



Agenda Date: 3/18/15
Agenda Item: 8C

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)	
PROGRAM ENERGY EFFICIENCY INCENTIVES)	
EXCEEDING \$500,000:)	DOCKET NOS.
)	
TROYS HILLS VILLAGE)	QG15020148
NICHOLAS MARKETS, INC.)	QG15020258

Parties of Record:

Matt Adler, Principal, Troy Hills Village
David Maniaci, Chief Executive Officer, Nicholas Markets, Inc.

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, local government, and schools 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, 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 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).

By Order, the Board considers two applications: (1) Troy Hills Village located at 1480 Route 46 in Parsippany, Morris County (Troy Hills); and (2) Nicholas Markets, Inc., located at 1068 High Mountain Road, North Haledon (Nicholas Markets).

Troy Hills submitted an application on June 27, 2013 for financial incentive of \$683,186.44 under the Pay for Performance – Existing Buildings Program. The Pay for Performance – Existing Buildings Program is open to existing C&I customers paying into the Societal Benefits Fund with buildings having a peak demand in excess of 100 kW in any of the preceding twelve

months. The program requires the proposed project achieve a 15% source energy reduction. The program incentives 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), which details the set of measures that will achieve the performance target as required for the project. The second incentive is paid upon the completion of installation of the approved measures. The third incentive is performance-based and paid upon the submittal of a post construction benchmarking report that verifies the level of savings achieved after twelve months of operation.

Troy Hills' application was enrolled under the program guidelines that were in effect from January 1, 2013 through June 30, 2013. The proposed project includes the replacement of gas-fired hot water boilers and related pumps, the installation of remote-access building controls for gas-fired hot water boilers, the installation of programmable thermostats, the insulation of hot water piping in crawlspaces, and upgrading of all common area and exterior lighting from incandescent and fluorescent lighting to light-emitting diodes.

The estimated first incentive, for the energy reduction plan, is \$50,000. The estimated second incentive, for completed installation of recommended energy efficiency measures, is \$316,593.22. The estimated third incentive, for the post construction benchmarking report, which is based on the one-year true up of the ERP, is \$316,593.22. The project has an estimated 31.5% total energy savings, which translates into an estimated annual energy savings of 197,927 kWh of electricity, 41.1 kW of electric demand, and 235,857 therms of natural gas. With an estimated project cost of \$1,482,000, the project will result in an estimated annual energy cost savings of \$208,478, resulting in a reduction of the payback period from 7.11 years to 3.83 years, and an internal rate of return of 11.5%.

The second applicant, Nicholas Markets, submitted an application to the Combined Heat and Power/Fuel Cell (CHP/FC) program for a total financial incentive of \$700,000. The CHP/FC program is open to all C&I customers paying into the Societal Benefits Fund who install combined heat and power or fuel cell systems to further enhance energy efficiency in their buildings through on-site power generation with recovery and productive use of waste heat, thereby reducing existing and new demands to the electric power grid. Incentives from this program are disbursed upon completion of three program milestones: (1) proof of purchase of equipment; (2) project installation and operation, including successful inspection; (3) acceptance and confirmation of achievement of the required performance thresholds based upon twelve months of operating data.

Nicholas Markets' application was received on June 20, 2014, and enrolled under the program guidelines that were in effect from July 1, 2013 through June 30, 2014. The project includes the installation of one 350 kW Caterpillar natural gas engine to generate on-site electricity and recover waste heat for the Nicholas Markets shopping center, which consists of a supermarket plus four additional shops. The majority of the electricity generated and all of the waste heat recovered will be used for process cooling in the form of refrigerant subcooling, as well as some space and water heating. The system has an overall efficiency of 83.2%, and is designed to black start and island in the event of a power outage.

