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November 1, 2011

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Clerk's Office
N.C. Utilities Commission

Ms. Renné Vance
Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4325

Re: Residential Home Energy Improvement Program;
Docket No. E-2, Sub 936

Dear Ms. Vance:

Enclosed for filing with and approval by the North Carolina Utilities Commission ("Commission") are an original and 30 copies of Progress Energy Carolinas, Inc.'s ("PEC") revised RESIDENTIAL SERVICE-HOME ENERGY IMPROVEMENT PROGRAM HEIP-3 tariff. PEC is proposing the following six revisions to its Residential Home Energy Improvement Program ("RHEIP"): (1) the removal of HVAC Tune Ups - Level I; (2) the removal of Window Replacement; (3) the removal of Duct Testing; (4) increases in incentives for Insulation and Duct Repair; (5) the addition of High Efficiency Room Air Conditioners and Heat Pump Water Heaters to the Program's portfolio; and (6) clarification regarding the ownership of environmental, energy efficiency and demand response benefits and attributes. Incentives under the revised Program will be available for installations being completed on and after the effective date of the revised Program tariff.

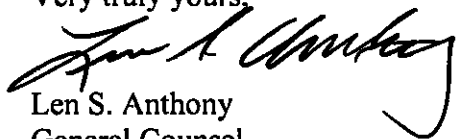
On February 24, 2009, PEC filed its RHEIP in accordance with Commission Rule R8-68 and the Commission's Orders dated February 29, 2008 and March 13, 2008 in Docket No. E-100, Sub 113. The Commission approved the RHEIP by Order dated April 30, 2009 and approved PEC's subsequent tariff filing by Order dated May 15, 2009.

The proposed RHEIP revisions are consistent with the findings and recommendations contained in PEC's Evaluation Measurement and Verification ("EM&V") report for the 2009 program year, which it filed with the Commission on May 3, 2011. The revisions also include additional cost-effective measures that can be effectively incorporated into the program, while conforming to the eligible market and market channels previously established by the Program.

The attached filing package contains a revised version of the Residential Home Energy Improvement Program, prepared in accordance with Rule R8-68(c)(2) and (3), and a revised RESIDENTIAL SERVICE-HOME ENERGY IMPROVEMENT PROGRAM HEIP-3 tariff.

The Commission's prompt attention to this matter is appreciated.

Very truly yours,

A handwritten signature in black ink, appearing to read "Len S. Anthony", is written over the typed name.

Len S. Anthony
General Counsel
Progress Energy Carolinas, Inc.

LSA:mhm

Enclosures

STAREG1882

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-2, SUB 936

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of:

Request For Approval of Residential Home
Energy Improvement Program

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**CERTIFICATE OF
SERVICE**

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NOV 01 2011

Clerk's Office
N.C. Utilities Commission

I, Len S. Anthony, hereby certify that the filing of Progress Energy Carolinas, Inc.'s Request for Approval of the Residential Home Energy Improvement Program in the above referenced docket has been served on all parties of record either by e-mail, hand delivery or by depositing said copy in the United States mail, postage prepaid, addressed as follows, this the 1st day of November, 2011:

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PEC DSM/EE Program Approval Request

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N.C. Utilities Commission

Docket No. E-2, Sub 936

Program Name: Home Energy Improvement Program

Program Type: Energy Efficiency

Target Class: Residential Progress Energy Carolina Customers

Target End-uses: HVAC, Attic Insulation and Air Sealing, High Efficiency Water Heater, & Building Envelope

Duration: Ongoing

On February 24, 2009, Progress Energy Carolinas, Inc ("PEC") filed its Residential Home Energy Improvement Program ("Program") in accordance with North Carolina Utilities Commission ("the Commission") Rule R8-68 and the Commission's Orders dated February 29, 2008 and March 13, 2008 in Docket No. E-100, Sub 113, Rulemaking Proceeding to Implement Session Law 2007-397 ("Senate Bill 3"). PEC is now proposing to incorporate modifications to measures offered under the Program approved on April 30, 2009. These modifications are based on findings of Evaluation Measurement and Verification ("EM&V"), as well as identification of other cost-effective measures that could be effectively incorporated into the Program and conform to the eligible market and market channels previously established by the Program.

