

Agenda Date: 10/23/12

CLEAN ENERGY

Agenda Item: 8A

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/

IN THE MATTER OF THE CLEAN ENERGY PROGRAM AUTHORIZATION OF COMMERCIAL AND INDUSTRIAL (C&I) PROGRAM ENERGY EFFICIENCY INCENTIVES) ORDER)
EXCEEDING \$300,000	DOCKET NOS.
MACK-CALI REALTY CORPORATION) E012090823V
FEDERAL BOULEVARD LLC) E012090887V
CLOVERLEAF GARDENS ASSOCIATES, LLC)) EO12090888V

Jeffrey Grant, Senior Director of Corporate Energy, Mack-Cali Realty Corporation Christopher Baldwin, Director of Critical Facilities, Federal Boulevard LLC Henry Stein, Partner, Cloverleaf Gardens Associates, LLC

BY THE BOARD1:

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 (SSBP or 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 Large Energy Users Pilot Programs. These programs collectively offer financial incentives to New Jersey property owners 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.

Mack-Cali Realty Corporation, Edison, NJ, has submitted an application for a financial incentive in the amount of \$795,594.86 under the 2011 Large Energy Users Pilot (LEUP) program, for projects located at thirty-one locations spread throughout New Jersey. The attached certification lists out the addresses and measures being installed at each address. Measures include lighting system upgrades, retrofits of variable frequency drives (VFDs) for fan systems, upgrades to building automation systems, motor efficiency and control upgrades, upgrades of

¹ Commissioner Mary-Anna Holden did not participate.

boiler systems, and roof insulation additions. Mack-Cali Realty Corporation has also included in its Final Energy Efficiency Plan (FEEP) three proposed conservation measures to be installed at various phases of the projects, including Light-emitting diode lighting upgrades from conventional systems, office lighting upgrades for tenant locations scheduled for improvement, and VFDs during implementation of the FEEP. This application will save the customer an estimated annual 6,328,088.12 kWh of electricity, resulting in an estimated annual demand reduction of 448 kW and an annual estimate of 49,634 therms. Overall, this application will have an estimated annual energy cost savings of \$943,536.52 at a total project cost of \$3,552,517.87.

Federal Boulevard LLC, Carteret, NJ, has submitted an application for a financial incentive in the amount of \$419,079.93 under the 2011 Large Energy Users Pilot program, for projects located at 1300 Federal Boulevard, Carteret, NJ. The applicant proposes to install as well as infrastructure support spaces to the computer room air conditioning units. In total, there are 96 computer room air conditioners conditioning these spaces. Installing these VFDs will reduce the annual electric demand by an estimated 6,048,480 kWh. Overall, this application will have an estimated annual energy cost savings of \$544,363 at a total project cost of \$730,484.

Cloverleaf Gardens Associates, LLC, Woodbridge, NJ, has submitted an application for a financial incentive in the amount of \$616,084.00 under the 2012 Pay for Performance – Existing Buildings Program, for a project located at 42 Roanoke Street, Woodbridge, NJ. The first estimated incentive, for the energy reduction plan (ERP), is \$24,136. The estimated second incentive, for certain measures (including installation of pipe insulation, boiler replacement, building envelope upgrades, lighting upgrades, installation of domestic hot water conservation measures, installation of new thermostats and dedicated zone valves, and laundry room equipment upgrades) is \$295,974. The estimated third incentive, for the post-construction benchmarking report, which is based on the one year true up of the ERP, is \$295,974. This application has an estimated 46.6% total energy savings and will save the customer an annual estimated 590,766 kWh of electricity, resulting in an annual estimated electric demand reduction of 342 kW. The application will also have an annual estimated natural gas savings of 184,792 therms. Overall, this application will have an estimated annual energy cost savings of \$316,292 at an estimated total project cost of \$1,186,600.

