



Agenda Date: 3/20/13

Agenda Item: 8C

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)
PROGRAM ENERGY EFFICIENCY INCENTIVES)
EXCEEDING \$300,000) DOCKET NOS.
FELLOWSHIP VILLAGE) EO13020150V
VERNON TOWNSHIP BOARD OF EDUCATION) EO13020151V
RIVERWALK G URBAN RENEWAL ASSOCIATES LLC) EO13020152V

Parties of Record:

Brian Lawrence, President and CEO, Fellowship Village
Matt DeLaRosa, Facilities Director, Vernon Township Board of Education
Andrew Marshall, Operating Partner, Riverwalk G Urban Renewal Associates LLC

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 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, Heating, Ventilation and Air Conditioning, water heating or other measures in new or existing buildings.

Fellowship Village, Basking Ridge, NJ, has submitted an application for a total financial incentive in the amount of \$450,000.00 under the 2012 Combined Heat and Power (CHP) and Fuel Cells Program, for a project located at a non-profit continuing care retirement community at 8000 Fellowship Road, Basking Ridge, NJ 07920. The applicant proposes to install a 225 kilowatt hour natural gas, internal combustion engine CHP system with an annual efficiency of 82.1%. The system is expected to provide about 55% of the electric load of the community's health center. Recovered heat from the system will be used for space heating and hot water

heating for the community's health center and community center, as well as space cooling for the health center. The first estimated incentive, in the amount of \$90,000.00, is to be paid upon proof of purchase of equipment. The second estimated incentive, in the amount of \$270,000.00, is to be paid upon project completion, review and acceptance of documentation, and successful inspection. The remaining estimated incentive, in the amount of \$90,000.00, 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 1,872,450 kWh of electricity annually and expected to produce 13,059 MMBtu of thermal energy recovered from waste heat.

Overall, this application is expected to result in an estimated annual energy cost savings of \$231,798.00 at an estimated project cost of \$1,897,500.00.

Vernon Township Board of Education, Vernon, NJ, has submitted an application for a total financial incentive in the amount of \$721,749.80 under the 2012 Pay for Performance – Existing Buildings Program, for a project located at Vernon Township High School, 1832 Route 565, Vernon, NJ 08837. The first estimated incentive, for the energy reduction plan (ERP), is \$12,269.80.¹ The estimated second incentive, for completed performance-based installation of recommended measures, including heat pump conversion, lighting upgrades, rooftop unit upgrades, controls upgrades, and weatherization, is \$354,740.00. The estimated third incentive, for the post construction benchmarking report, which is based on the one-year true up of the ERP, is \$354,740.00. This project has an estimated 57.2% total energy savings, which equates to an estimated annual energy savings of 3,224,910 kWh of electricity, resulting in an estimated annual electric demand reduction of 510 kW. Overall, this application will have an estimated annual energy cost savings of \$441,813.00 at an estimated first project installation cost of \$3,188,722.00.

Riverwalk G Urban Renewal Associates LLC, Short Hills, NJ, has submitted an application for a total financial incentive in the amount of \$569,954.40 under the 2012 Pay for Performance - New Construction Program, for a project located at Port Imperial North Building G, Tax block 168.1, Lot 7.10 (exact address TBD), West New York, NJ 07093. The first estimated incentive, for the proposed ERP, is \$36,275.40. The estimated second incentive, for the as-built reduction plan, including roof insulation, exterior wall insulation, improved window glazing, reduced interior lighting power density, reduced plug loads due to the use of ENERGY STAR appliances, installation of high efficiency packaged terminal air conditioning [PTAC] units, high efficiency air to air heat pumps for heating and cooling common areas, combination water heater and space heater for apartments; installation of low-flow fixtures and appliances in kitchens and bathrooms, high efficiency corridor air units, reduced lighting power in exterior lighting, and installation of carbon monoxide monitoring for garage fan ventilation operation, is \$368,054.00. The estimated third incentive for the commissioning report is \$165,625.00. This application has an estimated 19% total energy savings as compared to the current energy code used in New Jersey, ASHRAE 90.1.2007, and will save the customer an annual estimate of 442,253 kWh of electricity, and will result in an annual estimated demand reduction of 219 kW. The application will also save an estimated 2,482 therms annually. Overall, this application will