Program Description

Under the Program, PEC offers customers a variety of energy conservation measures that are designed to increase the energy efficiency of existing residential dwellings. The Program utilizes a network of over 850 prequalified contractors to install energy efficiency measures. However, high efficiency room air conditioners (a new measure addition included within this request) may be self-installed and do not require the use of a prequalified contractor.

The Program utilizes a prescriptive menu of measures from which customers can select to participate depending on the needs and characteristics of their individual homes. The specific

measures to be provided through this Program are addressed in the following paragraphs. The Program will be available to all residential customers that meet the Program eligibility criteria.

Basis for Modifications

The Program modifications are largely due to the recent EM&V report associated with the Program. This report, which was filed with the Commission on May 3, 2011, provided a comprehensive impact analysis of existing measures within the Program. Additionally, the report contained recommendations for improving the Program based on verification of data, analysis of Program records and assumptions, prequalified contractor surveys, and staff and contractor interviews. To ensure Program cost-effectiveness, participation, and delivery, the following modifications are requested: the removal of HVAC Tune Ups - Level I; the removal of Window Replacement; the removal of Duct Testing; increases in incentives for Insulation and Duct Repair; the addition of High Efficiency Room Air Conditioners; and Heat Pump Water Heaters to the Program's portfolio. Incentives under the revised Program will be available for installations being completed on and after the effective date of the revised tariff (RESIDENTIAL SERVICE – HOME ENERGY IMPROVEMENT PROGRAM HEIP-3). The justification for the modifications are as follows:

- The removal of HVAC Tune Up - Level I incentives – The EM&V results demonstrate reduced savings and a lower than anticipated net to gross value. These changes caused the unburdened, cost-effectiveness of the measure to fall below the TRC threshold required for inclusion in the Program portfolio (TRC = 0.173). Pursuant to PEC's Cost Recovery Mechanism approved by the Commission in Docket No. E-2, Sub 931, measures with a TRC test result less than 1.0 will not be considered further, unless the measure can be bundled into an EE or DSM Program to enhance the overall cost-effectiveness of that program. This measure's verified TRC result is less than 1.0 and its inclusion within the Program has not been shown to enhance the Program's overall cost effectiveness.
- The removal of Window Replacement – Changes in the building code around U-Value and Solar Coefficient Heat Gain values and corresponding market changes have resulted in the unburdened, cost-effectiveness of the measure to fall below the TRC threshold required for inclusion in the Program portfolio (TRC = 0.619). Pursuant to PEC's Cost

Recovery Mechanism approved by the Commission in Docket No. E-2, Sub 931, measures with a TRC test result less than 1.0 will not be considered further, unless the measure can be bundled into an EE or DSM Program to enhance the overall cost-effectiveness of that program. This measure's verified TRC result is less than 1.0 and its inclusion within the Program has not been shown to enhance the Program's overall cost effectiveness.

- The removal of Duct Testing incentives - Due to deterioration of the cost effectiveness of the Program, it was determined that this incentive was not necessary for identifying duct leakage in the majority of instances. As such, PEC proposes to remove the incentive and related costs from the Program portfolio. It should be noted that PEC has historically attributed no savings to this incentive, as savings were only attributed to the correlating duct repairs.
- The increase in incentive for Insulation and Duct Repair – The incremental participant costs are higher than originally projected. In an attempt to further increase participation in the Program, PEC is increasing the incentives for insulation and duct repair.
- The addition of High Efficiency Room Air Conditioner and Heat Pump Water Heater incentives - To expand the availability of cost effective Program offerings.

Customers requesting the existing HVAC Tune Up - Level I, Window Replacement, and Duct Testing measures will remain eligible for incentives for installations completed at least 30 days prior to the Program's revised effective date. Participating prequalified contractors have been notified of PEC's requested Program modifications, and will be notified immediately upon the Commission's approval of this request.

Consideration to be Offered

Energy Conservation Measures ("ECMs") to be added:

- High Efficiency Room Air Conditioning – Encourages residential customers to upgrade to Energy Star room air conditioners. Room air conditioners may be self-installed by the customer.
- Heat Pump Water Heater – Encourages residential customers to improve the efficiency of their home by replacing inefficient water heaters with high efficiency heat pump water heaters with an energy factor of 2.0 or greater. Heat pump water heaters must be installed by a prequalified contractor.