TRC Solutions (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 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 certification 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 <u>HEREBY ORDERS</u> the approval of the aforementioned applications for the total estimated incentive amounts of \$795,594.86 for Mack-Cali Realty Corporation, \$419,079.93 for Federal Boulevard LLC, and \$616,084.00 for Cloverleaf Gardens Associates, LLC, and <u>AUTHORIZES</u> issuance of a standard commitment letter to the applicants identified above, setting forth the terms and conditions of these commitments.

DATED: 10/23/12-

BOARD OF PUBLIC UTILITIES

ROBERT M. HANNA

PRESIDENT

JEANNE M. FOX COMMISSIONER

M. For

OSEPH L. FIORDALISO COMMISSIONER

NICHOLAS ASSELTA COMMISSIONER

ATTEST:

KRISTI IZZO SECRETARY

HEREBY CERTIFY that the within document is a true copy of the original in the files of the Board of Public

IN THE MATTER OF THE CLEAN ENERGY PROGRAM AUTHORIZATION OF COMMERCIAL AND INDUSTRIAL (C&I) PROGRAM ENERGY EFFICIENCY INCENTIVES EXCEEDING \$300,000 – MACK-CALI REALTY CORPORATION; FEDERAL BOULEVARD LLC; AND COVERLEAF GARDENS ASSOCIATES, LLC

DOCKET NOS. E012090823V, E012090887V & E012090888V

SERVICE LIST

Brian DeLuca TRC Solutions Program Manager 900 Route 9 North, Suite 104 Woodbridge, NJ 07095 Michael Winka Office of Clean Energy Board of Public Utilities P.O. Box 350 Trenton, NJ 08625-0350 James Nappi Applied Energy Group, Inc. 317 George Street Suite 305 New Brunswick, NJ 08901

Carl Teter TRC Solutions Associate Vice President 900 Route 9 North, Suite 104 Woodbridge, NJ 07095 Mona Mosser Office of Clean Energy Board of Public Utilities P.O. Box 350 Trenton, NJ 08625-0350 Michael Ambrosio Applied Energy Group, Inc. 317 George Street Suite 305 New Brunswick, NJ 08901

Valentina Rozanova TRC Solutions Program Manager 900 Route 9 North, Suite 104 Woodbridge, NJ 07095 Sharon Wolfe Office of Clean Energy Board of Public Utilities P.O. Box 350 Trenton, NJ 08625-0350 Jeffrey Grant Senior Director of Corporate Energy Mack-Cali Realty Corporation PO Box 7817 Edison, NJ 08818-7817

Caroline Vachier, DAG Division of Law Dept. of Law & Public Safety 124 Halsey Street P.O. Box 45029 Newark, NJ 07102

Rachel Boylan Counsel's Office Board of Public Utilities P.O. Box 350 Trenton, NJ 08625-0350 Christopher Baldwin Director, Critical Facilities Federal Boulevard LLC 1300 Federal Boulevard Carteret, NJ 07008

Veronica Beke, DAG Division of Law Dept. of Law & Public Safety 124 Halsey Street P.O. Box 45029 Newark, NJ 07102 Elizabeth M. Teng Office of Clean Energy Board of Public Utilities P.O. Box 350 Trenton, NJ 08625-0350 Henry Stein Partner Cloverleaf Gardens Associates, LLC 90 Woodbridge Center Drive Woodbridge, NJ 07095

Kristi Izzo, Secretary Board of Public Utilities 44 South Clinton Avenue P.O. Box 350 Trenton, NJ 08625-0350

Allison E. Mitchell Office of Clean Energy Board of Public Utilities P.O. Box 350 Trenton, NJ 08625-0350

4. Summary of Proposed Conservation Measures (ECMs)

Here are the ECMs identified for each facility. In addition three general categories of ECM's are shown to enable addressing potential opportunities that may arise in our portfolio in the following categories:

- 1. LED lighting upgrades from conventional systems. This is labeled as "ALL_LEDLIGHT."
- Office lighting upgrades for locations that remain to be identified in the course of managing tenant improvement requirements. This is labeled as "All LightsLIGHT."
- Variable Frequency Drive ("VFD") for locations that remain to be identified during the implementation phase of this FEEP. This is labeled as ALL_VFDVFD

A final category is shown that captures all Smart Start prescriptive rebates that were filed during the 2011 FEEP plan year. This is shown to account for reducing total available rebate funds under this FEEP by the rebate contribution of each ECM contained in this category. Refer to the application acceptance contained in the Enrollment Confirmation section of the Appendix for a detailed list of each of these ECM's.

