Dianne M. Triplett
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Duke Energy Florida, LLC

October 16, 2015

BY ELECTRONIC FILING

Ms. Carlotta Stauffer, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: FPSC Docket No. 150083-EI Petition for Approval of Demand-Side Management Plan of Duke Energy Florida, LLC.

Dear Ms. Stauffer:

Attached for filing in the above-referenced matter is Duke Energy Florida, LLC's Program Standards - Ten-Year DSM Plan 2015 – 2024.

Thank you for your assistance in this matter.

Sincerely,

/s/ Dianne M. Triplett

Dianne M. Triplett

DMT/lc
Attachments

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via electronic mail this 16th day of October, 2015, to all parties of record as indicated below.

/s/ Dianne M. Triplett
Attorney

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2015 – 2024

DEMAND-SIDE MANAGEMENT

PROGRAM PARTICIPATION STANDARDS

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HOME ENERGY CHECK PROGRAM

1. PROGRAM OVERVIEW

The Home Energy Check program of Duke Energy Florida, LLC (DEF) is a residential energy audit program that provides residential customers with an analysis of their energy consumption as well as educational information on how to save money by reducing their energy usage. The audit provides the opportunity to promote and directly install cost-effective measures in customers' homes while also educating and encouraging customers to implement energy-saving practices. The Home Energy Check program serves as the foundation for other residential energy efficiency and demand side management programs. The Home Energy Check program offers the following types of energy audits:

- Type 1: Free Walk-Through (computer assisted).
- Type 2: Customer Online (Internet Option).
- Type 3: Customer Phone Assisted.
- Type 4: Home Energy Rating (or BERS/HERS) Audit.

All of these audit types, except Type 4 - Home Energy Rating, are provided to the customer at no charge. The charge for the Home Energy Rating can be found in DEF's tariffs Section II, Fifth Revised Sheet No. 2.6 - Florida BERS/HERS Audit.

Customers will be provided with energy-efficiency tips and examples of easily installed energy efficiency measures. The program promotes continued customer involvement by demonstrating sustainable and measurable reductions in energy usage through the implementation of low cost energy-efficiency measures and energy saving recommendations. Customers participating in the Home Energy Check program may receive a residential Energy Efficiency Kit. The kit will contain energy saving measures that can easily be installed and utilized by the customer. The contents of this kit will be evaluated periodically and may change over time.

2. ELIGIBILITY REQUIREMENTS

The residence must be in DEF's service area and must be a residentially metered customer of DEF.

3. PARTICIPATION REQUIREMENTS

No more than one audit may be conducted for the same customer at the same premise within a two-year period. DEF reserves the right to update audits and schedule field visits on a per need basis.

4. REPORTING REQUIREMENTS

The reporting requirements for this program will follow Rule 25-17.0021(5), Florida Administrative Code.

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

RESIDENTIAL INCENTIVE PROGRAM

DUKE ENERGY FLORIDA, LLC
PROGRAM PARTICIPATION STANDARDS
RESIDENTIAL INCENTIVE PROGRAM

1. PROGRAM OVERVIEW

The Residential Incentive Program (RI PROGRAM) of Duke Energy Florida, LLC (DEF) is an "umbrella" program designed to improve the energy efficiency of existing and new residential homes. The program seeks to meet the following overall goals:

- Provide a cost-effective portfolio of measures across different housing types.
- Provide customer energy savings and demand reduction through the installation of energy-efficient equipment and thermal envelope upgrades.
- Educate the residential market regarding best practices, innovative technologies and opportunities to participate in all applicable incentives for managing energy consumption.

2. ELIGIBILITY REQUIREMENTS

1. All measures must have been recommended during a DEF energy audit completed within the past two (2) years. (**Exception:** *in emergency cases, the customer may have HVAC equipment installed prior to the audit.)*

2. The residence must be in DEF's service area and be a residentially metered customer of DEF.

3. All HVAC and Window installations must be permitted by the appropriate local agency.

4. A DEF-approved Trade Ally must be used for Duct Test, Duct Leakage Repair and Ceiling Insulation measures.

5. All installations must be accessible for verification of RI PROGRAM standards by a DEF representative.

3. TRADE ALLY REQUIREMENTS

1. All Trade Allies must comply with DEF Trade Ally training, procedures and manufacturers' specifications specific to the portion of the RI PROGRAM for which they are participating. Failure to do so may result in termination of participation in any or all DEF programs.

2. The Trade Ally is responsible for the work to be performed, the supervision of their employees, and the use of Trade Ally's own equipment to meet the work specifications and completion date.

3. The Trade Ally must correct any deficiency found in the installation or product when advised by a DEF representative, and notify the DEF representative of compliance within thirty (30) days.

4. The Trade Ally shall notify DEF of any incident occurring during installation of an RI Program measure or any follow-up procedure within five (5) working days of incident.

5. The Trade Ally shall indemnify and hold DEF harmless against any and all injuries, damages, claims, or costs, caused by items furnished or services rendered by the Trade Ally and/or its employees.

6. The Trade Ally must comply with all federal, state, and local codes and regulations and have the appropriate permits and license(s) for the work to be performed.

7. The Trade Ally must notify their insurance companies to provide DEF with documentation and maintain in force the state required minimum insurance policies for license retention or the following minimum insurance policies, whichever is greater. This applies to the Duct Test, Duct Leakage Repair and the Ceiling

Insulation Upgrade measures:

- Workman's Compensation as required by law.
- General Contractual and Automobile Bodily Injury Liability: $100,000 per person and $300,000 per occurrence.
- General and Automobile Property Damage Liability: $100,000 per occurrence.
- General and Vehicle Liability policies endorsed: $100,000 per occurrence to provide blanket coverage.

8. In multi-family structures, DEF reserves the right to request bids from Trade Allies to hold customer costs to a minimum.

4. INCENTIVES

The incentive payment structure is as follows:

Program Component	Incentive
Duct Test	50% of test cost up to $30 for the first unit tested
	50% of test cost up to $20 for each additional unit at same address
Duct Leakage Repair	Will pay the cost of the repair up to $150 per system for single family homes with ducted electric air and heat. Will pay the cost of the repair for Multi-Family homes with ducted electric and heat up to $150 per unit (no test required).
Attic Insulation (Ceiling Insulation Upgrade)	Will pay 0.19¢ per square foot up to $200 to bring insulation from R-19 or less to a minimum of R-38.
High Efficiency Heat Pump Replacing Resistance Heat Multi-Family	Will pay $150 for minimum cooling efficiency of 14.0 SEER and minimum heating efficiency of 8.2 HSPF

High Efficiency Heat Pump Single Family or Manufactured Homes	Will pay $375 for High Efficiency Heat Pump systems with a minimum cooling efficiency of 15 SEER and minimum heating efficiency of 8.2 HSPF replacing less efficient resistance/strip heat HVAC systems	
	Will pay $200 for High Efficiency Heat Pump systems with a minimum cooling efficiency of 15 SEER and minimum heating efficiency of 8.2 HSPF replacing less efficient Heat Pump HVAC systems	
High Efficiency Heat Pump Single Family	Will pay $800 for High Efficiency Heat Pump systems with a minimum cooling efficiency of 17 SEER and minimum heating efficiency of 9.0 HSPF replacing less efficient resistance/strip heat HVAC systems	
	Will pay $600 for High Efficiency Heat Pump systems with a minimum cooling efficiency of 17 SEER and minimum heating efficiency of 9.0 HSPF replacing less efficient Heat Pump HVAC systems	
Replacement Windows Single Family	Will pay $2.00 per square foot of east, west and south-facing window area up to a maximum of $400 for high performance windows that have a minimum Solar Heat Gain Coefficient (SHGC) of less than or equal to 0.25 and a U-Value of equal to or less than 0.35	
ENERGY STAR Qualified New Home version 3.1 (or current version) Incentive Per Single Family Home $200	Envelope	Insulation over conditioned area requires radiant barrier and insulation equal to or greater than R-38 (not required if the attic over living area is conditioned space) High performance windows must have a minimum Solar Heat Gain Coefficient (SHGC) less than or equal to 0.25 and U-Value less than or equal to 0.35
	Mechanical Systems	Must have all electric heat pump system located in conditioned space and all duct connections sealed with mastic Must have High Efficiency Heat Pump systems with a minimum cooling efficiency of 15 SEER and minimum heating efficiency of 8.2 HSPF Air conditioner ducts with minimum R-6 insulation and located 100% in conditioned space Fresh air ventilation must meet ASHRAE 62.2 Programmable thermostats
	Infiltration	House leakage must be less than or equal to 5 air changes per hour
	Lighting	Interior lighting must be CFL's or LED's minimum 85% of home

Notes:

1. If SEER is not available, an EER conversion using industry standard practices may be used to determine qualification.

4.1 INCENTIVE PROCESSING

1. A copy of the incentive form and all supporting documentation must accompany the application for all measures completed.

2. The customer or Trade Ally shall have six (6) months from date of installation to submit all required forms for the measure after which they will become ineligible for incentive.

3. On-site inspections will be performed on at least 10% of all program measures.

4. A copy of the certificate of completion and pre and post duct leakage data will be required for single family aerosol duct sealing measures.

5. If the measure is assigned for inspection, an inspection form will be completed by a DEF representative.

6. Incentives will be processed for payment after inspection requirements are met.

7. Duct test, repair, insulation upgrade and Energy Star Certified New Home incentive payments are made to the Trade Allies.

8. HVAC and window incentive payments are paid or credited to the customer or designated recipient.

5. REPORTING REQUIREMENTS

The reporting requirements for this program will follow Rule 25-17.0021(5), Florida Administrative Code.

6. DUCT TEST AND LEAKAGE REPAIR SINGLE FAMILY/MANUFACTURED HOMES

6.1 PARTICIPATION REQUIREMENTS

1. Repair recommendations must have been the result of a DEF-approved duct test or

DEF audit. (**Exception:** If during an energy audit or prior to duct test, the DEF representative validates the need for duct repair or complete duct system replacement, a duct test is not required).

2. The customer's duct system must be in adequate condition to accommodate the duct test and must be accessible and in adequate condition for duct repair. (**Exception:** aerosol sealing method).

3. Homes must have centrally-ducted electric cooling and electric heat. If non-space heating combustion appliances exist (i.e., water heater, stove, etc.) then the house must pass an industry-approved safety test prior to any duct sealing.

4. A minimum of 60 CFM at 25 Pascal's of leakage per ton of HVAC equipment capacity and a minimum of 60% of the leakage sealed is the baseline for participation in aerosol duct sealing.

6.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. All equipment installations must meet manufacturers' instructions and specifications and must meet all state, county and local codes.

2. For conventional duct repair, only mastic and fiber cloth or mastic with embedded fiber (mixed) may be used to seal the duct system. Tape may be used to hold the duct in place while the mastic is drying. If tape is used the mastic must cover the tape completely and extend a minimum of 2" past the width of the tape. Mastic must meet Underwriters Laboratories (UL) 181 specifications for the material that the mastic is being applied to.

3. Duct test procedures must be followed as specified in manufacturers' instructions, unless otherwise directed by DEF when performing the duct test.

4. Aerosol procedures must be followed as specified in training or manufacturers' instructions and will include:

    - Complete pre-seal and post-seal leakage test using approved aerosol software
    - Aerosol sealants shall meet the requirements of Underwriters Laboratories (UL) 723
    - Seal all boot-to-ceiling and/or floor connections

- All areas of the duct system will be evaluated and cost-effective leaks will be sealed by conventional or aerosol method

6.3 TRADE ALLY REQUIREMENTS

1. Must meet the Trade Ally requirements as outlined in Section 3.

2. Must be a licensed Mechanical Contractor, or a Class A, B, or C Air Conditioning Contractor in the jurisdiction having authority.