Financial incentives will be provided to participants for each of the conservation measures promoted within this Program. Detailed information regarding incentive structures and maximum allowable incentive levels for each measure is contained in the corresponding Program tariff. The table below summarizes the incentives available to customers that participate in each of the Program's new, modified, and existing ECMs:

Residential Prescriptive Incentives

ECM	Prescriptive Rebate	Change	Comment
HVAC Audit (Level II Maintenance)	\$100	Existing measure, no change to incentive. Approved by Commission Order dated April 30, 2009 in Docket No. E-2, Sub 936	\$100 for condenser coil cleaning plus correcting refrigerant charge and adjusting air flow using PEC approved diagnostic tool.
HVAC - High Efficiency Heat Pump/Central Air Conditioning Geothermal Heat Pump	\$300 \$300	Existing measure, no change to incentive. Approved by Commission Order dated April 30, 2009 in Docket No. E-2, Sub 936	\$300 for a 15 SEER or higher \$300 for a 19 EER or higher Geothermal Heat Pump.
Attic Insulation and Air Sealing	\$500	Existing measure with modified incentive.	\$500 to bring insulation level up to a minimum of R-30 (from a value of R19 or less) and reduce attic infiltration. \$0.375/Sq Ft up to maximum of \$500 per dwelling.
Duct Repair	Up to \$190/unit (central AC and heat pumps)	Existing measure with modified incentive.	50 percent of repair cost up to \$190 per unit
High Efficiency Room Air Conditioner	\$25 per AC	New measure	\$25 per AC for Energy Star® qualified products

ECM	Prescriptive Rebate	Change	Comment
Heat Pump Water Heater	\$350	New measure	\$350 with a minimum Energy Factor of 2.0 for Energy Star® qualified products.

Proposed Funding Sources

There are no changes to this section from the originally filed Home Energy Improvement Program dated February 24, 2009 in Docket No. E-2, Sub 936 and approved by the Commission on April 30, 2009.

Proposed Classes of Persons to Whom Measure or Program will be Offered

The HEIP Program is being offered to PEC residential customers living in dwellings that are at least one year old.

Total of Anticipated Program Costs (5-year Summary)

Year	Amounts (\$000)
2012	\$6,052
2013	6,348
2014	6,560
2015	6,778
2016	7,009
Total	\$32,747

Home Energy Improvement Program

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R8-68(c)(2)(ii) Program Description

Under the Program, PEC offers customers a variety of energy conservation measures designed to increase energy efficiency for existing residential dwellings that can no longer be considered new construction. The Program utilizes a network of over 850 prequalified contractors to install energy efficiency measures. However, high efficiency room air conditioners (a new measure addition included within this request) may be self-installed and do not require the use of a prequalified contractor. The Program will broaden the prequalified contractor network to include plumbing contractors in support of the heat pump water heater measure.

The Program utilizes a prescriptive menu of measures from which customers can select to participate depending on the needs and characteristics of their individual homes. The Program will be available to all residential customers that meet the Program eligibility criteria.

R8-68(c)(2)(ii)(a) Program Measure's Objective

The primary objective of this Program is to reduce energy consumption and system peak demand by improving energy efficiency through the promotion and implementation of residential ECMs.

R8-68(c)(2)(ii)(b) Program Duration

The Program is expected to be ongoing with no expected end date.

R8-68(c)(2)(ii)(c) The Targeted Market Sector and Eligibility Requirements

The Company is targeting all residential customers living in dwellings that are at least one year old. Equipment incentives are structured and promoted at the time of normal replacement rather than an early retirement program.

The eligibility requirements contained in the originally filed Home Energy Improvement Program dated February 24, 2009 in Docket No. E-2, Sub 936 and approved by the Commission

on April 30, 2009 have been broadened to accommodate dwellings in which incentives were received through PEC's Residential Home Advantage Program. The potential for redundancies between these two programs is alleviated through revised eligibility standards providing that Home Energy Improvement Program incentives are applicable to measures installed in dwellings that are at least one year old.

R8-68(c)(2)(ii)(d) Communication Costs and Materials

PEC anticipates marketing this Program primarily through the prequalified contractor network. The Program is also marketed through a number of secondary communication channels including, but not limited to, bill inserts, direct mail, associations, conferences, in-store displays, and various trade shows. The overall communications budget is shown below.