Each ECM is described as one of the below categories with the applicable abbreviation appended to the property code and delimited by and underscore (e.g. 30_BAS).

Description	Abbreviation	Count
Lighting system upgrades	Light	3
Retrofit of Variable Frequency Drives (VFD's) for fan systems	VFD	12
Upgrade of Building Automation Systems	BAS	10
Upgrade of HVAC systems	CU, RTU or HVAC	7
Motor Efficiency and Control	Motor	2
Upgrade of boiler systems.	Boilers	2
Addition of roof insulation.	Roof	9
Pending Legacy Smart Start Applications: 16	Pending	1
Total:		46

Page: 14 of: 37

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

I <u>Carl Teter</u> 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.

Date: 942-12

By: Carl P. Teter, P.E., LEED AP, Associate Vice President

App# L16228

1. Application Number: L16228

2. Program Name: Large Energy Users Pilot Program

3. Customer Contact (name, company, address, phone #):
Jeffrey Grant, Senior Director Corporate Energy
Mack-Call Realty Corporation
PO Box 7817
Edison, NJ 08818-7817

4. Project Name and Address:

4.	Floject Name and Address.
	300 Tice Boulevard Woodcliff Lake, NJ 07675
	3 Independence Way So. Brunswick, NJ 08540
	17-17 Route 208 Fairlawn, NJ 07410
	325 Columbia Turnpike Florham Park, NJ 07932
	50 Tice Boulevard Woodcliff Lake, NJ 07677
	100 Walnut Avenue Clark, NJ 07066
	777 Passaic Avenue Clifton, NJ 07012
	Mack-Cali Centre II, One Mack Drive (ak/a 650 From Road) Paramus, NJ 07652
	Mack-Call Centre VI, 461 From Road Paramus, NJ 07652
	Mack-Cali Lakeview Plaza, 201 Littleton Road Morris Plains, NJ 07950
	Mack Morris Plains (EDS), 250 Johnson Road Morris Plains, NJ 07950
	Mack Murray Hill-Chubb, 890 Mountain Avenue New Providence, NI 07974
	Mack Bridgewater I, 721 Route 206 Bridgewater, NJ 08807
	4 Becker Farm Road Roseland, NJ 07068
	Maple Plaza I, 4 Campus Drive Parsippany, NJ 07054
	One Grande Commons Bridgewater, NJ 08807
	5 Becker Farm Road Roseland, NJ 07068
	6 Becker Farm Road Roseland, NJ 07068
	85 Livingston Ave. Roseland, NJ 07068
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	412 Mt. Kemble Avenue Morris Township, NJ 07960
	Mack-Cali Business Campus, 7 Campus Drive Parsippany, NJ 07054
_	10 Mountainview Road Upper Saddle River, NJ 07458
_	101 Eisenhower Parkway Roseland, NJ 07068
	600 Parsippany Road Parsippany, NJ 07054
_	Mack Airport, 200 Riser Road Little Ferry, NJ 07643
	331 Newman Springs Road, Building One Red Bank, NJ 07701
	331 Newman Springs Road, Building Two Red Bank, NJ 07701
	120 Passaic Street-EDS Rochelle Park, NJ 07662
	999 Riverview Drive Totowa, NJ 07512
	5 Wood Hollow Road Parsippany, NJ 07054
	395 West Passalc Street Rochelle Park, NJ 07662

5. Rebate amount: \$795,594.86

6. Brief description of measures:

Building Name	Measure Details	Equipment Replaced
300 Tice Boulevard	Comprehensive upgrade, OSS, supply air reset, integration of heat and cooling.	Forced draft lower with constant speed motors.
300 Tice Boulevard	Upgrade forced draft replacement tower with 2 30 hp VFD's	Forced draft tower with constant speed motors.
300 Tice Boulevard	Upgrade HVAC unit to 12.5 EER	_
3 Independence Way	Upgrade replacement tower with 3, 5 hp induced draft fan motor VFD's	Fixed speed fan motors.