3. All participating Trade Allies must attend and successfully complete DEF-approved duct repair training.

6.4 INSPECTION REQUIREMENTS

All inspectors must attend and successfully complete a DEF-approved Duct Diagnostics training.

At a minimum, the training will consist of:

- Training session on Building Science
- Duct test applications (classroom, field and laboratory)
- Codes and standards as they relate to duct sealing

7. DUCT LEAKAGE REPAIR MULTI-FAMILY

7.1 PARTICIPATION REQUIREMENTS

1. Repair recommendations must have been the result of a DEF-approved audit.

3. The customer's duct system must be accessible and in adequate condition to accommodate the duct repair. (Exception: aerosol sealing method).

4. Homes must have centrally-ducted electric cooling and electric heat.

5. Home must not contain any combustion appliances (including wood burning or gas fire places).

7.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. All equipment installations must meet manufacturers' instructions and specifications and must meet all state, county and local codes.

2. For conventional duct repair only mastic and fiber cloth or mastic with embedded fiber (mixed) may be used to seal the duct system. Tape may be used to hold the duct in place while the mastic is drying. If tape is used the mastic must cover the tape completely and extend a minimum of 2" past the width of the tape. Mastic must meet Underwriters Laboratories (UL) 181 specifications for the material that the mastic is being applied to.

3. Aerosol procedures must be followed as specified in training or manufacturers' instructions and will include:

    - Complete pre-seal and post-seal leakage test using approved aerosol software
    - Aerosol sealants shall meet the requirements of Underwriters Laboratories (UL) 723
    - Seal all boot-to-ceiling and/or floor connections
    - All areas of the duct system will be evaluated and cost-effective leaks will be sealed by conventional or aerosol method

7.3 TRADE ALLY REQUIREMENTS

1. Must meet the Trade Ally requirements as outlined in Section 3.

2. Must be a licensed Mechanical Contractor, or a Class A, B, or C Air Conditioning Contractor in the jurisdiction having authority.

3. All participating Trade Allies must attend and successfully complete DEF-approved duct repair training.

7.4 INSPECTION REQUIREMENTS

All inspectors must attend and successfully complete DEF-approved Duct Diagnostics training.

At a minimum, the training will consist of:

- Training session on Building Science
- Duct test applications (classroom, field and laboratory)
- Codes and standards as they relate to duct sealing

8. CEILING INSULATION UPGRADE

8.1 PARTICIPATION REQUIREMENTS

1. Insulation recommendations must have been the result of a DEF audit.

2. Eligible residences must have whole house cooling and/or electric heating.

3. The weighted average R-value of the existing insulation over the total attic square footage (above conditioned space) must be less than or equal to R-19.
   (**Exception:** May exclude conditioned area for a recent addition.)

4. Any structure that has participated in DEF's attic insulation upgrade program is not eligible to participate again. However, if the structure, through an act of God loses the insulation **and** the loss is **not** covered by insurance, the structure is eligible to participate a second time. It is the customer's responsibility to provide DEF with a letter from his/her insurance company stating that the insulation was not covered.

5. Any home with "Knob and Tube Wiring" must be documented or certified as not energized by a state licensed electrician.

8.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. The insulation must be installed in accordance with the manufacturers' recommendations, specifications and must meet all state, county and local codes.

2. All installations must result in an insulation value equal to or greater than R-38.

3. Flat roofs must have sufficient space to allow a minimum of 3 inches of air space above the insulation after insulation has been installed to the recommended R-value.

4. The insulation must be installed in the unconditioned space as a direct application to the attic area over the conditioned space.

5. The insulation must have a minimum clearance around all recessed lighting and gas-fired appliances as required by state, county and local codes.

6. The insulation must be installed uniformly, resulting in the same R-value throughout the entire area including knee walls.

7. All attic access panels that are located in conditioned space must be insulated in the same minimum R-value as throughout the entire area and permanently attached.

8.3 TRADE ALLY REQUIREMENTS

1. Must meet the Trade Ally requirements as outlined in Section 3.

2. The Trade Ally will attach an R-value Certification Card signed by the insulation Trade Ally or his/her representative to the attic joist visible from the attic access and provide a copy of the R-value Certification Card to the customer. The card shall contain, at a minimum, the following information:

    - Manufacturer's name
    - Insulation type
    - R-Value of insulation installed; Thickness of insulation installed; Location of insulation installed
    - Name and address of the Trade Ally installing the insulation
    - Date of installation

3. All participating Trade Allies in the Ceiling Insulation Program must follow DEF Code of Ethics. DEF reserves the right to request background check results on all participating employees.

9. HIGH EFFICIENCY ELECTRIC HEAT PUMPS SINGLE-FAMILY / MANUFACTURED HOME

9.1 PARTICIPATION REQUIREMENTS

1. The customer must have had an audit within the past two (2) years. (An exception would be made for emergency heat pump equipment installations and change-outs as

a result of a non-operating system).

2. The customer must have electric resistance/strip heat or less efficient heat pump.

9.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. All equipment installations must meet manufacturers' instructions and specifications and must meet all state, county and local codes.

2. Installed equipment must be complete systems and shall be listed by Underwriters Laboratories or other nationally recognized testing laboratories in accordance with Underwriters Laboratories (UL) standards, as appropriate.

3. Both air handler and condensing unit must be replaced.

4. The installed air handler/outdoor condensing unit combination must satisfy both the heating and cooling minimum efficiency requirements.

5. All equipment shall be new and not refurbished, previously installed or used.

6. Equipment efficiency ratings shall be obtained from a nationally recognized certification program directory or a manufacturer's rating certified to be in compliance with an approved Department of Energy (DOE) or Air Conditioning Heating and Refrigeration Institute (AHRI) rating procedure (standard 210/240-2008).

7. Cooling unit sizing may not exceed the calculated whole house load by 15% or 6,000 Btu/h, whichever is larger. A manual J or ASHRAE approved sizing calculation must be completed. (**Exception:** *Additions with dedicated HVAC systems where conditioned area is less than 500 square feet and manufactured homes are exempted from this requirement.*)

8. The Trade Ally must use mastic on all connections.

9. Air handling units, mechanical closets and enclosed support platforms shall be sealed from unconditioned air.

10. Heat pump must be all electric.

9.3 TRADE ALLY REQUIREMENTS

1. Must meet the Trade Ally requirements as outlined in Section 3.

2. Must be a licensed Mechanical Contractor or Class A, B, or C Air Conditioning Contractor in the jurisdiction having authority.

3. The Trade Ally must be able to demonstrate their ability to properly calculate heating and cooling loads by using industry approved sizing software in the jurisdiction having authority.

4. The Trade Ally shall have six (6) months from date of installation to submit all "High Efficiency Equipment Forms" after which they will become ineligible for incentive.

10. HIGH EFFICIENCY ELECTRIC HEAT PUMPS MULTI-FAMILY

10.1 PARTICIPATION REQUIREMENTS

1. The customer must have had an audit within the past 2 years. (An exception would be made for emergency heat pump equipment installations and change-outs as a result of non-operating systems).

2. Customer must have electric resistance/strip heat.

10.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. All equipment installations must meet manufacturers' instructions and specifications and must meet all state, county and local codes.

2. Installed equipment must be complete systems and shall be listed by Underwriters Laboratories or other nationally recognized testing laboratories in accordance with Underwriters Laboratories (UL) standards, as appropriate.

3. Both air handler and condensing unit must be replaced.

4. The installed air handler/outdoor condensing unit combination must satisfy both the

cooling and heating minimum efficiency requirements.

5. All equipment shall be new and not refurbished, previously installed or used.

6. Equipment efficiency ratings shall be obtained from a nationally recognized certification program directory or a manufacturer's rating certified to be in compliance with an approved Department of Energy (DOE) or Air Conditioning Heating and Refrigeration Institute (AHRI) rating procedure (standard 210/240-2008).

7. Cooling unit sizing may not exceed the calculated whole house load by 15% or 6,000 Btu/h, whichever is larger. A manual J or ASHRAE approved sizing calculation must be completed. (**Exception:** *Additions with dedicated HVAC systems where conditioned area is less than 500 square feet and manufactured homes are exempted from this requirement.*)

8. The Trade Ally must use mastic on all connections.

9. Air handling units, mechanical closets and enclosed support platforms shall be sealed from unconditioned air.

10. Heat pump must be all electric.

10.3 TRADE ALLY REQUIREMENTS

1. Must meet the Trade Ally requirements as outlined in Section 3.

2. Must be a licensed Mechanical Contractor or Class A, B, or C Air Conditioning Contractor in the jurisdiction having authority.

3. Trade Allies must be able to demonstrate their ability to properly calculate heating and cooling loads by using industry approved sizing software in the jurisdiction having authority.

4. The Trade Ally shall have six (6) months from date of installation to submit all "High Efficiency Equipment Forms" after which they will become ineligible for incentive.

11. REPLACEMENT WINDOWS

11.1 PARTICIPATION REQUIREMENTS

1. Multi-family and manufactured homes are not eligible to participate.

2. Eligible residences must have whole house electric air conditioning and whole house electric heating.

3. Any structure that has maximized DEF's window incentive program is not eligible to participate again. However, if the structure, through an act of God loses windows **and** the loss is **not** covered by insurance, the structure is eligible to participate a second time. It is the customer's responsibility to provide DEF with a letter from his/her insurance company stating that the windows were not covered.

11.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. The replacement window and installation must meet manufacturers' instructions and specifications and must meet all state, county and local codes.

2. Incentive will be provided for south, east and west facing windows.

3. All materials shall be new and not refurbished, previously installed, or used.

4. The windows must be labeled by the National Fenestration Rating Council (NFRC) as achieving a Solar Heat Gain Coefficient (SHGC) of less than or equal to 0.25 and a U- value of less than or equal to 0.35.

5. Windows with overhangs extending three (3) feet or greater are exempt from the SHGC requirement but not the U-value requirement.

11.3 TRADE ALLY REQUIREMENTS

1. Must meet the Trade Ally requirements as outlined in Section 3.

2. The Trade Ally will leave a copy of the manufacturers' product specification sheet with the customer.

12. ENERGY STAR QUALIFIED NEW HOME

12.1 PARTICIPATION REQUIREMENTS

1. The home must be new. Additions do not qualify for this Residential New Construction measure. An existing home will be eligible if the whole house project is permitted new construction by the local governing body and Florida Building Code.

2. The home must be single family detached.

3. A Residential New Construction builder, developer or builder/owner must comply with all federal, state, and local codes.

4. The home must be accessible for verification of Residential Incentive Program standards by a DEF employee or representative.

5. The home must be individually metered by DEF on a residential rate.

12.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. All equipment installations must meet manufacturers' instructions and specifications and comply with all applicable local and state building codes.

2. Cooling unit sizing may not exceed the calculated whole house load by 15% or 6,000 Btu/h, whichever is larger. A manual J or ASHRAE approved sizing calculation must be completed

3. Equipment efficiency ratings shall be obtained from a nationally recognized certification program directory or a manufacturer's rating certified to be in compliance with an approved Department of Energy (DOE) or Air Conditioning Heating and Refrigeration Institute (AHRI) rating procedure (standard 210/240-2008).