Cost of Communications Materials

Year	Communications Materials (\$000)
2012	\$166
2013	174
2014	182
2015	191
2016	201
Total	\$914

R8-68(c)(2)(ii)(e) The Estimated Number of Participants

Year	Estimated Number of Participants
2012	15,286
2013	16,342
2014	16,883
2015	17,447
2016	18,043
Total	84,001

R8-68(c)(2)(ii)(f) Program Impacts

The estimated HEIP impacts for the five year period ending in 2016 are provided in the following table:

Year	At the Meter		At the Generator	
	Peak Annual MW Savings	MWh Annual Energy Savings	Peak Annual MW Savings	MWh Annual Energy Savings
2012	3.995	4,648	4.229	4,921
2013	8.198	10,015	8.679	10,602
2014	12.527	15,621	13.262	16,538
2015	16.986	21,481	17.982	22,741
2016	21.580	27,614	22.845	29,234

R8-68(c)(2)(ii)(g) Other Information

Not applicable.

R8-68(c)(2)(iii)(a) Proposed Marketing Plan and Anticipated Market Barriers

There are no changes to this section from the Home Energy Improvement Program originally filed on February 24, 2009 in Docket No. E-2, Sub 936 and approved by the Commission on April 30, 2009.

R8-68(c)(2)(iii)(b) Market Potential and Estimated Market Growth

Home Energy Improvement Program			
Year	Cumulative Participation Projections	Eligible Market Potential	% of Eligible Market
2012	15,286	1,142,893	1%
2013	31,628	1,160,245	3%
2014	48,511	1,179,822	4%
2015	65,958	1,201,178	5%
2016	84,001	1,221,178	7%

It should be noted that the table above represents the projected ratio of cumulative participating customers to the eligible customer pool at the program level. These values do not represent

measure-specific penetration rates. Specific measure-level penetration rates will be lower than those provided above.

R8-68(c)(2)(iii)(c) Estimated Summer and Winter Peak Demand Reductions

The following table provides the estimated summer peak demand reduction by participant and for the system as a whole.

Year	Summer Load (At the Meter)		Winter Load (At the Meter)	
	Per Participant (KW)	Total Annual (MW)	Per Participant (KW)	Total Annual (MW)
2012	0.261	3.994	0.090	1.382
2013	0.259	8.198	0.092	2.909
2014	0.258	12.527	0.093	4.495
2015	0.258	16.986	0.093	6.141
2016	0.257	21.580	0.093	7.854

R8-68(c)(2)(iii)(d) Estimated Energy Reductions

The following table provides the estimated annual energy reduction by participant and for the system as a whole.

Year	Energy Reductions (At the Meter)	
	Per Participant (KWH)	System Wide (MWH)
2012	304	4,648
2013	317	10,015
2014	322	15,621
2015	326	21,481
2016	329	27,614

R8-68(c)(2)(iii)(e) Estimated Lost Energy Sales

The following table provides the estimated annual lost energy sales by participant and for the system as a whole.

Year	Lost Energy Sales	
	\$/MWh	(\$000)
2012	\$98	\$457
2013	102	1,022
2014	107	1,667
2015	110	2,361
2016	111	3,072

R8-68(c)(2)(iii)(f) Estimated Load Shape Impacts

There are no changes to this section from the Home Energy Improvement Program originally filed on February 24, 2009 in Docket No. E-2, Sub 936 and approved by the Commission on April 30, 2009.

R8-68(c)(2)(iv) Costs and Benefits*R8-68(c)(2)(iv)(a) Program Costs*

The Company proposes that operating and maintenance costs associated with the Program be recorded on the Company's income statement in accordance with the Uniform System of Accounts. FERC account 182.3 "Other Regulatory Assets," would be used to defer all reasonable and prudent costs incurred with the Program until recovered. These costs will include administrative costs, implementation costs, incentive payments to Program participants, operating and maintenance costs, and the cost of capital and depreciation expense associated with capitalized Program expenditures, to the extent any capital costs are incurred.