¹ This applicant participated in the Local Government Energy Audit (LGEA) program, which provides incentives up to \$100,000 per calendar year per qualifying local governmental agency to subsidize the costs of an energy audit at government-owned facilities. Under the 2012 Pay for Performance – Existing Buildings program, the estimated first incentive amount is therefore reduced by 50% to recognize the value of the LGEA program energy audit consistent with the program filing.

have an estimated annual energy cost savings of \$108,427.00. Energy savings and cost savings are measured from a code-compliant building (ASHRAE 90.1-2007 baseline). This project has an estimated first cost of \$769,507.00.


TRC, the Market Manager engaged by the Board to manage the New Jersey Clean Energy Program (NJCEP) C&I energy efficiency programs, has submitted 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 the above, the Staff recommends that the Board approve the above-referenced applications.

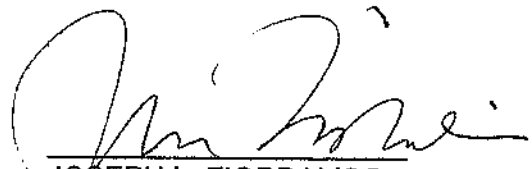
The Board **HEREBY ORDERS** the approval of the aforementioned applications for the total estimated incentive amounts of \$450,000.00 for Fellowship Village, \$721,749.80 for Vernon Township Board of Education, and \$569,954.40 for Riverwalk G Urban Renewal Associates LLC, and **AUTHORIZES** issuance of standard commitment letters to the applicants identified above, setting forth the terms and conditions of these commitments.

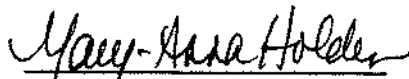
DATED: 3/20/13

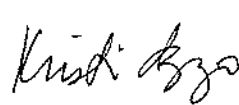
BOARD OF PUBLIC UTILITIES
BY:

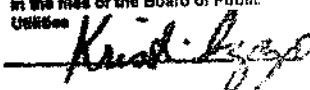

ROBERT M. HANNA
PRESIDENT


JEANNE M. FOX
COMMISSIONER


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
\$300,000 – FELLOWSHIP VILLAGE; VERNON TOWNSHIP BOARD OF EDUCATION; AND
RIVERWALK G URBAN RENEWAL ASSOCIATES LLC

DOCKET NOS. EO13020150V, EO13020151V, & EO13020152V

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President & CEO
Fellowship Village
8000 Fellowship Road
Basking Ridge, NJ 07920

Matt DeLaRosa
Facilities Director
Vernon Township Board of
Education
539 Route 515
Vernon, NJ 07462

Andrew Marshall
Operating Partner
Riverwalk G Urban Renewal
Associates LLC
233 Canoe Brook Road
Short Hills, NJ 07078

**Program Coordinator Certification
(New Incentive Commitments > \$300,000)**

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.

Maura H Watkins

By: _____

Date: 02-18-2013

Maura Watkins

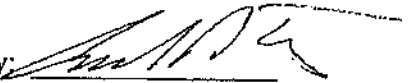
Quality Assurance Manager - Applied Energy Group, Inc.

Ref:	<u>18998CHP</u>
App #	<u>Fellowship Village</u>
Applicant	<u>Fellowship Village</u>
Payee	<u>Fellowship Village</u>

Committed Amount: \$450,000.00

Market Manger Certification
(New Incentive Commitments > \$300,000)

