



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

**STATE OF NEW JERSEY**  
**Board of Public Utilities**  
44 South Clinton Avenue, 3<sup>rd</sup> Floor, Suite 314  
Post Office Box 350  
Trenton, New Jersey 08625-0350  
[www.nj.gov/bpu/](http://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.
	)	
CLEMENT PAPPAS AND COMPANY, INC.	)	QG16020093
	)	
GRAND LHN I URBAN RENEWAL, LLC	)	QG16020094
	)	
EICKHOFF SUPERMARKETS, INC. (SHOPRITE OF	)	QG16020095
HAINESPORT)	)	
	)	
VILLAGE SUPERMARKET, INC. (SHOPRITE RIO	)	QG16020096
GRANDE)	)	

**Parties of Record:**

**George Oughterson, Plant Accounting Manager**, Clement Pappas & Co., Inc.  
**Joseph Punia, Executive Vice President**, Grand LHN I Urban Renewal, LLC  
**Cindy Rovinsky, Property Manager**, ShopRite KRE Inc. (aka Eickhoff Supermarkets, Inc.)  
**John Van Orden, Chief Financial Officer**, ShopRite – Village Supermarket, Inc.  
**Stefanie A. Brand, Esq., Director**, Division of Rate Counsel

**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 (P4P) – 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 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).

The 2015 and 2016 Small-Scale Combined Heat and Power & Fuel Cell (CHP/FC) programs are open to all C&I customers contributing to the Societal Benefits fund and installing CHP or FC systems to further energy efficiency in their buildings through on-site power generation thereby reducing existing and new demands to the electric power grid. Incentives are disbursed upon completion of three program milestones: (1) proof of purchase of equipment; (2) project installation and operation, including successful inspection; and (3) acceptance and confirmation of achievement of the required performance thresholds based upon twelve months of operating data.

By this Order, the Board considers three applications for incentives submitted under the 2015 and 2016 CHP/FC programs pursuant to the TRC FY 2015 Program & Budget Filing (September 17, 2014) or the TRC FY 2016 Program & Budget Filing (June 15, 2015): (1) Clement Pappas & Company, Inc. (Clement Pappas), located at 1045 Parsonage Road, in Bridgeton, Cumberland County; (2) Eickhoff Supermarkets, Inc., located at 1520 Route 38 in Hainesport, Burlington County; and (3) Village Supermarket, Inc., located at North 5<sup>th</sup> Street and Hirst Avenue, in Rio Grande, Cape May County. All applications submitted were accepted under the above-referenced program guidelines in effect from July 1, 2014 through June 30, 2015, or from July 1, 2015 through June 30, 2016. These project incentives are within the entity cap, based on the application approval date.

Clement Pappas submitted an application in July 2015 for a financial incentive of \$1,435,864.80 under the small scale 2016 CHP/FC Program. Clement Pappas is a large food processing and juice bottling firm. The project involves the installation of a 1 MW CHP system with waste heat recovery. The system is estimated to have an overall annual efficiency of 66%. The estimated first incentive, for purchase of the equipment, is \$430,759.44. The estimated second incentive, for completed installation of the system, is \$861,518.88. The estimated third incentive, granted after acceptance and confirmation of required performance threshold data, is \$143,586.48. The project is anticipated to generate 6,291,848 kWh of electricity annually, and is expected to recover 20,992 MMBtu of waste heat for the purpose of process heating. The project will have a cost of \$4,786,216.00, and will save on average \$449,954.82 in annual energy costs after a first year cost savings of \$364,826.32. The project has an 8.94 year payback without incentives, which is reduced to 6.26 years with incentive.

Eickhoff Supermarkets, Inc. submitted an application in June 2015 for a financial incentive of \$900,000.00 under the small scale 2015 CHP/FC Program. The project includes the installation of one natural gas CHP engine with a capacity of 450 kW. The system is estimated to have an overall annual efficiency of 72%, and is designed with blackstart and islanding capabilities. The estimated first incentive, for purchase of the equipment, is \$270,000.00. The estimated second incentive, for completed installation of the system, is \$540,000.00. The estimated third incentive, granted after acceptance and confirmation of required performance threshold data, is \$90,000.00. The project is anticipated to generate 3,570,743 kWh of electricity annually, with 10,964 MMBtu of waste heat recovered. The project will have a cost of \$2,744,099.00, and will save on average \$152,184.64 in annual energy costs. The project has a payback period without incentive of 12.9 years, which is reduced to 8.7 years with incentive.