4. Equipment information such as model numbers, manufacturers' name, and Btu/h capacity shall be made accessible to the DEF employee or representative.

5. The HVAC system shall be a high efficiency electric heat pump with a minimum cooling efficiency of 15.0 SEER (Seasonal Energy Efficiency Rating), with a minimum

heating efficiency of 8.2 HSPF (Heating Season Performance Factor) located in conditioned space.

6. Ducted systems shall be sealed with mastic and fiber cloth or mastic with embedded fiber (mixed). Tape may be used to hold the duct in place while the mastic is drying. If tape is used the mastic must cover the tape completely and extend a minimum of 2" past the width of the tape. Mastic must meet Underwriters Laboratories (UL) 181 specifications for the material that the mastic is being applied to.

7. The air conditioning ducts must be located in conditioned space with a minimum R-6 insulation value.

8. Insulation Over Conditioned Area requires radiant barrier and an R Value equal to or greater than R-38 (Not Required If The Attic Over Living Area Is Conditioned Space).

9. High performance windows must be labeled by the National Fenestration Rating Council (NFRC) as achieving a Solar Heat Gain Coefficient (SHGC) of less than or equal to 0.25 and a U-value less than or equal to 0.35. Decorative glass is exempt provided its total area does not exceed 15% of the total glass area of the home. North facing windows and awnings extending 3 feet or greater out from the windows are exempt from the SHGC requirement but not the U-value requirement.

10. Install fresh air ventilation in compliance with ASHRAE 62.2

11. The infiltration of the house must have 5 ACH or less.

12. A programmable thermostat must be used with the high efficiency heat pump mechanical system.

13. The interior lighting in the home will be a minimum 85% CFL's/LED's.

14. The home must be ENERGY STAR Version 3.1 certified or current version.

12.3 TRADE ALLY REQUIREMENTS

1. Must meet the Trade Ally requirements as outlined in Section 3.

2. All participating trade allies must comply with DEF trade ally requirements specific to the measure which they are participating.

3. Must meet the Residential New Construction technical specifications of all prescriptive measures.

12.4 INCENTIVE PROCESSING

1. To be eligible for incentives, an IRS W-4 and completed incentive form with all other required documentation must be submitted to DEF within six (6) months of Certificate of Occupancy for the home.

2. If the home is assigned for inspection and the inspection has been successfully completed, a DEF representative submits documents of the inspection to DEF for payment processing.

3. If the home is not assigned for inspection, or after it has passed inspection, builder's program forms will be processed for payment and a copy of the program forms will be retained by DEF.

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

NEIGHBORHOOD ENERGY SAVER PROGRAM

DUKE ENERGY FLORIDA, LLC
PROGRAM PARTICIPATION STANDARDS
NEIGHBORHOOD ENERGY SAVER PROGRAM

1.0 PROGRAM OVERVIEW

Duke Energy Florida, LLC's (DEF) Neighborhood Energy Saver (NES) program is a custom energy conservation program for low income customers. The NES program is designed to assist selected neighborhoods where 50% of the households have incomes equal to or less than 200% of the poverty level as established by the U.S. Government. NES allows DEF to individually reach a larger audience of income eligible customers than through traditional government agency flow-through methods. Duke Energy or a third party contractor will directly install energy conservation measures (ECM) identified through an energy assessment of the customer's home to increase their energy efficiency. Additionally, customers will receive a comprehensive package of energy education materials which will educate them on ways to better manage their energy usage. The energy conservation measures installed and energy efficiency education provided will be at no cost to the participants. The Neighborhood Energy Saver program seeks to achieve the following goals:

1. Complete a Home Energy Assessment to identify energy efficiency opportunities within the customer's home.

2. Implement a comprehensive package of electric conservation measures to increase the homes' energy efficiency.

3. Provide one-on-one customer education on energy efficiency techniques and energy conservation measures.

4. Promote behavioral changes that will help customers control their energy usage.

2.0 ELIGIBILTY REQUIREMENTS

DEF's NES program is a direct install program based upon identifying income eligible neighborhoods where 50% of the households have incomes equal to or less than 200% of

the poverty level established by the U.S. Government. Additional requirements are as follows:

- The resident must be a residential metered customer in DEF's service area.
- Customer must reside in a selected DEF qualifying Census Block that meets the definition of an income eligible neighborhood as stated above
- Multi-family dwellings that meet the above definition, that are located in the Neighborhood Energy Saver city, but not within the Census Block may also be eligible to participate in the program if they meet guidelines as presented in the program participation standards.
- All installations must be accessible for verification by a DEF representative.

3.0 EQUIPMENT/MATERIALS AND INSTALLATION SPECIFICATIONS

All materials and installation specifications shall meet or exceed the following guidelines:

- All equipment and the associated installations must meet manufacturers' instructions and specifications. Any contractor failing to meet manufacturers' specifications and DEF procedures may result in termination of participation in any or all DEF programs.
- All work shall be performed to constitute a finished product.
- Materials shall be free of defects and covered under warranty for at least one year.
- Installation procedures must comply with all federal, state and local codes.

4.0 CONTRACTOR REQUIREMENTS

The contractor shall work with subcontractors to install certain measures as mutually agreed upon with DEF. Contractors and subcontractors must have an active Florida General Contractor's license and meet all associated requirements of the Florida

Department of Business and Professional Regulation Division of Professions and must comply with all local, state and federal rules and codes. The selected contractor(s) is/are responsible for all work performed and must meet and/or comply with the following requirements:

1. Contractors must have appropriate license(s) and comply with all appropriate federal, state, and local building and safety codes for all work performed.

2. DEF reserves the right to request background checks of contractors participating in the NES program. The contractor shall be responsible for all associated costs.

3. The contractor is responsible for the associated work to be performed, the supervision of their employees and or subcontractors, and the use of contractor's own equipment (or rental equipment) to meet the work specifications.

4. All contractors must comply with DEF contractor procedures and manufacturers' specifications specific to the NES Program. Failure to do so may result in termination of participation in any or all DEF programs.

5. The contractor shall notify DEF of any incident occurring as a result of the NES program or any follow-up procedure within one (1) working day of incident.

6. The contractor must correct any deficiency found in the installation or product(s) associated with the NES comprehensive package of electric conservation measures, when advised by a DEF representative, and notify the DEF representative of compliance within thirty (30) days.

7. Contractors shall indemnify and hold harmless DEF from any and all losses, liabilities, injuries, damages, claims or costs whatsoever caused by items furnished or services rendered as a result of the NES program.

8. The contractor must notify their insurance companies to provide DEF with documentation and maintain in force the state required minimum insurance policies for license retention or the following minimum insurance policies, whichever is greater:

    - Workman's Compensation as required by law.
    - General Contractual and Automobile Bodily Injury Liability: $100,000 per

person and $300,000 per occurrence.

- General and Automobile Property Damage Liability: $100,000 per occurrence.
- General and Vehicle Liability policies endorsed: $100,000 per occurrence to provide blanket coverage.
- All sub-contract labor must comply with insurance requirements.

4. All participating duct sealing contractors must attend and successfully complete a DEF-approved duct repair course. At a minimum, the training will consist of:

    - Training session on Building Science
    - Duct test applications (classroom, field and laboratory)
    - Codes and standards as they relate to duct sealing

5. Sub-contractors participating in the measures must follow DEF Code of Ethics. DEF reserves the right to request background check results on all participating employees.

5.0 ELIGIBLE MEASURES

5.1 ENERGY-EFFICIENT LIGHTING

This measure will provide for the installation of a maximum of 8 energy-efficient light bulbs, for lights which are in use for an average of at least 4 hours per day:

The contractor shall replace incandescent bulbs with the appropriate corresponding wattage for CFL's and LED's in accordance with the chart below.

Existing Incandescent Wattage	**Replacement Wattage (Range)**
40 Watts	11 Watts – 13 Watts CFL
60 Watts	14 Watts – 16 Watts CFL 9 Watt LED
75 Watts	19 Watts – 21 Watts CFL
100 Watts	23 Watts – 25 Watts CFL

CFLs or LEDs will not be installed in dimmable fixtures, outdoor fixtures or enclosed fixtures.

5.2 WATER HEATER MEASURES

5.2.1 WATER HEATER INSULATION WRAP

Contractor will furnish and install water heater insulation on electric water heaters as needed. Heater Insulation:

- Shall have an insulating value of R- 6 or greater.
- Shall be Underwriters Laboratories (UL) approved.
- Shall be installed in accordance with manufacturer guidelines.
- Tape is allowed to be placed on top of the wrap to secure the insulation. (Tape used to secure the insulation must be vinyl and have good adhesive qualities).
- Water heating units, which have manufacturers' warnings against insulating, shall not be wrapped.
- Gas water heaters do not qualify.
- Any violation of the National Electrical Code will make a unit ineligible for the water heater wrap.

Recommended Materials

- Blanket Materials conformance to ASTM C592-80
- High Temperature conformance to ASTM 892-78
- Facing Material must have foil or vinyl facing
- R-Value must be R-6, minimum

5.2.2 WATER HEATER PIPE INSULATION

Contractor will furnish and install pipe insulation, as needed. Pipe Insulation:

- Shall have an insulating value of R-3 or greater.
- Shall be installed on at least the first five (5) feet of the hot and cold water pipes, when accessible.
- Gas water heater systems do not qualify.
- Any violation of the National Electrical Code will make a unit ineligible for the water heater pipe insulation.

Recommended Materials

- Must be flexible
- Wall thickness of 1 inch
- Temperature range must be 160 degrees to 200 degrees Fahrenheit.
- Must comply with requirements of ASTM E 84-05 and Underwriters Laboratories (UL) 181 sections 11.0 a 16.0, and retards heat loss.

5.2.3 WATER HEATER TEMPERATURE CHECK AND ADJUSTMENT

- The contractor will check the temperature of the hot water and inform the customer of the possibility for turndown adjustment.
- Contractor will discuss appropriateness of this conservation measure.
- If customer agrees and the water heater equipment is in proper working condition, contractor should reduce temperature setting to 120° F.

5.2.4 WATER SAVING FAUCET AERATORS

Contractor will furnish and install a maximum of three (3) water saving faucet aerators on the customer's faucets.

- Install a maximum of one kitchen aerator per home that shall provide a maximum flow rate of 2.2 gallons per minute (GPM) over normal line pressures and have shut-off capability.
- Install a maximum of two bathroom aerators per home that shall provide a maximum flow rate of 1.5 GPM over normal line pressures.
- Homes using gas water heaters will not qualify for water saving faucet aerators measures.

Recommended Materials

- Must be dual thread to fit male and female threaded faucets.
- Must meet the performance requirements of ANSI specification A112.18.
- Screen must be stainless steel.

5.2.5 WATER SAVING SHOWERHEADS

Contractor will furnish and install a maximum of 2 showerheads per home, including adapters. The showerhead:

- Shall have fittings constructed of chrome plated solid brass with 1/2-inch thread.
- Shall have a flow rate not to exceed 2.5 GPM at normal line pressures.
- Hand-held type fixtures may be provided. If the existing fixture is not handheld, the contractor must obtain the customer's approval to install the handheld showerhead.

Recommended Materials

- Must meet ANSI/ASME specification A112.18.1M 2.5 GPM max.
- Adjustable spray selections offer regular, massage and combo setting.
- Must meet Federal, State, and Local plumbing standards.
- Must have pause feature for user to slow the flow for additional savings.
- Anti-sediment screen to prevent line debris from clogging the screen.