17-17 Route 208	Upgrade replacement roof design to high reflectivity, high emissivity membrane and increment insulation by R-7 to R 20.5	Roof system.
17-17 Route 208	Upgrade forced draft replacement tower with 2, 20 hp VFD's	Forced draft tower with constant speed motors.
50 Tice Boulevard	Upgrade forced draft replacement tower with 2, 50 hp VFD's	Forced draft tower with constant speed motors.
325 Columbia Turnpike	Upgrade 1, 60 Ton and 1, 40 ton roof top units, include dual enthalpy economizer	
100 Walnut Avenue	Improvement of integration of electric heat with cooling cycle, addition of CO2 demand based, DDC control of SF and RF.	
777 Passaic Avenue	Upgrade 1, 60 ton RTU, include dual enthalpy economizer	·
Mack-Cali Centre II, One Mack Drive (ak/a 650 From Road)	Upgrade replacement roof design to high reflectivity, high emissivity membrane and increment insulation from R-13.25 to R-24.75	Roof system.
Mack-Call Centre VI, 461 From Road	Upgrade replacement roof design to high reflectivity, high emissivity membrane and increment insulation from R-10.00 to R-12.5	Roof system.
Mack-Call Lakeview Plaza, 201 Littleton Road	Retrofit unitary controls with DDC controls on 90 T Air Handling Unit (1 X 40 and 1 X 50 condensing unit). Control improvements will be integrated DDC economizer control, supply air temperature optimization and optimum start and stopping, night set-back and set-up.	Unitary HAVC controls
Mack-Cali Lakeview Plaza, 201 Littleton Road	Upgrade 1, 90 Ton roof top unit	

Mack-Cali Lakeview Plaza, 201 Littleton Road	Retrofit 1, 40 hp VFD's on SA Fan	
Mack Morris Plains (EDS), 250 Johnson Road	Upgrade 1, 110 ton (1 x 60 and 1 x 60) roof top unit condensing units, include dual enthalpy controls	
Mack Morris Plains (EDS), 250 Johnson Road	Upgrade replacement roof design to high reflectivity, high emissivity membrane and increment insulation from R-7 to R-20.5	Roof system.
Mack Murray Hill- Chubb, 890 Mountain Avenue	Upgrade replacement roof design to high reflectivity, high emissivity membrane and increment insulation by R-7 to R 20.5	Roof system.
Mack Bridgewater I, 721 Route 206	Integrate economizer operation with mechanical cooling on one of the HVAC unit, add enthalpy economizer control, supply static pressure and air temperature optimization, improve coordination of heating and AC cycles.	Integrate heating control with AC instead of independent heating system.
4 Becker Farm Road	Cooling Tower motor and motor control upgrade for improved part load operation.	3 towers each with 2 x 15 hp motors upgraded to 3 towers with 1 x 5 HP and 1 x 15 HP motors with Energy Miser Motor Control System.
4 Becker Farm Road	Upgrade replacement roof design to high reflectivity, high emissivity membrane and increment insulation from R-9 to R-20.5	Roof system.
Maple Plaza I, 4 Campus Drive	Upgrade for integrated DDC SAT control and dual enthalpy economizer control. Also integrate time clock based outdoor lighting control with photocell.	Unitary controls and time clocks.
One Grande Commons	Supply and Return FANS 4 X 75 hp And 4 x 30 hp	