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# 18998CHP

Date: 2-20-13

1. Application Number: 18998CHP
2. Program Name: Combined Heat and Power
3. Customer Contact (name, company, address, phone #):
 Brian Lawrence, President & CEO,
 Fellowship Village, 8000 Fellowship Road, Basking Ridge, NJ 07920
 908-580-3805
4. Project Name and Address:
 Fellowship Village, 8000 Fellowship Road, Basking Ridge, NJ 07920
5. Rebate amount:
 Incentive #1: \$90,000.00
 Incentive #2: \$270,000.00
Incentive #3: \$90,000.00
 Total: \$450,000.00
6. Brief description of CHP to be installed (size, efficiency, emission, equipment to be replaced):
 225 kW natural gas, internal combustion engine (Aegenco PowerSync) system; Annual system efficiency of 82.1%

Emissions:

	Vendor supplied (lbs/MWh)	Annual Site Emissions Reduction (lbs)
NOx	0.272	-
SOx	-	2320
PM-10	-	-
CO2	-	1,832,000
CO	2.17	-
VOC	5.26	-

The CHP system is designed to provide on-site, utility parallel, electricity to the non-profit continuing care retirement community. It is expected to provide about 55% of the electric load of the community's health center. Recovered heat from the system will be used for space heating and hot water heating for the community's health center and community center, as well as space cooling for the health center. In the event of a power outage, such as that experienced by the community during hurricane Sandy, the CHP system will initially shut down, and then restart in stand-alone mode, supplying power to predetermined loads.

7. Annual Estimated Energy Savings:
 Expected Annual Electricity Production: 1,872,450 kWh
 Expected Annual Thermal Energy Production: 13,059 MMBtu of recovered heat for space heating, water heating, and space cooling.
8. Project Cost: \$1,897,500.00

9. Annual Estimate Energy Cost Savings: average cost savings of \$231,798.00 (simple payback of 8.3 years with incentive, compared to 10.9 years without incentive).

**Program Coordinator Certification
(New Incentive Commitments > \$300,000)**

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.

Maura H Watkins

By: _____

Date: 02-18-2013

Maura Watkins

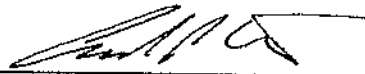
Quality Assurance Manager - Applied Energy Group, Inc.

Ref: _____
App # 16028
Applicant Vernon Township Board of Education
Payee Vernon Township Board of Education

Committed Amount: \$721,749.80

Market Manager Certification
(New Incentive Commitments > \$300,000)

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# 16028

Date: 2-20-13

1. Application Number: **16028**
2. Program Name: **Pay for Performance- Existing Buildings**
3. Customer Contact (name, company, address, phone #):
Matt DeLaRosa, Facilities Director
Vernon Township Board of Education, 539 Route 515, Vernon, NJ 07462
973-764-2900 x4063
4. Project Name and Address:
Vernon Township High School
1832 Route 565, Vernon, NJ 08837
5. Rebate amount:
Incentive #1: \$12,269.80
Incentive #2: \$354,740.00
Incentive #3: \$354,740.00
Total: \$721,749.80

6. Brief description of measures

Measure Name	Measure Details	File Attached	Quantity
1	Heat Pump Conversion	Replacement of existing unit ventilators equipped with DX and electric heat with new high efficiency air-source heat pumps.	Electric 76
2	Lighting Upgrade	Reduction in lighting power through retrofit of existing fluorescent fixtures with T5 and reduced wattage T8 fluorescent fixtures. Installation of occupancy sensors, including ceiling mount and wall switch passive infrared sensors, programmable time clock systems, day lighting controls, and parking and pathway occupancy dimming controls.	Electric 583
3	RTU Upgrade	Replacement of existing multi-zone rooftop units with new high-efficiency units.	Electric 3
4	Controls Upgrade	Comprehensive upgrade of existing controls system and installation of newall DDC controls to provide advanced controls sequences. Sequences include night setback, reduced fan schedules, and reduction of outside air during unoccupied hours.	Electric
5	Weatherization	Install heavy duty weather stripping on exterior doors.	Electric 59

7. Annual Estimated Energy Savings: **3,224,910 kWh; 510 kW**

8. Annual Estimate Energy Cost Savings: **\$441,813.00**

**Program Coordinator Certification
(New Incentive Commitments > \$300,000)**

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.