Village Supermarket, Inc. submitted an application in June 2015 for a financial incentive of \$900,000.00 under the small scale 2015 CHP/FC Program. The project includes the installation of one natural gas CHP engine with a capacity of 450 kW. The system is estimated to have an overall annual efficiency of 78%, and is designed with blackstart and islanding capabilities. The estimated first incentive, for purchase of the equipment, is \$270,000.00. The estimated second incentive, for completed installation of the system, is \$540,000.00. The estimated third incentive, granted after acceptance and confirmation of required performance threshold data, is \$90,000.00. The project is anticipated to generate 3,664,563 kWh of electricity annually, with 12,152 MMBtu of waste heat recovered. The project will have a cost of \$2,764,099.00, and will save on average \$158,317.03 in annual energy costs. The project has a payback period without incentive of 12.7 years, which is reduced to 8.5 years with incentive.

The P4P – New Construction Program promotes high performance buildings that achieve 15% or more energy cost savings than buildings built to the current energy code. Incentives for this program are released in three phases upon satisfactory completion of each milestone. The first incentive is intended to help offset the cost of services associated with the development of the Energy Reduction Plan (ERP) and design fees. An ERP detailing the set of measures will achieve the performance target is required for each project. The second incentive is issued upon the submittal and approval of the As-Built ERP. The third incentive follows construction completion and the submittal and approval of the Commissioning Report. The third incentive is based upon confirmation that the building achieved the performance target value indicated in the proposed ERP.

By this Order, the Board considers the P4P – New Construction application of Grand LHN I Urban Renewal, LLC, located at 18 Park Avenue, Jersey City, Hudson County, for a total financial incentive of \$596,664.44. This application was accepted under the above-referenced program guidelines in effect from January 1, 2012 through November 13, 2012.<sup>1</sup> The project's incentives are within the entity cap, based on the application approval date. The proposed project is an 11-story building consisting of 407,558 square feet of mixed use residential, retail, and restaurant space, and will house the Boys & Girls Club of Hudson County. The facility was completed in 2015 and earned Leadership in Energy & Environmental Design (LEED) Silver certification. Measures in the ERP include high efficiency HVAC systems, window and glass door upgrades, use of LED lighting, and installation of high efficiency domestic hot water boilers.

The estimated first incentive, for the energy reduction plan, is \$40,755.80. The estimated second incentive, for completed installation of recommended energy efficiency measures, is \$407,558.00. The estimated third incentive, for the post construction benchmarking report, which is based on the one-year true up of the ERP, is \$148,350.64. The project has an estimated 20% total energy savings, which translates into an estimated annual energy savings of 1,128,352 kWh of electricity and electric demand savings of 1,216.75 kW. The project is also anticipated to save 59,150 therms of natural gas. With an estimated incremental project cost of

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<sup>1</sup> The proposed ERP for this project was originally submitted in August 2013. The technical review took longer than average to complete due to several factors including: size/complexity of proposed building design, the use of a third party as the primary energy modeler for this project, a total of six (6) revisions to the ERP, staffing changes within the primary Partner firm, and unanticipated difficulty obtaining required information from the consulting Commissioning Firm.

\$741,212.00, the project will result in an estimated annual energy cost savings of \$237,369.00, resulting in a 3 year simple payback period. Energy savings and cost savings are measured from a code-compliant building American Society of Heating and Air-Conditioning Engineers 90.1-2007 baseline.

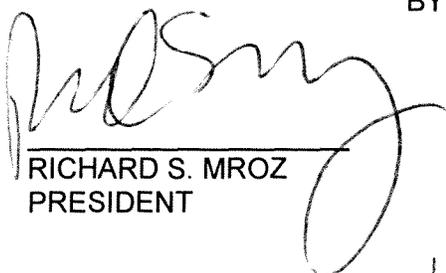
TRC, the Market Manager engaged by the Board to manage the NJCEP C&I EE programs, submitted certifications that the incentives were calculated in accordance with the program policies and procedures, and that the listed amounts are the true and accurate estimated incentives for which the applicants are 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 incentive 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 \$1,435,864.80 for Clement Pappas, \$900,000.00 for Eickhoff Supermarkets, Inc., \$900,000.00 for Village Supermarket, Inc., and \$596,664.44 for Grand LHN I Urban Renewal, LLC, and **HEREBY AUTHORIZES** issuance of standard commitment letters to the applicants identified above, setting forth the terms and conditions of these commitments.