The estimated first incentive, for purchase of the equipment, is \$210,000. The estimated second incentive, for completed installation of the system, is \$420,000. The estimated third incentive, granted after acceptance and confirmation of required performance threshold data, is \$70,000. The project is anticipated to generate 2,673,072 kWh of electricity annually and recover 16,932 MMBtu of waste heat annually. The project will have an upfront cost of

\$1,850,000, and will save approximately \$242,750.16 in annual energy costs. The application would have a payback of 6.59 years prior to granting this incentive, and will be reduced to 4.1 years with incentive.

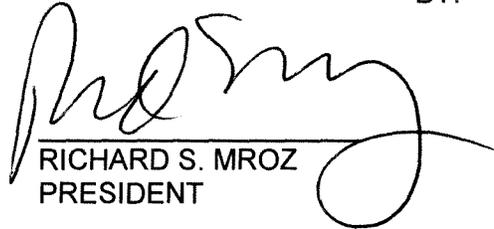
TRC, the Market Manager engaged by the Board to manage the NJCEP C&I EE programs, submitted certifications that the incentives were calculated in accordance with the program policies and procedures, and that the listed amounts are the true and accurate estimated incentives for which the applicants are eligible. Further, Applied Energy Group, in its role as the NJCEP Program Coordinator, also reviewed the applications and submitted certifications that the incentives 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 amount of \$683,186.44 for Troy Hills, and \$700,000 for Nicholas Markets, and **HEREBY AUTHORIZES** issuance of standard commitment letters to the applicants identified above, setting forth the terms and conditions of these commitments.

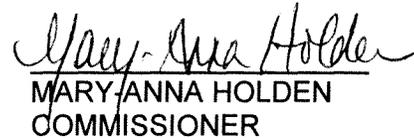
The effective date of this Order is March 27, 2015.

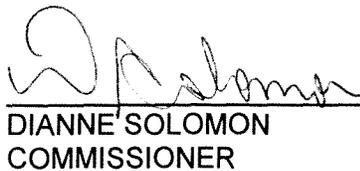
DATED: 3/18/15

BOARD OF PUBLIC UTILITIES
BY:


RICHARD S. MROZ
PRESIDENT

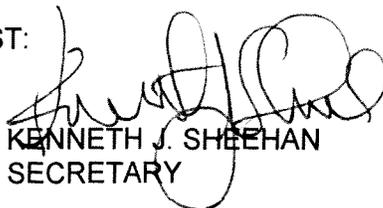

JOSEPH L. FIORDALISO
COMMISSIONER


MARY-ANNA HOLDEN
COMMISSIONER

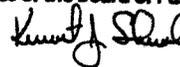

DIANNE SOLOMON
COMMISSIONER


UPENDRA J. CHIVUKULA
COMMISSIONER

ATTEST:


KENNETH J. SHEEHAN
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 – TROY HILLS VILLAGE AND NICHOLAS MARKETS, INC.
DOCKET NOS. QG15020148 & QG15020258

SERVICE LIST

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Woodbridge, NJ 07095

Carl Teter
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Woodbridge, NJ 07095

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New Brunswick, NJ 08901

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Nicholas Markets, Inc.
1068 High Mountain Road
North Haledon, NJ 07508

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

Matt Adler, Principal
Adler Development
1480 Rt. 46W
Parsippany, NJ 07054

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: 02/04/2015
Carl P. Teter, P.E., LEED AP, Associate Vice President
App# 21987

1. Application Number: **21987**
2. Program Name: Pay for Performance Existing Buildings
3. Customer Contact (name, company, address, phone #):
 Matt Adler, Principal
 Adler Development
 1480 Rt. 46W Parsippany, NJ 07054
 732-225-5000
4. Project Name and Address:
 Troy Hills Village
 1480 Rt. 46W Parsippany, NJ 07054
5. Rebate amount:
Incentive #1: \$50,000.00
Incentive #2: \$316,593.22
Incentive #3: \$316,593.22
Total: \$683,186.44