5.3 REFRIGERATION THERMOMETERS

Contractor will furnish, install and demonstrate the proper temperature setting for the refrigeration equipment:

- Locate all refrigerators/freezers in the home
- Place one thermometer in refrigeration compartment area that will have uniform temperature, and place one thermometer in the freezer compartment.
- Educate resident on proper refrigeration settings and how to adjust their refrigerator/freezer thermostat.
- Install a maximum of six (6) refrigeration thermometers per home.

5.4 HVAC MEASURES

5.4.1 WALL PLATE THERMOMETER

Contractor will furnish, install and recommend the winter / summer temperature settings for the HVAC equipment:

- For central HVAC equipment, the wall plate thermometer should be mounted in the main conditioned space as close to any central HVAC air returns and away from any supply vents.
- For window units, locate the wall plate thermometer on the opposite wall in the largest room that is cooled by the unit.
- The wall plate thermometer should not be installed on exterior walls.
- Replace the existing wall switch plate with the wall plate thermometer.

- Educate resident on recommended winter / summer settings and how to adjust the HVAC system thermostat.
- Install a maximum of one (1) wall plate thermometer per home.

Recommended Materials
- Must be Underwriters Laboratories (UL) listed
- Must be fire resistant, and precut to fit
- Must be minimum 1/8" thick
- Must be wireless and battery included

5.4.2 WINTERIZATION KIT FOR WALL/WINDOW AC UNITS

Contractor will furnish and demonstrate the proper installation and use of the winterization kit for wall/window AC units:

- Locate all wall / window AC units in the home
- Install the winterization kit on all wall/window AC units, if seasonably applicable and the system is not in operation. If the wall / window AC units are in operational mode, continue on with educational component and leave the AC winterization kit with the residents.
- Educate the resident on proper installation techniques for the AC winterization kit on all wall/window units.
- Install or leave behind a maximum of three (3) winterization kits per home.

Recommended Materials
- A quilted AC cover designed to insulate and stop draft penetration.
- Must include installation instructions, weather stripping and removable tape.

5.4.3 HVAC FILTERS

Contractor will furnish and deliver four (4) filters for each central HVAC system.

- Locate all HVAC return grills with filter sizes
- Install a new filter in the main return grill.
- Leave customer with additional three (3) filters of the same size.
- If filter is of the permanent washable type, clean filter.
- Educate the resident on the importance of replacing or cleaning these filters regularly.

Recommended Materials

- Maybe fiber glass or natural fiber.
- Must be Underwriters Laboratories (UL) classified.
- Must be a high efficiency furnace/AC filter.
- Must have a minimum efficiency rating value of four.

5.5 HVAC MAINTENANCE

During the assessment, the contractor will perform a visual assessment of the HVAC system and make a recommendation for a basic system check. Home must be electrically heated and/or cooled to qualify for this measure.

The following represents the minimum requirement that must be performed by an approved HVAC Technician:

System Controls and Operation:

- Check thermostatic operation
- Cycle all controls
- Inspect for dirt and loose connections; clean and tighten as necessary
- Visually check all connections for refrigerant leaks
- Check refrigerant pressure and add as needed
- Check and record supply and return temperature

Evaporator:

- Inspect coil assembly and drip pan
- Clean coil and pan and flush as necessary
- Check drain line and blow out if necessary
- Apply algae treatment as required

Blower and Blower Drive:

- Oil blower motor if applicable
- Check motor bearings
- Check belt condition and tension; replace if necessary
- Check blower cleanliness; clean if necessary
- Check and record amp draw
- Check drive and pulley alignment
- Check for vibrations

Condenser:

- Lubricate condenser fan motor, if applicable
- Check motor bearings
- Check coil condition for dirt build-up and clean as necessary
- Clean condenser as needed

Compressor:

- Check electrical wire connections; clean and tighten where possible
- Check operation and condition
- Check and record operating amperage

Heating System:

- Check electric heat strips

5.5.1 CONTRACTOR REQUIREMENTS

Contractor must meet specifications as outlined in section 4.0.

5.6 DUCT LEAKAGE REPAIR

5.6.1 PARTICIPATION REQUIREMENTS

Contractor will determine if the home qualifies for an HVAC Duct Leakage Repair. Home must have a centrally ducted system to qualify for this measure.

Contractor will perform a visual inspection of the duct work. If not currently insulated or sealed, the contractor will arrange for a qualified HVAC Technician to install this measure.

1. The customer's duct system must be in adequate condition to accommodate the duct leakage repair.

2. The duct must be accessible for repair.

3. Homes must have centrally-ducted electric cooling and electric heat.

4. Home must not contain any combustion appliances (including wood burning or gas fire places).

5. The Contractor will seal every joint and connection.

5.6.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. All equipment installations must meet manufacturers' instructions and specifications.

2. For conventional duct repair only mastic and fiber cloth or mastic with embedded fiber (mixed) may be used to seal the duct system. Tape may be used to hold the duct in place while the mastic is drying. If tape is used the mastic must cover the tape completely and extend a minimum of 2" past the width of the tape. Mastic must meet Underwriters Laboratories (UL) 181 specifications for the material that the mastic is being applied to.

5.6.3 CONTRACTOR REQUIREMENTS

Contractor must meet specifications as outlined in section 4.0.

5.7 HOME ENERGY REPORT (MYHER)

5.7.1 ELIGIBILITY

The purpose of this program is to provide comparative usage data for similar residences in the same geographic area to motivate customers to better manage and reduce energy usage. The program will assist a maximum of 15,000 single-family residential customers who have previously participated in the Neighborhood Energy Saver (NES) Program or who have been identified as an income-qualified customer to both reinforce their existing efficient actions and continue to educate them on ways to save energy, as well as provide seasonal reminders and actionable tips that will help them better manage their energy usage.

5.7.2 SPECIFICATIONS

This program is available at the Company's option to participating NES customers or other income-qualified residential customers as identified by DEF and served on Duke

Energy's residential rate schedule.

- Customers will receive periodic comparative usage data reports via direct mail.

- Reports will provide targeted educational information to customers on seasonal actionable energy saving tips, as well as reminders for upkeep of their heating/cooling system.

- The Company will require a minimum number of months of historical usage data before allowing participation.

5.8 INFILTRATION MEASURES

5.8.1 WEATHER STRIPPING

Installed on exterior doors shall be aluminum and/or vinyl and/or metal with rubber gasket.

Recommended Materials

- Professional grade weather-stripping.

5.8.2 DOOR SWEEPS

Installed on external doors must be triple flange

Recommended Materials

- The height must be 2-3/8 inches.
- Extruded Aluminum with slotted holes for adjustment.
- Pliable vinyl triple seal with appropriate screws.

5.8.3 CAULKING

- Used on surfaces designated by the manufacturer.
- Must have a minimum life of twenty-five years.
- Must be acrylic latex or equivalent.

Recommended Materials

- Must be clear silicon acrylic caulk.

- Must stick to damp and dry surfaces with soap/water cleanup.
- Must dry clear, odor free and be paintable.
- Must not be oil or resin based caulks.

5.8.4 FOAM INSULATION

Use on surfaces as designated by the manufacturer.

Recommended Materials

- One component expanding polyurethane foam sealant.
- Must have strong adhesion quality-sticks to most surfaces.
- Must be Underwriters Laboratories (UL) classified.
- Must be environmentally safe and contain no CFCs or HCFCs.

5.9 CEILING INSULATION

5.9.1 PARTICIPATION REQUIREMENTS

1. Insulation recommendations must be the recommendation of the contractor.

2. Eligible residences must have whole house electric air conditioning and/or whole house electric heating.

3. The weighted average R-value of the existing insulation over the total attic square footage (above conditioned space) must be R-11 or less. (**Exception:** May exclude conditioned area for a recent addition.)

4. Any structure that has participated in DEF's attic insulation upgrade program is not eligible to participate again. However, if the structure, through an act of God, has lost the insulation **and** the loss is **not** covered by insurance, the structure is eligible to participate a second time. It is the customer's responsibility to provide DEF with a letter from his/her insurance company stating that the insulation was not covered.

5. Any home with "Knob and Tube Wiring" that is energized is not eligible.[1]

[1] National Electrical Code, Article 394

5.9.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. The insulation must be installed in accordance with the manufacturers' recommendations and specifications.

2. All installations must result in an insulation value equal to or greater than R-19.

3. Flat roofs must have sufficient space to allow a minimum of 3 inches of air space above the insulation after insulation has been installed to the recommended R-value.

4. The insulation must be installed in the unconditioned space as a direct application to the attic area over the conditioned space.

5. The insulation must have a minimum clearance around all recessed lighting and gas-fired appliances as required by state, county and local codes.

6. The insulation must be installed uniformly, resulting in the same R value throughout the entire area including knee walls.[2]

7. All attic access panels that are located in conditioned space must be insulated to a minimum R value of 19 and the insulation must be permanently attached.

8. Ceilings with a rise greater than 5 and a run of 12 (5 over 12 pitch) shall not be insulated with blown-in (loose fill) insulation. Blown-in insulation shall not be used in attics where the distance from the top of the bottom chord of the truss or ceiling joist to the underside of the top chord of the trusses at the ridge is less than 30 inches and where obstructions to blown insulation exist (such as air conditioning ducts).[3]

5.9.3 CONTRACTOR REQUIREMENTS

1. The contractor must meet requirements as outlined in section 4.0.

2. The contractor will supply to the customer in writing, the number of bags that will be installed, and leave the customer an empty bag or manufacturers' literature in order to determine the required density of the insulation.

[2] 2010 Florida Building Code Section 402.2.13 Walls Considered Ceiling Area
[3] 2010 Florida Building Code Section 402.2.1 Ceilings With Blown-In Insulation

3. The contractor will sign and attach an R-value Certification Card to the attic joist visible from the attic access. The card shall contain, at a minimum, the following information:

    - Manufacturer's name
    - Insulation type
    - R-Value of insulation installed, thickness of insulation installed, and location of insulation installed
    - Name and address of the Trade Ally installing the insulation
    - Date of installation

6.0 INSTALLATION PROCESS

The energy assessment will begin with the Energy Specialist(s)' explanation of the process/program to the resident. Emphasis on educating the resident on each of the conservation measures is vital to making the improvements sustainable.

1. Identify the location and wattage of up to eight (8) high-use incandescent lights within the home to be replaced with energy-efficient bulbs of equivalent lumen output and note the locations installed. The energy savings potential of these bulbs will be communicated to the resident.

2. Measure the hot water temperature at the closest water faucet to the water heater and document the temperature. If the water temperature is above 120° F, they will recommend having the water heater thermostat set to a lower temperature and note the recommendation. Gas water heaters will not qualify for this measure. Additionally, any violation of the National Electrical Code will make a unit ineligible.

3. The water heater location and type will be identified as to its eligibility for the installation of a water heater wrap. Gas water heaters do not qualify for this measure. Additionally, any violation of the National Electrical Code will make a unit ineligible. If a water heater wrap is applicable, this wrap will be installed per the manufacturers' instructions. Verify that the water heater is electric; not leaking and meets code requirements.

4. Insulation will be installed on the hot and cold water pipes to and from the electric water heater (5' on each side of the tank) as practicable. Gas water heaters do not

qualify for this measure. Additionally, any violation of the National Electrical Code will make a unit ineligible.

5. The general location of each shower head (maximum 2 per home), will be noted and replaced with an upgraded water saving showerhead. The Energy Specialist(s) will also list any adapters required for this replacement.

6. The general location of each applicable faucet (maximum per home is 1 in the kitchen and 2 in the bathroom) will be noted and a water saving aerator will be installed.