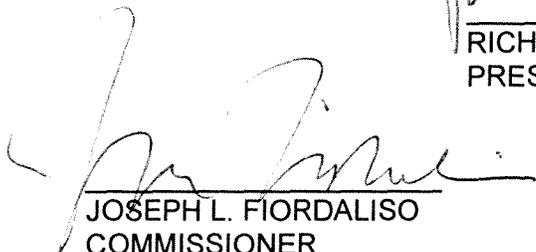
The effective date of this Order is March 5, 2016.

DATED: 2-24-16

BOARD OF PUBLIC UTILITIES  
BY:



RICHARD S. MROZ  
PRESIDENT



JOSEPH L. FIORDALISO  
COMMISSIONER



MARY ANNA HOLDEN  
COMMISSIONER

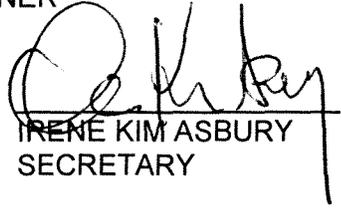


DIANNE SOLOMON  
COMMISSIONER



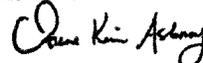
UPENDRA J. CHIVUKULA  
COMMISSIONER

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 – CLEMENT PAPPAS AND COMPANY, INC.; GRAND LHN I URBAN  
RENEWAL; EICKHOFF SUPERMARKETS, INC. (SHOPRITE OF HAINESPORT); AND  
VILLAGE SUPERMARKET, INC. (SHOPRITE RIO GRANDE)  
DOCKET NOS. QG16020093, QG16020094, QG16020095, and QG16020096

SERVICE LIST

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Joseph Punia  
Executive Vice President  
Grand LHN 1 Urban Renewal, LLC  
520 Route 22  
Bridgewater, NJ 08807

John Van Orden, CFO  
ShopRite – Village Supermarket Inc.  
733 Mountain Avenue  
Springfield, NJ 07081

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Carneys Point, NJ 08069

Cindy Rovinsky  
Property Manager  
ShopRite KRE Inc.  
1310 Fairview Boulevard  
Delran, NJ 08075

**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: 01-28-2016

**Maura Watkins**

Quality Assurance Manager - Applied Energy Group, Inc.

Ref: \_\_\_\_\_  
App # 18207

Applicant Grand LHN 1 Urban Renewal

Payee Grand LHN I Urban Renewal

Committed Amount: \$596,664.44

**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: 02-01-16  
*Carl P. Teter, P.E., LEED AP, Associate Vice President*  
*App# 18207*

1. Application Number: **18207**
2. Program Name: **Pay for Performance - New Construction**
3. Customer Contact (name, company, address, phone #):  
**Joseph Punia, Executive Vice President**  
**Grand LHN 1 Urban Renewal, LLC**  
**520 Route 22, Bridgewater, NJ 08807**  
**908-725-8100**
4. Project Name and Address:  
**18 Park**  
**18 Park Avenue, Jersey City, NJ 07304**
5. Rebate amount:  
**Incentive #1: \$40,755.80**  
**Incentive #2: \$407,558.00**  
**Incentive #3: \$148,350.64**  
**Total: \$596,664.44**
6. Brief description of measures:  
**18 Park is a 407,558 sqft Multi-Family High Rise that includes retail space, restaurant space, a Boys & Girls Club and a 66,434 sqft parking garage for a total of 473,992 sq ft. The building will have 11 stories above grade.**

Energy Efficiency Measure		Brief Description of Measure	Proposed Components						
			Manufacturer	Model	Capacity	Capacity Units	Quantity	Efficiency	Efficiency Units
1	Unitary HVAC/Split Systems	Replace HVAC equipment with High Performance Equipment	GE Through the wall ASHP Lennox ASHP / Trane WSHP / Reznor Roof Top Unit / Mitsubishi ASHP / AERCO	AZ61H12D	11,600	BTUH	495	3.7	COP / SEER / EER / SEER / AFUE
				AZ61H15D	14,600		462	3.3	
				AZ61H15E/	14,800 /		24 /	3.3 /	
				CBX27UH-030 /	29,200 /		7 /	15.5 /	
				EXHE0484 /	45,120		5	15.5	
				EXHE0364	34,270		16	15.9	
				EXHE0704	64,700		3	14.4	
				EXHE0247	22,800		3	15	
				EXHE0187	18,260		2	15.5	
				GEVE2404 /	242,180 /		2 /	15.1 /	
				RDDDB-370-700 /	433,700 /		6 /	11.3 /	
				PKA-A24HA	24,000		2	17	
				PCA-A24KA	24,000		1	16.8	
				PKA-A12HA	12,000		2	15.2	
				MSY-GE12HA	12,000		1	20.5	
				PKA-A18HA	18,000		1	15.3	
				PEA-A24AA	24,000 /		1 /	16	
BMK-2.0	2,000,000	2	92%						
2	Windows and Glass Doors	U = 0.44 SHGC = 0.38	TBD	N/A	N/A	N/A	1131 / 89	0.44 0.38	U Value SHGC
3	Other Lighting	0.52 W/sf	LED Lighting, Various Fixtures - See Schedules	Various - See Schedule	Various	W	538	N/A	N/A