Program O&M Cost Projections by Type

Year	Program Administration (\$000)	Communications (\$000)	Participant Incentives (\$000)	EM&V (\$000)	Total (\$000)
2012	\$1,534	\$166	\$4,064	\$288	\$6,052
2013	1,610	174	4,262	302	6,348
2014	1,681	182	4,385	312	6,560
2015	1,752	191	4,512	323	6,778
2016	1,828	201	4,646	334	7,009
Total	\$8,405	\$914	\$21,869	\$1,559	\$32,747

The following table contains a summary of total categorized Program costs and unitized costs reported on the basis of Program benefits.

Cost Element	Cost (\$000)	Cost/Unit
Program Administration	\$8,405	\$100
Communications	914	11
Participant Incentives	21,869	260
EM&V	1,559	19
Total	\$32,747	\$390

R8-68(c)(2)(iv)(b) Consideration to be Offered

- HVAC Audit (Level II Tune-up) – encourages residential customers to improve the efficiency of their existing central HVAC system by performing diagnostic maintenance on heat pumps or central A/C. Incentives will be paid as a check to the customer. The system must be centrally ducted, and the audit must be performed by a licensed participating contractor.
- High-Efficiency Heat Pumps and Central A/C – encourages residential customers to upgrade HVAC equipment to higher energy-efficient SEER rating standards. Incentives will be available to customers that purchase new equipment with at least a 15 SEER rating. The HVAC incentive will be provided to the customer. The system must be new and not refurbished, and must be installed by a licensed prequalified contractor.
- Duct Repair – encourages residential customers to improve the efficiency of their existing HVAC systems by sealing leaks in the duct system. The system must be centrally ducted, and the repair must be performed by a licensed prequalified contractor.

- **Insulation Upgrades and Attic Sealing** – encourages residential customers to improve the efficiency of their home by offering incentives to upgrade attic insulation to R-30 and seal air leaks in the attic. The insulation must be installed by a licensed prequalified contractor.
- **High Efficiency Room Air Conditioning** – encourages residential customers to upgrade to ENERGY STAR® room air conditioners. Room air conditioners may be self-installed by the customer.
- **Heat Pump Water Heater** – encourages residential customers to improve the efficiency of their home by replacing their inefficient water heater with a high efficiency heat pump water heater with an energy factor of 2.0 or greater. Heat pump water heaters must be installed by a licensed prequalified contractor.

Financial incentives will be provided to participants for each of the conservation measures promoted within this Program. The incentive amounts vary by the type of measure. Detailed information regarding incentive structures and maximum allowable incentive levels for each measure is defined in the corresponding Program tariff. The table below summarizes the incentives available to customers that participate in each of the Program's new, modified, and existing ECMs:

Residential Prescriptive Incentives

ECM	Prescriptive Rebate	Change	Comment
HVAC Audit (Level II Maintenance)	\$100	Existing measure, no change to incentive. Approved by Commission Order dated April 30, 2009 in Docket No. E-2, Sub 936	\$100 for condenser coil cleaning plus correcting refrigerant charge and adjusting air flow using PEC approved diagnostic tool.
HVAC - High Efficiency Heat Pump/Central Air Conditioning - Geothermal Heat	\$300	Existing measure, no change to incentive. Approved by Commission	\$300 for a 15 SEER or higher

ECM	Prescriptive Rebate	Change	Comment
Pump	\$300	Order dated April 30, 2009 in Docket No. E-2, Sub 936	\$300 for a 19 EER or higher Geothermal Heat Pump
Attic Insulation and Air Sealing	\$500	Existing measure with modified incentive.	\$500 to bring insulation level up to a minimum of R-30 (from a value of R19 or less) and reduce attic infiltration. \$0.375/Sq Ft up to maximum of \$500 per home
Duct Repair	Up to \$190/unit (central AC and heat pumps)	Existing measure with modified incentive.	50 percent of repair cost up to \$190 per unit
High Efficiency Room Air Conditioner	\$25 per AC	New measure	Energy Star® qualified products
Heat Pump Water Heater	\$350	New measure	\$350 with a minimum Energy Factor of 2.0 for Energy Star® qualified products

PEC proposes to maintain the flexibility to modify participant incentive levels consistent with the Commission's Order on April 30, 2009 approving this Program. Any other Program changes will be filed with the commission on an informational basis at least one week in advance of implementing the change. All Program modification filings will include revised cost effectiveness test results.