7. Locate all central HVAC filter locations and note the size and location. Replace (1) HVAC filter as required. Leave customer with additional (3) filters of the same size. Education of the resident on the importance of replacing or cleaning these filters regularly will be done. Up to 3 window air-conditioner filters are also eligible for replacement.

8. Inform the resident that a wall plate thermometer will be installed in the house. A location for the wall plate thermometer should be considered carefully. A location in the main conditioned space as close to any central HVAC air returns and away from any supply vents is best. For window units, locate the wall plate thermometer on the opposite wall in the largest room that is cooled by the unit. The wall plate thermometer should not be installed on exterior walls. Replace the existing wall switch plate with the wall plate thermometer. Explain to the resident that proper setting of the HVAC thermostat can result in significant savings on the power bill.

9. Install refrigerator thermometers in up to three (3) refrigerators/freezers in the house. Discuss the savings from the use of a refrigerator thermometer to keep food at the proper temperature with the resident.

10. Each penetration into the building envelope (HVAC chase, pipes, etc.) will be inspected for adequate seal. If needed, foam insulation will be added. Additionally, any broken windows will be noted and repaired with clear tape as practicable. The Energy Specialist(s) will discuss the impact of air infiltration on the customer's power bill.

11. Weather stripping, caulking and door sweeps will be specified for all exterior doors and window AC units as needed. The Energy Specialist(s) will install measures and discuss the impact of air infiltration around doors and window AC units on the

customer's power bill.

12. Install the winter kit for wall/window AC units, if applicable. This kit will prevent operation of the HVAC unit until it is removed. Explain the proper operation of the kit to the resident. Leave the kit with the customer if it is not the proper season to install on the unit.

13. Review the condition of the insulation in the attic and make recommendation to install enough to meet R-19 requirements. The Energy Specialist(s) will note if insulation is required and make arrangements for the Insulation Contractor to make an appointment to install the insulation.

14. Review the condition of the whole house HVAC system and recommend an HVAC tune-up if required. This measure is available for central electric heat and/or central AC units. The Energy Specialist(s) will note the need for a tune up and make arrangements with an HVAC Technician to get this service completed.

15. Review the condition of the duct work. If applicable, make arrangements with an HVAC Technician to have the ducts sealed.

16. Document for the resident all of the measures that were installed in the home and reiterate the importance of each measure in saving energy and money. An explanation includes the benefits and instruction on the proper use and care of the NES measures.

    1. An NES educational booklet outlining the installed measures and their benefits will be left with each customer.

    2. Education brochure(s) or other materials will also be provided by DEF that provide participants with specific energy saving recommendations.

17. The Energy Specialist(s) will also inform the resident that their home may be selected for inspection after all energy efficiency measures are installed.

18. Once all measures have been installed and explained to the customer, the Energy Specialist(s) will move on to the next home.

7.0 INCENTIVES

7.1 CUSTOMER INCENTIVES

The program provides an array of benefits that are distributed directly to those homes within the qualifying NES program. The customer will begin to benefit immediately from those measures which were specifically recommended from the Home Energy Assessment and installed as part of the comprehensive package of electric conservation measures during the NES program. The comprehensive package of electric conservation measures consists of the following which are provided at no cost to the resident:

- Compact fluorescent/LED lighting
- Water heater insulation wrap and insulation for water pipes
- Water conservation shower head and faucet aerators
- Water heater temperature check
- 4 HVAC filters
- Caulking for doors
- Weather-stripping and door sweeps
- Indoor wall thermometer
- Window AC unit cover
- HVAC maintenance
- Attic insulation
- Duct sealing
- Infiltration repairs
- My Home Energy Reports (MyHER)

Additionally, the customer receives education on energy efficiency techniques and the promotion of behavioral changes to help reduce their energy usage and make these measures sustainable.

7.2 CONTRACTOR INCENTIVES

The contractor will submit the following information with all invoices (not to exceed forty-five (45) days from the date of installation):

- A completed copy of the installed measures with date, customer and installer's information for each DEF account.
- Itemized invoice listing each of the completed DEF accounts, measures and cost

based upon the agreed cost per measure installed.

If the home is not selected for inspection, or after it has passed inspection, invoices will be processed for payment. DEF will input installed measures and paid incentives to a database system. Submitted reports and invoices will be maintained on file.

8.0 REPORTING REQUIREMENTS

DEF will follow the reporting requirements consistent with Rule 25-17.0021(5), Florida Administrative Code.

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

LOW-INCOME WEATHERIZATION ASSISTANCE PROGRAM

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

LOW-INCOME WEATHERIZATION ASSISTANCE PROGRAM

1.0 PROGRAM OVERVIEW

Duke Energy Florida, LLC's (DEF) Low-income Weatherization Assistance Program (LIWAP) is a custom energy conservation program. Through its partnerships with local weatherization providers, DEF provides education about energy saving opportunities and installs energy efficiency measures in homes of qualifying low income customers. The LIWAP seeks to achieve the following goals:

1. Integrate DEF's LIWAP procedures with the Department of Economic Opportunity (DEO) and local weatherization providers to deliver energy efficiency measures to low-income families.

2. Identify and educate agencies and low income customers about energy saving opportunities to upgrade their home's energy efficiency.

3. Increase low-income families' participation in DEF's DSM programs.

4. Minimize "lost opportunities" in the existing marketplace.

2.0 ELIGIBILITY REQUIREMENTS

The eligibility requirements for LIWAP align with DEO's requirements for participation in the Weatherization Assistance Program for Low Income. The DEO is responsible for providing annual updates to participating providers. Additional requirements are as follows:

- The residence must be in DEF's service area and be a residentially metered customer with an active account.

- Must meet Florida's weatherization low-income criteria in addition to income requirements stated above.

- All installations must be accessible for verification by a DEF representative.

- Homes must be greater than two years old.

- Homes having previously received DEF incentives for listed measures are not eligible for the same measure.

2.1 CONTRACTOR REQUIREMENTS

The Department of Economic Opportunity and local weatherization providers are responsible for all work performed. Local providers may also use DEF participating contractors for attic insulation and duct testing/repair.

1. Local providers must have appropriate license(s) and comply with all appropriate federal, state, and local building and safety codes for all work performed.

2. All work performed must follow manufacturers' and DEF's specifications where applicable.

3. Local providers and their agents must correct any deficiencies found in the installation or materials identified by DEF.

4. DEO/Providers shall indemnify and hold DEF harmless from any and all losses, liabilities, injuries, damages claims or costs whatsoever caused by items furnished or services rendered.

5. All DEF contractors shall indemnify and hold harmless DEF from any and all losses, liabilities, injuries, damages, claims or costs whatsoever caused by items furnished or services rendered.

6. DEF requires a minimum of the following insurance policies be in force by all participating contractors:
    - Workman's Compensation as required by law.
    - General Contractual and Automobile Bodily Injury Liability: $100,000 per person and $300,000 per occurrence.
    - General and Automobile Property Damage Liability: $100,000 per occurrence.
    - General and Vehicle Liability policies endorsed: $100,000 per occurrence to provide blanket coverage.

2.2 EQUIPMENT/MATERIALS AND INSTALLATION SPECIFICATIONS

All materials and installation specifications shall meet or exceed the following guidelines:

- Weatherization Installation Standards of the U.S. Department of Energy.
- Equipment must meet manufacturers' specification and installation procedures.
- All work shall be performed to constitute a finished product.
- Materials shall be free of defects and covered under warranty for at least one year.
- Installation procedures must comply with all federal, state and local codes.
- All equipment installations must meet manufacturer's instructions and specifications. Any contractor failing to meet manufacturer's specifications and DEF procedures may result in termination of participation in any or all DEF programs.

2.3 LOCAL PROVIDERS RESPONSIBILITY

The Department of Economic Opportunity, through their local weatherization providers, will be responsible for the following:

1. Qualify all participants using federal and state guidelines outlined in Section 2.
2. Perform an audit using the National Energy Audit Tool (NEAT) or any DEF-approved energy audit on all eligible low-income weatherization installations.
3. Qualify and install measures by DEF's standards and procedures. All installations shall comply with DEF specifications (see Sections 4.2 through 10.2).
4. Provide DEF random access to the weatherized homes for program evaluation and inspection.
5. Deliver energy education to weatherization clients.
6. Invoice DEF for program approved installed measures on a monthly basis.

3.0 INCENTIVES AND ELIGIBLE MEASURES

Duke Energy will provide incentives for the following measures with the stipulation that all requirements and minimum levels are achieved where applicable:

Weatherization Measure	Minimum Measure Requirement	Maximum Incentive Amount	Additional Requirements
Attic Insulation	Insulate homes with R5 or less to at least R-19 on residences with whole house electric air conditioning and/or electric heating	$.50 per square foot up to a maximum of $300 per home	Must be a recommendation of a NEAT or DEF-approved audit
Duct Leakage Test/ Repair	Repair Centrally Ducted Electric Heated and Cooled Systems	$150	1. LIWAP Inspection 2. Completed Duct Test
Reduce Air Infiltration	Must demonstrate a minimum reduction of 1500 cfm at 50 pascals in electrically heated homes Not to exceed a minimum of 0.35 ACH	$37.50	Must be a recommendation of a NEAT or DEF-approved audit
Electric Hot Water Reduction	Wrap electric water heater, insulate water pipes, lower temperature setting if needed, repair water leaks	$20	LIWAP Inspection
HVAC Maintenance	Tune up on Centrally Ducted Electric Heated and Cooled Systems	$150	LIWAP Inspection
High Efficiency Heat Pump Replacing a Heat Pump	New HP must be a minimum 15 SEER and 8.2 HSPF	$1,000	Must be a recommendation of a NEAT or DEF-approved audit. Incentive applicable on each new HP installed
High Efficiency Heat Pump Replacing Electric Resistance Heat	New HP must be a minimum 15 SEER and 8.2 HSPF	$1,500	
Water Saving Showerheads	Maximum of 2.5 gallon per minute flow on homes with Electric Water Heaters	$10 per showerhead	Maximum of 2 per home

Energy-efficient Light Bulbs	15 or 18 watt Compact Fluorescent replacing incandescent lamp greater than or equal to 60 watts 9 watt LED replacing incandescent lamp greater than or equal to 60 watts	$3.00 per lamp $4.50 per lamp	Maximum of 6 light bulbs per household
Faucet Aerators	Water Flow Reduction on homes with Electric Water Heaters	$5 per Aerator	Maximum of 2 per household
Refrigerator	Must be Energy Star rated	$400	1 per household

Notes:

1. *In multi-family structures, DEF reserves the right to request bids from contractors to hold costs to a minimum.*
2. *Incentive amounts will be reviewed and compared to market prices annually and adjusted accordingly.*

4. CEILING INSULATION

4.1 PARTICIPATION REQUIREMENTS

1. Must meet the Eligibility Requirements outlined in Section 2.0.

2. Must be a recommendation of a NEAT or DEF-approved audit.

3. The home must be at least two years old.

4. Eligible residences must have whole house electric air conditioning and/or whole house electric heating.

5. The weighted average R-value of the existing insulation over the total attic square footage (above conditioned space) must be less than R-11.

6. Any structure that has utilized any of DEF's ceiling insulation programs is not eligible to participate again. However, if the structure, through an act of God, loses the insulation **and** the loss is **not** covered by insurance, the structure is eligible to participate a second time. It is the customer's responsibility to provide DEF with a letter from his/her insurance company stating that the insulation was not covered.