85 Livingston Ave.	Upgrade replacement roof design to high reflectivity, high emissivity membrane and increment insulation from R-9.0 to 20.5	Roof system.
412 Mt. Kemble Avenue	Upgrade 80 Ton split unit, add dual enthalpy economizer	1 x 80 ton Split
412 Mt. Kemble Avenue	Upgrade 293 existing lighting fixtures to high efficiency systems	
Mack-Cali Buslness Campus, 7 Campus Drive	Upgrade for integrated DDC SAT control and dual enthalpy economizer control, Also integrate time clock based outdoor lighting control with photocell.	Unitary controls and time clocks.
10 Mountainview Road	Retrofit 6 50 hp cooling water pump motors with VFD's	Ejection tower constant flow pumping system
101 Eisenhower Parkway	Full DDC of 180 Tons of a total of 600 Tons. CO2, DDC Enthalpy, VFD on 180T unit	Integrate solar gain heating control with AC instead of independent heating system.
101 Eisenhower Parkway	Upgrade 90 Ton split unit, add dual enthalpy economizer	1 x 90 ton Split
600 Parsippany Road	Upgrade 2, 1,500 MBH boilers to 87% efficiency	2 1,200 MBH 81% gas fired boilers.
Mack Airport, 200 Riser Road	Upgrade replacement roof design to high reflectivity, high emissivity membrane and increment insulation from R-3.0 to R-14.5	Roof system.
331 Newman Springs Road, Building One	Upgrade Induced draft replacement tower with 3, 5 hp VFD's	Induced draft tower with constant speed motors.
331 Newman Springs Road, Building Two	Upgrade induced draft replacement tower with 2, 15 hp VFD's	Induced draft tower with constant speed motors.
120 Passaic Street-EDS	Upgrade replacement roof design to high reflectivity, high emissivity membrane and increment insulation from R-16.8 to R-28.25	Roof system.

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999 Riverview Drive	Upgrade controls of full DDC of SAT, SA and RA Fans, CO2 demand ventilation, Dual enthalpy control, Ceiling plenum electric resistance heat DDC control.	Unitary controls
999 Riverview Drive	Upgrade replacement roof design to high reflectivity, high emissivity membrane and increment insulation from R-11.2 to R-20.2	Roof system,
5 Wood Hollow Road	Upgrade 2 boilers to 4 2,000 MBH boilers at 85% efficiency	2 5,400 MBH boilers
395 West Passaic Street	Improve heat pump loop pump and cooling tower fan motors with VFD DDC control and optimized loop temperature control.	Integrate heating control with AC instead of independent heating system,

All_LEDLIGHT	LED Lighting Upgrade - Budget	MR-15 and Low Wattage incandescent Upgrade throughout tenant spaces of buildings listed above
ALL_LightsLIGHT	TI Lighting Upgrade Budget	Typical 2x2 and 2x4 upgrades when space turns over throughout tenant spaces of bulldings listed above
All_VFDVFD	VFD Budget	

7. Annual Estimated Energy Savings:

1) 6,328,088.12 kWh 2) 448 kW (5) 9/4/11 3) 49,634 therms

8. Annual Estimate Energy Cost Savings: \$943,536.52

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.			
·	a 4 Warkins Date: 09-12-2012		
Maura Watkins Quality Assurance Manager - Applied Energy Group, Inc.			
Ref: App #	L16228		
Applicant	Mack- Cali Realty Corp.		
Payee	Mack- Cali Realty Corp.		
Committed Am	ount: \$795,594.86		

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

I, Diane M. Zukas, 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.