R8-68(c)(2)(iv)(c) Impacts on non-Participating Customers

The Company has not proposed any conditions or limitations for customers that do not wish to participate in the Program. Participation in the Program is strictly voluntary.

R8-68(c)(2)(v) Cost Effectiveness Evaluation

PEC has employed four cost effectiveness tests in its evaluation of this Program. They are the Rate Impact Measure (RIM) test, the Total Resource Cost (TRC) test, the Utility Cost (UC) test, and the Participant test. The following table provides a forward-looking summary of test results for the Program with the modifications contained within this request.

Cost-Effectiveness Test	Benefit/Cost Ratio	NPV of Net Benefits (\$000)
RIM	0.973	-\$1,367
TRC	1.450	\$15,519
UC	1.924	\$24,004
Participant	1.450	\$15,876

Information relating to the determination of Program impacts associated with the aforementioned values is provided in Section “*R8-68(c)(3)(ii)(c) Methodologies used to Produce Impact Estimates*” below.

R8-68(c)(2)(vi) Commission Guidelines Regarding Incentive Programs

The Program does not provide any inducement or incentive affecting a residential customer’s decision to install or adopt natural gas or electric service.

R8-68(c)(2)(vii) Integrated Resource Plan

The Program is consistent with PEC’s Integrated Resource Plan to actively pursue cost effective demand-side management and energy efficiency programs.

R8-68(c)(2)(viii) Other Information

Not Applicable

R8-68(c)(3) Additional Filing Requirements

R8-68(c)(3)(i) Costs and Benefits*R8-68(c)(3)(i)(a) Program Costs to be Recovered Through DSM/EE Rider*

PEC's estimated Program costs are provided in the following table. The recovery of the jurisdictionally allocated portion of the Program costs provided in the following table will be requested through the DSM/EE Rider.

Year	Amounts (\$000)
2012	\$6,052
2013	6,348
2014	6,560
2015	6,778
2016	7,009
Total	\$32,747

R8-68(c)(3)(i)(b) Estimate of Avoided Capacity and Energy Costs

Year	Avoided Capacity Costs (\$000)	Avoided Capacity Cost \$/kW	Avoided Energy Costs (\$000)	Avoided Energy Costs \$/MWH	Total Avoided Costs (\$000)
2012	\$575	\$136	\$291	\$59	\$866
2013	1,207	139	649	61	1,856
2014	1,880	142	1,402	85	3,282
2015	2,601	145	1,856	82	4,457
2016	3,370	148	2,490	85	5,860

R8-68(c)(3)(i)(c) Estimate of Participation Incentives

Program Year	Incentives (\$000)	Cost / Unit
2012	\$4,064	\$266
2013	4,262	261
2014	4,385	260
2015	4,512	259
2016	4,646	257
Total	\$21,869	\$260

R8-68(c)(3)(i)(d) Cost Allocation

The allocation of costs will be determined in a manner consistent with PEC's Cost Recovery Mechanism which was approved by the Commission in its June 15, 2009 Order in Docket No. E-2, Sub 931.

R8-68(c)(3)(i)(e) Proposed Capitalization Period for Long Lived Program Costs

The determination of capitalization periods for long lived Program costs will be consistent with PEC's Cost Recovery Mechanism which was approved by the Commission in its June 15, 2009 Order in Docket No. E-2, Sub 931.

R8-68(c)(3)(i)(f) Measurement and Verification (M&V) Costs

Estimates of measurement and verification costs have been provided in the following table.

Year	M&V Costs (\$000)
2012	\$288
2013	302
2014	312
2015	323
2016	334
Total	\$1,559

R8-68(c)(3)(ii) Measurement and Verification (M&V) Reporting Plan*R8-68(c)(3)(ii)(a) Methods to be used to Determine Savings*

EM&V activities will provide independent, third-party validation of energy and peak demand savings estimates developed from Program records. Specific objectives include the following:

- Ensure that Program databases are supported by paper or electronic records of transactions and reflect actual removals of eligible equipment.
- Determine to what degree Program-supported measures are being employed.
- Support Program planning and verify Program savings estimates.

PEC's consultant will apply industry-accepted methods and be guided by the M&V section of the California evaluation protocols¹ and by the International Performance Measurement and Verification Protocol (IPMVP),² as appropriate. These guidelines describe how field measurements and data collection can be conducted to support impact evaluations in a manner that is accurate, consistent, and transparent.