Maura H Watkins

By: _____

Date: 02-20-2013

Maura Watkins

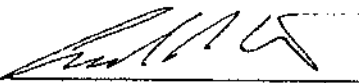
Quality Assurance Manager - Applied Energy Group, Inc.

Ref:	
App #	<u>14940</u>
Applicant	<u>Riverwalk G Urban Renewal Associates LLC</u>
Payee	<u>Riverwalk G Urban Renewal Associates</u>

Committed Amount: \$569,954.40

Market Manager Certification
(New Incentive Commitments > \$300,000)

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# 14940

Date: 2-20-13

1. Application Number: 14940
2. Program Name: Pay for Performance- New Construction
3. Customer Contact (name, company, address, phone #):
Andrew Marshall, Operating Partner
Riverwalk G Urban Renewal Associates LLC, 233 Canoe Brook Rd., Short Hills, NJ 07078
973-218-2339
4. Project Name and Address:
Port Imperial North Building G
Tax block 168.1, Lot 7.10 (exact address TBD), West New York, NJ 07093
5. Rebate amount:
Incentive #1: \$36,275.40
Incentive #2: \$368,054.00
Incentive #3: \$165,625.00
Total: \$569,954.40
6. Brief description of measures

Measure Name	Measure Details	ASHRAE 90.1-2007 Baseline	Quantity
1	Insulation - Ceiling Roof assembly is to be tapered polyisocyanurate with average R-value of R-30.	R-20 continuous insulation	all
2	Insulation - Walls, Kneewalls, Rim Band/Joists R-22 Insulation added to exterior walls to improve thermal performance.	R-13 steel frame plus R-7.5 continuous insulation	all
3	Windows and Glass Doors Glazing "70XL" air-filled double glazing in windows for improved thermal performance. Window assembly U-Value: 0.422 Btu/hr-sf-F, SHGC: 0.246	Window max assembly U-Value: 0.40 Btu/hr-sf-F, max SHGC: 0.40	all
4	Interior Lighting Reduced lighting power density for mechanical rooms (0.70 w/sqft), parking garage (0.127), and apartments (0.8)	mechanical rooms (1.5), parking garage (0.2), and apartments (1.1)	All hard-wired fixtures in spaces at left
5	ENERGY STAR Appliances Reduced plug loads (1.25 W/sqft) due to the use of Energy Star Appliances (clothes washers, dishwashers and refrigerators).	Plug loads (1.52 W/sqft) based on standard efficiency appliances	948
6	PTACs High efficiency (SEER 12) through the wall air-conditioning units for apartments.	9.3 EER units	316
7	Air to Air Heat Pump (cooling) High efficiency (13.5-15 SEER) heat pumps for common areas.	10.8-13 SEER units	16
8	Air to Air Heat Pump (heating) High efficiency (8.7 HSPF) heat pumps for common areas.	7.7 HSPF units	16
9	Hot Water Boiler (Gas) Combination water heater and space heater for apartments.	Fossil fuel boilers	316

10	Hot Water Boiler (Gas)	Combination water heater and space heater for apartments.	Fossil fuel boilers	316
11	Low-flow fixtures	Low flow fixtures and appliances (7.9 gpm of hot water) in kitchens and bathrooms.	Standard flow fixtures (13 gpm of hot water).	1585
12	Unitary HVAC/Split Systems	High efficiency (15 SEER) corridor make-up air units (with heat recovery).	Standard efficiency package rooftop units (9.8 EER)	3
13	Exterior Lighting	Reduced lighting power (4,081 W)	7,498 W	all
14	CO Sensor	Carbon Monoxide (CO) monitoring for garage fan ventilation operation with variable flow.	Fixed flow.	6

7. Annual Estimated Energy Savings: Savings are measured from a code-compliant building (ASHRAE 90.1-2007 baseline)

442,253 kWh

219 kW

2,482 therms

8. Annual Estimate Energy Cost Savings: Cost savings are measured from a code-compliant building (ASHRAE 90.1-2007)

\$108,427.00