4	Water Heater (Gas) - <=/= 50 Gals.	High Efficiency Gas Fired Instantaneous DHW Heaters	Lochinvar	AWN-701PM	700,000	BTUH	4	96%	Et
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7. Annual Estimated Energy Savings compared to ASHRAE 90.1-2007

**1,128,352 kWh**

**1,216.75 kW**

**5,915 MMBtu Natural Gas**

8. Annual Estimate Energy Cost Savings (based on incremental cost):

**Annual Cost Savings: \$237,369.00**

**IRR 32%**

**Payback 3 years**

9. Estimated incremental project cost:

**\$741,212.00**

**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: 02-01-2016

**Maura Watkins**

Quality Assurance Manager - Applied Energy Group, Inc.

Ref:

App #

**33393CHP**

Applicant

**ShopRite KRE Inc. A.k.a- Eickhoff's Supermarkets**

Payee

**UE-00211NJ, LLC**

Committed Amount: \$900,000.00

**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: 02-01-16  
*Carl P. Teter, P.E., LEED AP, Associate Vice President*  
*App# 33393CHP*

1. Application Number: **33393CHP**
2. Program Name: **Combined Heat and Power & Fuel Cells**
3. Customer Contact (name, company, address, phone #):  
  
**Karl Eickhoff, CEO**  
**Cindy Rovinsky, Property Manager**  
**ShopRite KRE Inc. (aka - Eickhoff Supermarkets, Inc.)**  
**1310 Fairview Blvd., Delran, NJ 08075**  
**609-284-5562**
4. Project Name and Address:  
**ShopRite KRE Inc.**  
**1520 Route 38, Hainesport, NJ 08060**
5. Rebate amount:  
**Incentive #1: \$270,000.00**  
**Incentive #2: \$540,000.00**  
**Incentive #3: \$90,000.00**  
**Total: \$900,000.00**
6. Brief description of CHP to be Installed:  
**The host site is an existing grocery store with plans for a 10,000 sqft expansion. Project proposes to install one 450 kW natural gas engine with waste heat recovery routed to an absorption chiller to cool compressor racks, as well as supplement natural gas used to heat domestic hot water systems and rooftop heating units. Overall annual system efficiency estimated at 72%. The system is designed to blackstart and island in order to provide power independent of the grid in the event of a power outage.**
7. Annual Estimated Energy Savings:  
**Expected Annual Electricity Production: 3,570,743 kWh**  
**Expected Annual Thermal Energy Production: 9,480 MMBtu of recovered heat estimated to offset annually 153,118 kWh of power otherwise needed for refrigeration equipment (equal to 7,996 MMBtu), as well as 923 MMBtu for space heating and 561 MMBtu for domestic hot water heating.**
8. Project Cost: **\$2,744,099.00**
9. Project Funding Type (capital purchase, lease, finance, PPA, other/describe): **Power Purchase Agreement**
10. Financials:
  - **Average annual cost savings: \$152,184.64**
  - **Payback without incentive: 12.9 years**
  - **Payback with incentive: 8.7 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: 02-01-2016

**Maura Watkins**

Quality Assurance Manager - Applied Energy Group, Inc.