7. The total ceiling area to be insulated must be greater than 100 square feet.

8. Mobile homes built after January 1, 1977 will be assumed to have an insulation value in excess of R-11 and will not be eligible to participate in this part of the LIWAP program unless documentation is provided to DEF stating that the actual existing insulation value is less than R-12.

9. Any home with "Knob and Tube Wiring" that is energized is not eligible. (Refer to: National Electrical Code, Article 324, Section 324-4).

4.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. The insulation must be installed in accordance with the manufacturer's recommendations and specifications.

2. All installations must result in an insulation value equal to or greater than R-19.

3. Flat roofs must have sufficient space to allow a minimum of 3 inches of air space above the insulation after insulation has been installed to the recommended R-value.

4. The insulation must be installed in the unconditioned space as a direct application to the attic area over the conditioned space.

5. The insulation must have a minimum clearance around all recessed lighting and gas-fired appliances as required by State, County and local codes.

6. The insulation must be installed uniformly, resulting in a minimum R-19 value throughout the entire area including knee walls. (Refer to: Florida Building Code Chapter 13, sub section 6 Section 604.1.A.1 Walls Considered Ceiling Area).

7. All attic access panels that are located in conditioned space must be insulated with a minimum R-19 batt permanently attached.

8. Radiant barriers will not be allowed as a substitute in the LIWAP.

9. Ceilings with a rise greater than 5 and a run of 12 (5 over 12 pitch) shall not be insulated with blown-in (loose fill) insulation. Blown-in insulation shall not be used in attics where the distance from the top of the bottom chord of the truss or ceiling joist to the underside of the top chord of the trusses at the ridge is less than 30 inches and where obstructions to blown insulation exist (such as air conditioning ducts). (Refer to: Florida Building Code Chapter 13, sub section 6 Section 604.1ABC.1.1 Ceilings With Blown-In Insulation).

4.3 CONTRACTOR REQUIREMENTS

1. Must meet the Contractor Requirements outlined in Section 2.1.

2. The contractor will supply to the customer, in writing the number of bags installed, and leave with the customer an empty bag or manufacturer's literature in order to determine the required density of the insulation.

3. The contractor will attach an R-value Certification Card signed by the insulation contractor or his representative to the attic joist visible from the attic access. The card shall contain, at a minimum, the following information:
    - Manufacturer's name
    - Insulation type
    - R-Value of insulation installed
    - Thickness of insulation installed
    - Location of insulation installed
    - Name and address of the contractor installing the insulation
    - Date of installation

5. DUCT LEAKAGE REPAIR

LIWAP duct repair is designed encourage weatherization providers to identify and repair duct leakage. Blower door or duct blaster equipment will be used as a diagnostic tool to locate duct leakage and provide quality control. This LIWAP component is available to all residential customers having a centrally ducted system with electric heating and cooling, provided the duct system is easily accessible.

5.1 PARTICIPATION REQUIREMENTS

1. Must meet the Eligibility Requirements outlined in Section 2.0.

2. Repair recommendations must have been the result of a DEF-approved duct test.

3. The customer's duct system and HVAC systems must be in adequate condition to accommodate the duct test, and not have been previously tested for the present occupant within a 5-year period.

4. The duct must be accessible for repair.

5. Homes must have centrally-ducted electric cooling and electric heat. If non-space heating combustion appliances exist (i.e., water heater, stove, etc.) then the house must pass a safety test prior to any duct sealing.

5.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. All equipment installations must meet manufacturers' instructions and specifications.

2. Only mastic and fiber cloth or mastic with imbed fiber (mixed) may be used to seal the duct system. Duct tape may be used to hold the duct in place while the mastic is drying. If duct tape is used the mastic must cover the duct tape completely and extend a minimum of 2" past the width of the duct tape. Mastic must meet UL181 specifications for the material that the mastic is being applied to.

3. Blower door or duct blaster procedures must be followed as specified in training or manufacturer's instructions, unless otherwise directed by DEF when performing the duct test.

5.3 CONTRACTOR REQUIREMENTS

1. Must meet the Contractor Requirements outlined in Section 2.1.

2. Must be a licensed Mechanical Contractor, Class A, B, or C Air Conditioning contractor.

3. All participating contractors must have attended and successfully completed a DEF-approved duct repair course. At a minimum, the training will consist of:
    - Training session on Building Science
    - Duct test applications (classroom and laboratory)
    - Duct test field applications
    - Codes and standards as they relate to duct sealing

4. Before any duct repairs can be made on homes with non-space heating combustion appliances the contractor shall follow the procedures as written in Chapter 4 of the "Duct Doctoring" instruction manual provided by the Florida Solar Energy Center Duct Diagnostics Training Course. The only exception is line 36, which deals with drilling a hole in the customer's vent pipe. This is not required. Instead of this procedure, DEF has adopted the National Fuel Gas Code's "Appendix H: Recommended Procedure for Safety Inspection of an Existing Appliance Installation."

5. A list of DEF contractors will be furnished to local weatherization providers for duct testing and repair. Providers will contract directly with DEF duct repair contractors for repair work.

5.4. INSPECTION REQUIREMENTS

All inspectors must be trained in the area for which they are inspecting. If inspecting for the Duct Test and Leakage portion of this program, all inspectors must have attended and successfully completed the training offered by the Florida Solar Energy Center or similar course. At a minimum, the training will consist of:

- Training session on Building Science
- Duct test applications (classroom and laboratory)
- Duct test field applications
- Codes and standards as they relate to duct sealing

6. HIGH EFFICIENCY ELECTRIC HEAT PUMPS

Promote the proper sizing and installation of high efficiency Heat Pump systems.

6.1 PARTICIPATION REQUIREMENTS

1. Must meet the Eligibility Requirements outlined in Section 2.0.

2. Must be a recommendation of a NEAT or DEF-approved audit.

6.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. All equipment installations must meet manufacturers' instructions and specifications.

2. Installed equipment must be complete systems and shall be listed by Underwriters Laboratories or other nationally recognized testing laboratories in accordance with UL standards, as appropriate.

3. Both air handler and condensing units must be replaced.

4. The installed air handler/outdoor condensing unit combination must satisfy both the cooling and heating minimum efficiency requirements.

5. All equipment shall be new and not refurbished or have been previously installed or used.

6. Equipment efficiency ratings shall be obtained from a nationally recognized certification program directory or a manufacturer's rating certified to be in compliance with an approved Department of Energy (DOE) or Air Conditioning and Refrigeration Institute (ARI) rating procedure (standard 210/240-94). All cooling-mode efficiency ratings eligibility will be based on EER if available. (Note: If EER ratings are not available then SEER will be used to determine cooling-mode eligibility. All heating-mode efficiency ratings eligibility will be based on HSPF, except for water source units.)

7. If the unit is sized larger than one ton (12,000 BTU) per 500 square feet of conditioned space, a manual J or ASHRAE approved sizing calculation must be submitted. The contractor must certify that the unit was sized according to manufacturer specifications. Exception: Manufactured homes are exempted from this requirement.

8. The contractor will certify that the unit was sized according to manufacturer specifications.

9. Refrigerant charge and type shall be according to manufacturer's specifications and recommendations for the unit installed. The contractor will certify that the proper charge is installed, that the unit is tested and is leak free.

10. Contractors shall certify that the airflow meets the manufacturer's recommendations and specifications for the system installed.

11. Contractors shall certify that if the equipment installed has a scroll compressor (36,001 Btu or larger), that a hard start kit was installed either by the contractor or at the factory.

12. Return air filters shall be installed to meet manufacturer's specifications with no obstructions. Filters must be easily accessible and the location shown to the customer.

13. The contractor shall check that the controlling thermostat is properly leveled, that the anticipator is properly set, and the thermometer is correct to within two degrees Fahrenheit.

14. The contractor will be encouraged to use mastic on all new connections.

15. Air handling units, mechanical closets and enclosed support platforms shall be sealed from unconditioned air.

16. Heat pump must be all electric.

6.3 CONTRACTOR REQUIREMENTS

1. Must meet Contractor Requirements in Section 2.1.

2. Must be a licensed Mechanical Contractor, Class A, B, or C Air Conditioning contractor in the jurisdiction having authority.

3. Contractors must demonstrate their capability to properly calculate heating and cooling loads by the Manual J method and to properly size and specify HVAC equipment.

4. The contractor must notify DEF within thirty (30) days if there was an emergency replacement due to equipment failure.

5. The agency shall have six (6) months from date of installation to submit all "High Efficiency Equipment Forms" after which they will become ineligible for incentive.

7. HEATING AND AIR CONDITIONING MAINTENANCE (HVAC)

Heating and air conditioning maintenance is designed to increase energy efficiency through proper operation of mechanical equipment. Local providers are encouraged to identify HVAC systems that could benefit from service maintenance to avoid future breakdowns.

7.1 PARTICIPATION REQUIREMENTS

1. Must meet Eligibility Requirements outlined in Section 2.0.

2. Must be a recommendation from a LIWAP inspection.

3. Must have centrally ducted electric heating and cooling.

7.2 EQUIPMENT/SERVICE AND INSTALLATION SPECIFICATIONS

The following represents the minimum requirement that must be performed by an approved contractor:

Filter:

- Inspect and clean filters
- Replace up to one inch throw-away filter
- Replace specialty filters if provided by customer

System Controls and Operation:

- Check thermostatic operation
- Cycle all controls
- Inspect for dirt and loose connections; clean and tighten as necessary
- Visually check all connections for refrigerant leaks
- Check refrigerant pressure and add as needed
- Check and record supply and return temperature

Evaporator:

- Inspect coil assembly and drip pan
- Clean coil and pan and flush as necessary
- Check drain line and blow out if necessary
- Apply algae treatment as required

Blower and Blower Drive:

- Oil blower motor if applicable
- Check motor bearings
- Check belt condition and tension; replace if necessary
- Check blower cleanliness; clean if necessary
- Check and record amp draw
- Check drive and pulley alignment
- Check for vibrations

Condenser:

- Lubricate condenser fan motor, if applicable
- Check motor bearings

- Check coil condition for dirt build-up and clean as necessary
- Clean condenser as needed

Compressor:

- Check electrical wire connections; clean and tighten where possible
- Check operation and condition
- Check and record operating amperage

Heating System:

- Check electric heat strips

7.3 CONTRACTOR REQUIREMENTS

Must meet Contractor Requirements in Sections 2.1 and 6.3.

8.0 WATER HEATER

It is the intent of this portion of the program to save energy through adding additional insulation to older water heaters, set back temperatures, insulate pipes and replace older less efficient water heaters, and help defray the cost of a new high efficient water heater.

8.1 PARTICIPATION REQUIREMENTS

1. Must meet Eligibility Requirements outlined in Section 2.0.
2. Must be a recommendation from a LIWAP inspection.
3. Must have an electric water heater.

8.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. Sides must be wrapped with a minimum Insulation level equal to R-6 or greater.
2. Top must be insulated to an R-8 or greater.
3. Pipes shall be insulated up to 3-foot minimum.

8.3 CONTRACTOR REQUIREMENTS

Must meet Contractor Requirements in Section 2.1.

9.0 AIR INFILTRATION REDUCTION

It is the intent of this portion of the program to save energy through reduction of unintended air infiltration into conditioned spaces of older homes.

9.1 PARTICIPATION REQUIREMENTS

1. Must meet Eligibility Requirements outlined in Section 2.0.
2. Must be a recommendation from a NEAT or DEF-approved audit.
3. Must be able to achieve an infiltration reduction of at least 1,500 cfm at 50 pascals.
4. Home must meet ASHRA Standard 90.2 as a minimum air infiltration level once infiltration sealing is completed.