R8-68(c)(3)(ii)(b) Reporting Schedule

PEC intends to continue to file annual reports to update the Commission on Program activity, including the number of participating customers and the estimated kW and kWh impact of the Program. An updated schedule of EM&V activities and deliverables will be developed by the third-party EM&V consultant as part of the revised evaluation plan. PEC will continue to provide copies of final EM&V reports to the Commission.

R8-68(c)(3)(ii)(c) Methodologies used to Produce Impact Estimates

Estimates of the demand and energy impacts per-unit were developed for each conservation measure included in the Program. Impact estimates for previously existing measures that have

¹ *California Energy Efficiency Evaluation Protocols: Technical, Methodological and Reporting Requirements for Evaluation Professionals*, California Public Utilities Commission, April 2006.

² *International Performance Measurement and Verification Protocol: Concepts and Options for Determining Energy and Water Savings, Volume I*, Efficiency Valuation Organization, April 2007.

undergone M&V used the Program year 2009 M&V results provided by Navigant Consulting.³ The evaluation applied participant billing data analysis and residential appliance saturations to calibrate energy simulation models and estimate per-unit gross impacts for each major measure. Impact estimates for new measures or measures that have not been fully evaluated through the M&V process were based upon information gathered from the NC Measures Database, the ICF study and other utility programs. Total gross measure impacts were calculated by multiplying the per-unit gross impacts to projected participation by measure. Total net measure impacts were developed by applying measure-level net-to-gross (NTG) factors to the total gross measure impacts, using the NTG factors from the Navigant M&V results where available. Total Program impacts represent the summation of the total gross and net measure impacts across all measures.

R8-68(c)(3)(ii)(d) Third Party Measurement and Verification Contractor

PEC is using an independent, third-party consultant specializing in the evaluation, measurement, and verification of energy efficiency program impacts to provide the appropriate EM&V support for this Program. PEC's existing EM&V plan for the Program will be revised to address the specific Program modifications proposed within this document upon Commission approval.

R8-68(c)(3)(iii) Cost Recovery Mechanism

The Company intends to utilize the cost recovery mechanism approved by the Commission in its Order issued June 15, 2009 in Docket No. E-2, Sub 931.

R8-68(c)(3)(iv) Tariffs or Rates

PEC's proposed Home Energy Improvement Rider is attached in Appendix A.

R8-68(c)(3)(vi) Utility Incentives

PEC's requested incentives, including the recoupment of net lost revenues, are consistent with those filed in its Home Energy Improvement Program request dated February 24, 2009 in Docket No. E-2, Sub 936. Pursuant to PEC's Cost Recovery and Incentive Mechanism approved by the Commission on June 15, 2009 in Docket No. E-2, Sub 931, program performance incentives and

³ 2009 EM&V Report for the Home Energy Improvement Program, Navigant Consulting with the Cadmus Group, March 2011.

recovered net lost revenues will be trued-up on the basis of completed M&V evaluations. Estimated net lost revenues and program performance incentives for each year of the proposed recovery period have been provided in the following table. Portions of these amounts would be assigned to PEC's North Carolina customers based upon jurisdictional allocation factors.

ESTIMATED NET LOST REVENUE AND UTILITY INCENTIVES (\$000s)

Period	Net Lost Revenue	Recoverable Net Lost Revenue	Program Performance Incentive (PPI)
2012	\$131	\$ 131	\$ 83
2013	412	412	178
2014	720	720	278
2015	1,041	911	379
2016	1,377	966	482
2017	1,547	829	482
2018	1,546	507	482
2019	1,544	171	482
2020	1,543	—	482
2021	1,539	—	482
2022	1,524	—	399
2023	1,498	—	304
2024	1,471	—	205
2025	1,442	—	104
Total	\$17,335	\$4,648	\$4,821
Present Value⁴	\$ 9,479	\$3,459	\$2,865

⁴ Discount rate employed in the determination of present values is 8.8054 percent.