Ref: \_\_\_\_\_  
App # 33394CHP  
Applicant Village Super Market, Inc.  
Payee UE-00215NJ, LLC

Committed Amount: \$900,000.00

**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: 02-01-16

*Carl P. Teter, P.E., LEED AP, Associate Vice President*  
*App# 33394CHP*

1. Application Number: **33394CHP**
2. Program Name: **Combined Heat and Power & Fuel Cells**
3. Customer Contact (name, company, address, phone #):  
**John Van Orden, CFO**  
**ShopRite - Village Supermarket Inc.**  
**733 Mountain Avenue, Springfield, NJ 07081**  
**973-467-2200 x218**
4. Project Name and Address:  
**ShopRite - Village Supermarket Inc.**  
**North 5<sup>th</sup> St. & Hirst Avenue, Rio Grande, NJ 08242**
5. Rebate amount:  
**Incentive #1: \$270,000.00**  
**Incentive #2: \$540,000.00**  
**Incentive #3: \$90,000.00**  
**Total:        **\$900,000.00****
6. Brief description of CHP to be Installed:  
**The host site is an existing grocery store. Project proposes to install one 450 kW natural gas engine with waste heat recovery routed to an absorption chiller for the purposes of condensing and pressure control of refrigeration system, as well as supplement natural gas used to heat domestic hot water systems. Overall annual system efficiency estimated at 78%. The system is designed to blackstart and island in order to provide power independent of the grid in the event of a power outage.**
7. Annual Estimated Energy Savings:  
**Expected Annual Electricity Production: 3,664,563 kWh**  
**Expected Annual Thermal Energy Production: 11,546 MMBtu of recovered heat estimated to offset annually 90,200 kWh of power otherwise needed for refrigeration equipment (equal to 10,930 MMBtu), as well as 616 MMBtu for domestic hot water heating.**
8. Project Cost: **\$2,764,099.00**
9. Project Funding Type (capital purchase, lease, finance, PPA, other/describe): **Power Purchase Agreement**
10. Financials:
  - **Average annual cost savings: \$158,317.03**
  - **Payback without incentive: 12.7 years**
  - **Payback with incentive: 8.5 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: 11-20-2015

**Maura Watkins**

Quality Assurance Manager - Applied Energy Group, Inc.

Ref:

App #

**33974CHP**

Applicant

**Clement Pappas & Co. Inc.**

Payee

**Clement Pappas and Company, Inc.**

Committed Amount: **\$1,435,864.80**

**Market Manager 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: 12-03-2015  
*Carl P. Teter, P.E., LEED AP, Associate Vice President*  
*App# 33974CHP*

1. Application Number: **33974CHP**
2. Program Name: **Combined Heat and Power & Fuel Cells**
3. Customer Contact (name, company, address, phone #):  
**George Oughterson, Plant Accounting Manager**  
**Clement Pappas & Co. Inc.**  
**1 Collins Drive, Suite 200**  
**Carneys Point, NJ 08069**  
**302-893-4134**
4. Project Name and Address:  
**Clement Pappas & Co. Inc.**  
**1045 Parsonage Road**  
**Bridgeton, NJ 08302**
5. Rebate amount:  
**Incentive #1: \$430,759.44**  
**Incentive #2: \$861,518.88**  
**Incentive #3: \$143,586.48**  
**Total: \$1,435,864.80**
6. Brief description of CHP to be Installed:
  - **Clement Pappas is a leading Private Brand supplier of cranberry sauces and beverages including juices, drinks, teas and waters. The facility in Bridgeton, NJ is one of Clement Pappas' largest bottling plants. The facility was built in the 1930s-1940s and has been in operation since. Currently, it operates multiple bottling and canning production lines, bottling and canning over 60 million gallons of product annually. The facility also produces plastic bottles for the bottling portion of the plant. This process requires a high and consistent usage of heat for pasteurization of the product, with a high correlation of heating usage with electrical usage while the production lines are operational. The total facility size is 650,000sf and consists of production and warehouse space. Typical operation is for 3 shifts/day and 5-7 days/week.**
  - **Proposed project is a 1 MW Capstone gas turbine**
    - **66% overall system efficiency**
    - **Replacing two 600 HP steam boilers**
    - **Grid-parallel operation; no blackstart/islanding capabilities**
7. Annual Estimated Energy Savings:  
**Expected Annual Electricity Production: 6,291,848 kWh**  
**Expected Annual Thermal Energy Production: Utilizing 20,992 MMBTU of waste heat for the purpose of process heating**
8. Project Cost: **\$4,786,216 (\$3,083,646 project cost, plus \$1,702,570 for 10-year maintenance/service)**

9. Project Funding Type: **capital purchase**

10. Financials:

<b>Table 27: Financial Evaluation</b>	
Simple Payback Period (years) w/o incentive	8.94
Simple Payback Period (years) w/ incentive	6.26
IRR w/o incentive	12%
First Year (Annual) Cost Savings	\$364,826.32
Average Annual Cost Savings	\$449,954.82
Lifecycle Savings	\$3,424,715.96