9.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

Contractor must use a blower door and a manometer for precise pressure measurements.

9.3 CONTRACTOR REQUIREMENTS

Must meet Contractor Requirements in Section 2.1 and 6.3.

10.0 COMPACT FLUORESCENT BULBS/LED BULBS, WATER SAVING SHOWERHEADS AND FAUCET AERATORS

10.1 PARTICIPATION REQUIREMENTS

1. Must meet the Eligibility Requirements outlined in Section 2.0.

2. Must be a recommendation from a NEAT or DEF-approved audit.

Measure	Participation Requirements	Equipment and Installation Specifications
Water Saving Showerhead	• Electric Water Heater • Current showerhead flow of 3.5 gallon per minute or greater	• Must meet manufacturer's specifications
Compact Fluorescent Light Bulb LED Light Bulb	• 15 or 18 watt compact fluorescent replacing incandescent lamp greater than or equal to 60 watts operating a minimum of 3 hours per day • 9 watt LED replacing incandescent lamp greater than or equal to 60 watts operating a minimum of 3 hours per day	• Must meet manufacturer's specifications • Must not be installed on a dimming circuit • Must not be installed in an enclosed fixture • Must be interior use only
Faucet aerators	• No aerators currently installed	• Must meet manufacturer's specifications • Threads must be compatible with existing faucet threads

10.2 CONTRACTOR REQUIREMENTS

Must meet the Contractor Requirements outlined in Section 2.1.

11.0 REFRIGERATOR REPLACEMENTS

11.1 PARTICIPATION REQUIREMENTS

1. Must meet Eligibility Requirements outlined in Section 2.0.

2. Must be a recommendation from a NEAT or DEF-approved audit.

11.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. New refrigerator must be Energy Star rated.

2. Old refrigerator must be decommissioned and recycled appropriately.

3. Old refrigerator must be metered for 2 hours w/o defrost cycle, or metered for 24 hours to make sure that usage is over 900 kWh per year.

4. Replacement refrigerator must be top freezer, no through the door ice maker, no water dispenser, white or black, 18 to 21 cubic feet.

11.3 CONTRACTOR REQUIREMENTS

1. Must meet the contractor requirements outlined in section 2.1.

2. Contractor is responsible for removing old refrigerator from home and will put a hole through old unit and/or cut the cord so it cannot be reused.

12.0 INCENTIVE PROCESSING

Incentives will be paid directly to weatherization providers. Weatherization providers are required to submit the following information along with all invoices by the tenth workday of each month (not to exceed forty-five (45) days from the date of installation):

- Customer information - including name, address, and DEF account number.
- A list of installed measures and, where appropriate, pre-existing conditions
- Pre and post CFM 50 readings
- Itemized invoice with a brief description of installed measures (incentive measures only) and program incentive for each weatherized home, or the DEF/LIWAP data information form.

If the home is not selected for inspection, or after it has passed inspection, invoices will be processed for payment. DEF will input installed measures and paid incentives to a data base system. Submitted reports and invoices will be maintained on file.

13.0 REPORTING REQUIREMENTS

DEF will follow the reporting requirements consistent with Rule 25-17.0021(5), Florida Administrative Code.

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

RESIDENTIAL ENERGY MANAGEMENT PROGRAM

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

RESIDENTIAL ENERGY MANAGEMENT PROGRAM

1. PROGRAM OVERVIEW

The Residential Energy Management Program is a direct load control program of Duke Energy Florida, LLC (DEF). This program reduces DEF's demand during peak or emergency conditions by temporarily interrupting customer equipment (electric central heating, central electric cooling, water heater, and swimming pool pump).

Service under the RSL-1 and RSL-2 rate schedules is subject to DEF's currently effective and filed "General Rules and Regulations for Electrical Service." Standby or resale is not permitted under either of these rate schedules.

2. ELIGIBILITY REQUIREMENTS

- The residence must be in DEF's service area and be within the range of the Company's Energy Management system.

- The customer must be eligible for Residential Service under Rate Schedule RS-1 or RSS-1.

- The Company must be allowed reasonable access to the customer's premises to install, maintain, inspect, test and remove load management devices.

2.1 PARTICIPATION REQUIREMENTS

1. Customers may participate in this program on the 12 month (RSL-1) tariff or the winter-only (Nov-March) (RSL-2) tariff.

Residential Load Management (RSL-1) -This rate schedule is available to customers who meet the following requirements:

- Minimum average monthly usage of 600 kWh's (based on the most recent 12 months, or, where not available, a projection for 12 months).

- Premise has active load management device installed prior to June 30, 2007, or premise has active load management device installed after June 30, 2007 and premise has and customer is willing to submit to load control at a minimum central electric cooling and heating systems.

- Electric water heater control and pool pump control is optional.

Residential Load Management - Winter Only (RSL-2) - This rate schedule is available to customers who meet the following requirements:

- Minimum average usage of 600 kWh's for the months November through March (based on the most recent billings and where not available, a projection for those months).

- Premise must have active load management device and customer must be willing to submit to load control of both an electric water heater and a central electric heating system.

- DEF-approved, licensed contractor must complete all work.

2. The company or assigned representative may require an inspection of the Energy Management installation at the premise to insure the equipment is connected and operating properly prior to reinstating the credits on the account. If access cannot be obtained, the account will remain or be placed into suspended status.

3. All pre-existing installations must be accessible for inspection and operational verification before credits under this rate schedule may be reinstated.

4. Any customer requesting removal from this program will be ineligible to participate for a period of twelve (12) months from the date of transfer.

2.2 EQUIPMENT AND INSTALLATION REQUIREMENTS

2. All installations must comply with all provisions of the National Electric Code (NEC) and any code or requirement of other authorities having jurisdiction.

3. DEF-approved, licensed contractor must complete all work.

4. The contractor shall comply with all Residential Energy Management Program Standards as specified by DEF and stated in the most current copy of the Energy Management Operations Manual.

3. CONTRACTOR REQUIREMENTS

1. Contractors participating in the installation of Energy Management equipment must meet the financial criteria set forth in the DEF Purchasing Standards for contractors doing business with DEF.

2. DEF reserves the right to request background checks of contractors participating in the Residential Energy Management Program.

3. Contractors must be insured per minimum specifications detailed within the Demand Side Management Contractor Participation Agreement.

4. Contractor is responsible for providing supervision of its employees and the necessary tools and equipment to meet program specifications by required completion date.

4. INCENTIVES

1. The various participation options and associated credits are specified in the RSL-1 and RSL-2 tariffs.

4.1 INCENTIVE PROCESSING

1. Customers on the RSL-1 rate schedule will be eligible to receive a monthly credit on their electric bill.

2. Customers on the RSL-2 rate schedule will be eligible to receive a monthly credit on their electric bill for the billing months of November through March only.

5. REPORTING REQUIREMENTS

The reporting requirements for this program will follow Rule 25-17.0021(5) of the Florida Administrative Code.

II. COMMERCIAL/INDUSTRIAL

CONSERVATION PROGRAMS

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

BUSINESS ENERGY CHECK PROGRAM

DUKE ENERGY FLORIDA, LLC
PROGRAM PARTICIPATION STANDARDS
BUSINESS ENERGY CHECK PROGRAM

1. PROGRAM OVERVIEW

The Business Energy Check Program of Duke Energy Florida, LLC (DEF) is an energy assessment that provides commercial customers with an analysis of their energy use and recommendations on measures that can be implemented to improve the energy efficiency of their facilities and operations. The audits focus on educating and encouraging customers to implement minimal cost energy-saving practices and measures. The program serves as the foundation for participation in other commercial and industrial DSM programs.

The program consists of an energy evaluation conducted by a DEF commercial energy assessor that is provided at no charge to the customer. Recommendations are made to the customer, which may include operational changes or equipment modifications. The assessor also provides information about other DEF programs that are designed to assist the customer in improving the energy efficiency of their facility.

The program offers both Walk-Through and Phone-Assisted audits.

2. ELIGIBILITY REQUIREMENTS

The customer must be a business customer located in DEF's service territory and served by a metered DEF account.

3. PARTICIPATION REQUIREMENTS

Customers may not have more than one assessment completed within a two-year period. DEF reserves the right to update audits and schedule field visits on a per needed basis.

4. INCENTIVES

DEF may offer a small incentive to customers who participate in the program.

5. REPORTING REQUIREMENTS

The reporting requirements for this program will follow Rule 25-17.0021(5), Florida Administrative Code.

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

BETTER BUSINESS PROGRAM

DUKE ENERGY FLORIDA, LLC
PROGRAM PARTICIPATION STANDARDS
BETTER BUSINESS PROGRAM

1. PROGRAM OVERVIEW

The Better Business Program is the "umbrella" efficiency program designed to improve the energy efficiency of commercial facilities. The program seeks to meet the following overall goals:

- Provide customers with a cost effective portfolio of measures across all building types.
- Improve customer energy savings and demand reduction through the installation of energy-efficient equipment and thermal envelope upgrades.
- Educate customers regarding best practices, innovative technologies and opportunities to manage energy consumption.

2. ELIGIBILITY REQUIREMENTS

1. Equipment and measures must be installed in facilities that are located in the DEF service territory and served by a commercially metered DEF account.

2. Commercial multi-family is defined as commercially metered accounts of multi-family residential apartments or condominiums, or commercially metered accounts of assisted living residential apartment units (with a minimum of 500 square feet of conditioned space). Any multi-family residential dwellings that are master metered (referred to as "Domestic/Commercial") shall be eligible to participate in this program.

3. DEF must be permitted to inspect the installation of all measures and equipment prior to issuing any incentive payments.

3. CONTRACTOR REQUIREMENTS

3.1. PARTICIPATING DEF CONTRACTOR REQUIREMENTS

1. All participating contractors, those under contract with DEF, must comply with DEF contractor procedures specific to the program component in which they are participating. Failure to do so may result in termination of participation in any or all DEF Programs.

2. The contractor is responsible for the work to be performed, the supervision of their employees, and the use of contractor's own equipment to meet the work specifications and completion date.

3. The contractor must correct any deficiency found in the installation or product when advised by a DEF representative and notify DEF of compliance within thirty (30) days.

4. The contractor shall indemnify and hold DEF harmless against any and all injuries, damages, claims or costs, whatsoever, caused by items furnished or services rendered.

5. The contractor must comply with all federal, state, and local codes and regulations and have the appropriate license(s) for the work to be performed.

6. The contractor must follow manufacturers' specifications and procedures; failure to do so may result in termination of participation in any or all DEF programs.

7. The contractor shall notify DEF of any incident occurring during installation of a conservation measure or any follow-up procedure within five (5) working days of incident.

8. The contractor must notify their insurance companies to provide DEF with documentation and maintain in force the state required minimum insurance policies for license retention or the following minimum insurance policies, whichever is greater: (***Exception:*** *Section 10 dealing with HVAC contractors is exempt from this provision.*)

- Workers' Compensation as required by law.
- General Contractual and Automobile Bodily Injury Liability: $100,000 per person and $300,000 per occurrence.
- General and Automobile Property Damage Liability: $100,000 per occurrence.
- General and Vehicle Liability policies endorsed: $100,000 per occurrence to provide blanket coverage.