6. Brief description of measures

Measure Name		Measure Category	Measure Details (Describe Equipment/Controls to be Installed)	Quantity	Equipment Replaced (optional)
1	Boiler and Pump Replacement	Hot Water Boiler (Gas)	Replace all boilers and pumps with condensing boiler, Premium efficiency pumps and VFDs. The boilers will be replaced with 500MBH gas boilers with an efficiency of 93.3% DHW Boilers will be replaced with 200MBH capacity boilers with efficiencies of 96%. New pumps to be .166 to 5HP at 86% Efficiency	32 Boilers, 14 DHW boilers. 16 Motors	Hot Water Boiler, space heating boilers, and pumps (Gas)
2	Building Controls	Hot Water Boiler (Gas)	Install remote access controls for boilers, pumps and apartment stats; programmable thermostats, and update OA reset controls and settings	1	Old Analog and Digital Controls
3	Pipe Insulation	Hot Water Boiler (Gas)	Insulate all uninsulated hot water piping in the crawlspaces. New u-value = 0.217	21,140 Linear Feet	NONE
4	Lighting Upgrades	LED Parking Lot Lighting	Upgrade all common area and exterior lighting to LED.	855	Incandescent and Fluorescent Lighting

7. Annual Estimated Energy Savings:
197,927 kWh
23,585.7 MMBtu Natural Gas
41.1 kW
8. Annual Estimate Energy Cost Savings:
\$208,478, 11.5% IRR, 7.11 year simple payback (without incentive), and 3.83 year simple payback (with incentive)
9. Estimated project cost
\$1,482,000.00

**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: 02-04-2015

Maura Watkins

Quality Assurance Manager - Applied Energy Group, Inc.

Ref: _____
App # 21987

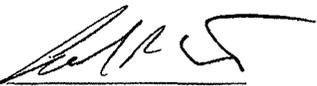
Applicant Troy Hills Village

Payee Troy Hills Village

Committed Amount: \$683,186.44

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

I Carl Teter hereby certify that application(s) 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. This review does not include an analysis of the financial viability of the project(s) on this list. Item #10 on following page is provided for informational purposes only based on data submitted by applicant.

By: 

Date: 2-19-15

Carl P. Teter, P.E., LEED AP, Associate Vice President
App# 26634CHP

1. Application Number: **26634CHP**
2. Program Name: **Nicholas Markets, Inc.**
3. Customer Contact (name, company, address, phone #):
Nicholas Markets, Inc.
David Maniaci, CEO
1068 High Mountain Road, North Haledon, NJ 07508
201-589-0004
4. Project Name and Address:
Nicholas Markets, Inc.
1068 High Mountain Road, North Haledon, NJ 07508
5. Rebate amount:
Incentive #1: \$210,000.00
Incentive #2: \$420,000.00
Incentive #3: \$ 70,000.00
Total: \$700,000.00
6. Brief description of CHP to be Installed:
One 350kW Caterpillar natural gas engine generator to provide on-site electricity and waste heat to the Nicolas Markets shopping center, which consists of a Foodtown Supermarket plus four ancillary shops. Majority of electricity and all of the waste heat is planned to be utilized at the supermarket for process cooling in the form of refrigerant subcooling (via absorption chiller), as well as some space and water heating. Overall system efficiency is estimated at 83.2%. System is designed to black start and island in the event of a power outage.
7. Annual Estimated Energy Savings:
Expected Annual Electricity Production: 2,673,072 kWh
Expected Annual Thermal Energy Production: 16,932 MMBtu of utilized waste heat
8. Project Cost: **\$1,850,000.00**
9. Project Funding Type (capital purchase, lease, finance, PPA, other/describe): **Finance**
10. Financials:
 - **Average Annual Cost Savings: \$242,750.16**
 - **Simple payback w/o incentive: 6.59 years**
 - **Simple payback with incentive: 4.10 years**

**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: 02-18-2015

Maura Watkins

Quality Assurance Manager - Applied Energy Group, Inc.

Ref:

App #

26634CHP

Applicant

Nicholas Markets, Inc.

Payee

Nicholas Markets, Inc.

Committed Amount: \$700,000.00