Date: 09/27/12

By: Stane M. Jukas

Diane M. Zukas, Office in Charge

Application #L16210

1. Application Number: L16210

2. Program Name: Large Energy Users Pilot Program

 Customer Contact (Name, company, address, phone #):
 Christopher Baldwin, Director, Critical Facilities, Federal Boulevard LLC, 1300 Federal Blvd, Carteret, NJ 07008, 212-902-1303

4. Project Address: 1300 Federal Blvd, Carteret, NJ 07008

5. Incentive amount: \$ 419,079.93

6. Brief description of measures

Variable Frequency Drives

The proposed ECMs for this application include applying VFDs to Data Center Fields 3, 4, and 5 as well as infrastructure support spaces to the computer room air conditioning units. In total there are 96 CRAC (Computer Room Air Conditioners) units conditioning these spaces. Installing VFD's on the CRAH units in DCF-3, 4, 5, and supporting areas will reduce the kWh usage by CRAH fan unit.

Annual Estimated Energy Savings:
 6,048,480 kWh
 0 kW – No demand reduction for this project

8. Annual Estimate Energy Cost Savings: \$544,363

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

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.				
including the Cu Pilot Program, A supporting the ir	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.			
Maur	a 4 Watkins			
Ву:				
Maura Watkins Quality Assurance Manager - Applied Energy Group, Inc.				
Ref: App #	L16210			
Applicant	Federal Boulevard LLC			
Payee	Federal Boulevard LLC			
Committed Am	ount:\$419,079.93			

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

I <u>Diane M. Zukas</u> 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: Sume M. Sukas, Officer in Charge

App# 16639

Date: 9/27//2

1. Application Number: 16639

2. Program Name: Pay for Performance - Existing Buildings

Customer Contact (name, company, address, phone #):
 Henry Stein, Partner
 Cloverleaf Gardens Associates, LLC
 90 Woodbridge Center Drive, Woodbridge, NJ 07095
 732-750-1111

Project Name and Address:
 Clover Leaf Gardens
 42 Roanoke Street, Woodbridge, NJ 07095

5. Rebate amount:

Incentive #1: \$24,136.00 Incentive #2: \$295,974.00 Incentive #3: \$295,974.00 Total: \$616,084.00

6. Brief description of measures

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1	Pipe Insulation	Install: A-inch Imcolock pipe insulation on all accessible hot water piping in crawl spaces	- Naturai Gas	Αij
2	Boiler replacement	Replace atmospherio boilers w/high efficiency Lochinyar Knight-XI/condensing boilers and Lochniyar Armor hot water fieaters in all boiler rooms	Natural Gas	14
3	Envelope Upgrades	Add 12" of attic insulation improving U-factor to 0.02. Replace patio doors with air-tight vinyl-frame units improving U-factor to 0.55.	Natural Gas	All
4	Lighting Upgrades	Replace incandescent with CFL Lighting Attached fixtures.	Electrio	ΑÜ
5	DHW Conservation	Retrofit all bathroom faucets with 1.5 GPM aerators. Retrofit all kitchen faucets with 1.75 GPM aerators. Replace existing showerheads in all bathrooms with more efficient 1.75 GPM units.	Natural Gas	All;
6	HVAC Controls	Install hew thermostats in apartments and dedicated zone valves with temperature lockouts at 72 F max.	Natural Gas	All
7	Laundry Room Equipment Upgrades	Replace existing washing machines that use on average 27Gal/Load with new that use 12.4Gal/Load and spin laundry at high speed (1,000rpm) to reduce drying time.	Natural Gas	14-21 (final) TBD).

7. Annual Estimated Energy Savings: 590,766 kWh; 342 kW; 184,792 therms

8. Annual Estimate Energy Cost Savings: \$316,292.00

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.					
including the Co Pilot Program, A supporting the i	ased on uniquely calculated estimated energy savings, ustom Program, Pay for Performance and Large Energy Users applied Energy Group certifies locating documentation aputs used to calculate the rebate amount and evidencing n of those inputs as required by the program's policies and				
Maura II Watkins By:					
Maura Watkins Quality Assurance Manager - Applied Energy Group, Inc.					
Ref: App #	16639				
Applicant	Clover Leaf Gardens Associates LLC				
Payee	Clover Leaf Gardens Associates LLC				
Committed Am	\$616,084.00				

Committed Amount: ____