Appendix A

Home Energy Improvement Program Rider

Carolina Power & Light Company
d/b/a Progress Energy Carolinas, Inc.
(North Carolina Only)

RESIDENTIAL SERVICE – HOME ENERGY IMPROVEMENT PROGRAM HEIP-3

PURPOSE

The purpose of this program is to offer customers a variety of energy conservation measures designed to increase energy efficiency in existing residential dwellings that can no longer be considered new construction. This Program will utilize a network of customer-selected contractors from a prequalified list provided by Company to install energy efficiency measures: (1) to encourage the installation of high efficiency central air conditioning (AC) and heat pump systems, (2) to encourage attic insulation and sealing, (3) to perform diagnostic maintenance on heat pumps or central AC units, (4) to encourage the installation of heat pump water heaters, and (5) to encourage high efficiency room air conditioning.

AVAILABILITY

The program is available to customers whose premise is at least one year old, is served under a residential service schedule by Company, and is applicable to all electric service of the same available type supplied to Customer's premises at one point of delivery through one kilowatt-hour meter under the provisions of this Program.

Incentives are only applicable to measures installed by a prequalified contractor approved by Company; however, high efficiency room air conditioners may be self-installed and do not require the use of a prequalified contractor.

INCENTIVE PAYMENTS

For installations on and after (*insert effective date*), Customer shall receive the following incentives for qualifying equipment or other measures:

1. For air duct repair, 50% of the repair cost, not to exceed \$190 per unit per dwelling.
2. For increasing attic insulation to a minimum of R30 and attic air sealing, 37.5 cents per square foot, not to exceed \$500 per dwelling.
3. For the installation of high efficiency central AC, heat pumps, and geothermal heat pumps, \$300 per unit.
4. For an HVAC audit, consisting of condenser coil cleaning plus correcting refrigerant charge and adjusting air flow using Company approved diagnostic tool, \$100. Customer shall be eligible for an HVAC audit incentive only once for the HVAC equipment life.

5. For the installation of heat pump water heater(s), \$350 per dwelling.
6. For high efficiency room air conditioner(s), \$25 per unit with a maximum of 4 units per customer account subject to an incentive.

Incentive Payments for qualifying window replacements, HVAC tune-up - level 1, and duct testing under Program HEIP-1 shall continue to be available for installations completed on or before *(insert 30 days following the effective date)*.

RESPONSIBILITY OF PARTIES

A dwelling is eligible to receive an incentive for each central air conditioner or heat pump, and heat pump water heater installed based on the efficiency level. The work performed for all measures must be completed by a Company prequalified contractor who has met the program training requirements and guidelines as set forth by the Program; however, high efficiency room air conditioners may be self-installed and do not require the use of a prequalified contractor.

CONTRACT TERM

Customer shall submit the required incentive application form, including required documentation such as equipment cut sheets and the original contractor invoice as provided by the contractor based upon program requirements, within ninety (90) days of completion of the work. Incentive application forms received after that date will not be eligible to receive an incentive payment.

All energy conservation measures shall be subject to inspection by Company for the purposes program evaluation, measurement, and verification.

OTHER CONDITIONS

The following equipment specifications shall be met in order to be eligible to receive an incentive:

High Efficiency Heat Pump Replacements - the replacement unit(s) shall be a minimum SEER (Seasonal Energy Efficiency Ratio) of 15.

High Efficiency Central AC Replacements - the replacement unit(s) shall be a minimum SEER of 15.

Geothermal Heat Pumps - shall be a minimum EER (Energy Efficiency Ratio) of 19.

Attic Insulation - shall require air leak sealing, bring the insulation up to a minimum of R30 and existing insulation shall not be higher than R19.

Heat Pump Water Heaters – the replacement unit(s) shall have a minimum Energy Factor of 2.0

High Efficiency Room Air Conditioning – the unit(s) shall be Energy Star qualified.

COMPANY RETENTION OF PROGRAM BENEFITS

Incentives and other considerations offered under the terms of this Program are understood to be an essential element in the recipient's decision to participate in the Program. Upon payment of these considerations, Company will be entitled to any and all environmental, energy efficiency, and demand reduction benefits and attributes, including all reporting and compliance rights, associated with participation in the Program.

GENERAL

Service rendered under this Program is subject to the provisions of the Service Regulations of the Company on file with the state regulatory commission.

Supersedes Program HEIP-1

Effective for service rendered on and after _____

NCUC Docket No. E-2, Sub 936