9. DEF reserves the right to request background checks of contractors participating in the Better Business Program.

3.2. CUSTOMER CHOSEN CONTRACTOR REQUIREMENTS

1. The contractor must comply with all federal, state and local codes and regulations and have the appropriate license(s) for the work to be performed.

2. The contractor is responsible for the work to be performed, the supervision of their employees, and the use of contractors' own equipment to meet the work specifications and completion date.

3. The contractor must follow manufacturers' specifications and procedures; failure to do so may result in termination of participation in any or all DEF programs.

4. INCENTIVE

The incentive payment structure is as follows:

Program Component	**Incentive**
Building Envelope Improvements	
Cool Roof	Energy Star Roof Product with 0.70 or greater solar reflectance per ASTM E 903 or ASTM C 1549; 15¢ per square-foot installed with a maximum of $50,000 per building.

Ceiling Insulation Upgrade	10¢ per square foot to bring insulation level up to a minimum of R-19
	An additional $0.075 per square foot will be paid to bring the insulation level from R19 to a minimum of R-38 for existing structures
Roof Insulation Upgrade	7¢ per sq. ft. to bring insulation level up to a minimum of R19 with a maximum of $50,000 per building.
HVAC Equipment Replacement	
Air-Cooled and Water-Cooled Electric Chillers	$50 per ton for qualifying equipment as referenced in the Table in Section 9.4
Heat Pumps < 65,000 Btu/h replacing resistance heat	$375 for minimum cooling efficiency of **15 SEER** and minimum heating efficiency of **8.2 HSPF**
Heat Pumps < 65,000 Btu/h replacing heat pump	$200 for minimum cooling efficiency of **15 SEER** and minimum heating efficiency of **8.2 HSPF**
Package Terminal Heat Pumps and Air Conditioners (PTHPs/PTACs)	$100 per ton as referenced in the Table in Section 11.4
Single Package Vertical Heat Pump (SPVHP)	$75 per ton as referenced in the Table in Section 11.4
Unitary A/C and Heat Pumps > 65,000 Btu/h	$75 per ton as referenced in the Table in Section 12.4 *(Includes Variable Refrigerant Multi-Split A/C and HP units of all sizes as referenced in the Table in Section 12.5)
HVAC System Related Improvements	
Demand Control Ventilation	$50 per ton with properly designed and installed DCV controls and programming. Note: Incentives for DCV are not to exceed 50% of total project or service cost
Duct Test	50% of test cost up to $30 for first unit tested
	50% of test cost up to $20 for each additional unit tested at same address

Duct Repair	25% of the repair cost up to a maximum of $50 per unit for facilities with non-ducted electric heat
	50% of the repair cost up to a maximum of $150 per unit for facilities with ducted electric heat. Commercial multi-family units count on a per unit basis, receive $100 and no duct test is required - applies to top floors only on multi-story buildings.
Energy Recovery Ventilation	$1.40 per CFM, minimum 450 CFM unit >65% total heating effectiveness per AHRI 1060-2000
HVAC Coil Cleaning	$20 per unit (PTHP/PTAC) -- one-time incentive $20 per ton for all other type of air conditioning units – one time incentive not to exceed 50% of the total project or service cost.
Roof Top Unit Re-commissioning	$25 per ton – one time incentive not to exceed 50% of the total project or service cost.
HVAC/Chiller Tune-up	$25 per ton for units up to 300 tons $5.00 per ton for units >300 tons The expected average incentive paid out will be $10 per ton based on expected participation.

4.1 INCENTIVE PROCESSING

1. On-site inspections will be performed on at least 10% of the completed projects for each program measure.

2. Project supporting documents will be collected and reviewed for program compliance.

3. Incentives will not be paid until the review (and inspection when required) is completed.

4. A copy of the customer's invoice, purchase order, or equivalent (determined by DEF) must accompany the incentive application for all measures, and must be received within six (6) months of the completion of that measure. For a new construction measure the supporting documentation must be received within six (6) months of the Certificate of Occupancy, or permanent meter set.

5. The customer has the option of receiving the incentive in the form of a credit on their account or in the form of a rebate check. The DEF Assessor will need to obtain the customer's Tax ID#. Any customer receiving over $600 total during a year will receive an IRS 1099 form from DEF reporting to the customer and the IRS the total amount of the rebates received from DEF for that year.

5. REPORTING REQUIREMENTS

The reporting requirements for this program will follow Rule 25-17.0021(5), Florida Administrative Code.

6. COOL ROOF

6.1 PARTICIPATION REQUIREMENTS

1. The account must meet the Eligibility Requirements as outlined in Section 2.

2. The customer must provide proof of the installation of the approved roof products including documentation of project cost and project completion date. This requirement is typically met by submitting copies of invoices. Documentation must also be provided indicating the total square footage over air conditioned space.

3. The roof product must be tested using the ASTM E 903 or ASTM C 1549 test standards and must be certified as having an Initial Solar Reflectance Rating greater than or equal to 0.70. Proof of certification by either Energy Star or the Cool Roof Rating Council must be attached to the incentive form.

4. The cooling system for the facility must be all electric.

6.2 MATERIAL AND INSTALLATION SPECIFICATIONS

1. All installations must meet manufacturers' instructions and specifications.

2. DEF participating contractors must meet the contractor requirements outlined in Section 3.1. Customer chosen contractors must meet the contractor requirements as outlined in Section 3.2.

7. CEILING INSULATION

7.1 PARTICIPATION REQUIREMENTS

1. Must meet the Eligibility Requirements as outlined in Section 2.

2. Building must be at least two (2) years old in order to qualify for an incentive.

3. The weighted average R-value of the existing insulation over the total ceiling square footage (above conditioned space) must be less than or equal to R-12. (**Exception:** May exclude conditioned area for a recent addition.)

4. Eligible facilities must have both electric (non-portable) air conditioning and electric (non-portable) heating.

5. A Business Energy Check or other pre-qualification methods (as determined by DEF) is required prior to installation to establish existing insulation levels.

6. Any structure that has in the past utilized this portion of the program (attic insulation) is not eligible to participate again. However, if that structure, through an act of God, loses the insulation and this loss is not covered by insurance, then the structure would be eligible to participate a second time. It is the customer's responsibility to provide DEF with a letter from their insurance company stating that the insulation loss was not covered by insurance.

7. Any home with "Knob and Tube Wiring" must be documented or certified as not energized by a state licensed electrician. *(National Electrical Code 1990, Article 324, Section 324-4).*

8. Commercial multi-family units will be qualified as individual units for incentive purposes. For multi-family units greater than one story in height the top floor eligible will be eligible for incentives.

7.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. The insulation must be installed in accordance with the manufacturers' recommendations and specifications and must meet all state, county, and local codes.

2. Flat roofs must have sufficient space to allow a minimum of 3 inches of air space above the insulation after insulation has been installed to the recommended R-value.

3. The insulation must be installed in the unconditioned space as a direct application to the attic area over the conditioned space.

4. The insulation must have a minimum clearance around all recessed lighting and gas-fired appliances as required by state, county and local codes.

5. The insulation must be installed uniformly, resulting in the same R value throughout the entire area.

6. All attic access panels that are located in conditioned space must be insulated in the same minimum R value as throughout the entire area and permanently attached.

7.3 CONTRACTOR REQUIREMENTS

1. DEF participating contractors must meet the contractor requirements outlined in Section 3.1. Customer chosen contractors must meet the contractor requirements as outlined in Section 3.2.

2. The contractor will attach an R-Value Certification Card signed by the insulation contractor or his representative to the attic joist visible from the attic access. The card shall contain, at a minimum, the following information:

    - Manufacturer's name
    - Insulation type
    - R-Value, the thickness, and the location of the insulation installed.
    - Name and address of the contractor installing the insulation
    - Date of installation

3. All participating Trade Allies in the Ceiling Insulation Program must follow DEF Code of Ethics.

8. ROOF INSULATION

8.1 PARTICIPATION REQUIREMENTS

1. Must meet the Eligibility Requirements as outlined in Section 2.

2. The weighted average R-value of the existing insulation over the total roof square footage (above conditioned space) must be less than R-12 for existing structures. For new construction, incentives will only be provided for insulation over R38.

3. Eligible facilities must have both electric (non-portable) air conditioning and electric (non-portable) heating.

8.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. DEF participating contractors must meet the contractor requirements outlined in Section 3.1. Customer chosen contractors must meet the contractor requirements as outlined in Section 3.2.

2. The insulation must be installed in accordance with the manufacturers' recommendations and specifications and state, county, and local codes.

3. The insulation must be installed in the roof deck assembly. (*Note: Spray on foam insulation (i.e. Icynene) can be applied to the underside of the roof deck).*

4. The insulation must be installed uniformly.

HVAC EQUIPMENT

9. AIR-COOLED AND WATER COOLED ELECTRIC CHILLERS

9.1 PARTICIPATION REQUIREMENTS

1. Must meet the Eligibility Requirements as outlined in Section 2.

2. The customer must provide proof of HVAC project cost, project completion date and an itemized inventory of equipment installed. This requirement is typically met by submitting copies of invoices or purchase orders.

3. Air Conditioning, Heating and Refrigeration Institute (AHRI) certified efficiency data at Standard Rating Conditions must be attached to the incentive form. If AHRI sheet cannot be obtained, documentation must be provided indicating that the equipment was tested to the AHRI 550/590 Test Standard**.** Cooling and heating load calculations must be performed if the capacity of the new high efficiency unit differs from that of the original unit or if the new high efficiency unit is adding cooling or heating to previously unconditioned space.

9.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. Equipment efficiency ratings shall be obtained from a nationally recognized certification program directory or a manufacturers' rating certified to be in compliance with an approved Department of Energy (DOE) or Air Conditioning, Heating and Refrigeration Institute (AHRI) rating procedure.

2. All equipment for which an incentive is paid shall be new and not refurbished, previously installed, or used.

3. All equipment installations shall meet or exceed the minimum efficiencies listed in Section 11.4 and meet manufacturers' instructions and specifications.

4. HVAC equipment must be all electric.

9.3 CONTRACTOR REQUIREMENTS

1. Must meet the contractor requirements as outlined in Section 3.1. If a customer chosen contractor, the contractor must meet the contractor requirements as outlined in Section 3.2.

2. Must be a licensed Mechanical Contractor, Class A, B, or C Air Conditioning Contractor in the jurisdiction having authority.

9.4 TECHNICAL SPECIFICATIONS ON EQUIPMENT ELIGIBILITY

AIR-COOLED AND WATER-COOLED ELECTRIC CHILLERS (AHRI 550/590 Test Standards)		
Chiller Type and Size Range	**2010 State Energy Code Standard**	**Minimum Efficiency Eligible for Incentive**
Water Cooled Centrifugal		
under 150 tons	FL: 0.634 kW/ton IPLV: 0.596 kW/ton	FL: 0.571 kW/ton IPLV: 0.405 kW/ton
150-300 tons	FL: 0.634 kW/ton IPLV: 0.596 kW/ton	FL: 0.571 kW/ton IPLV: 0.405 kW/ton
300-600 tons	FL: 0.576 kW/ton IPLV: 0.549 kW/ton	FL: 0.513 kW/ton IPLV: 0.360 kW/ton
Over 600 tons	FL: 0.570 kW/ton IPLV: 0.539 kW/ton	FL: 0.513 kW/ton IPLV: 0.360 kW/ton
Water Cooled Positive Displacement		
under 75 tons	FL: 0.780 kW/ton IPLV: 0.630 kW/ton	FL: 0.760 kW/ton IPLV: 0.540 kW/ton
75-150 tons	FL: 0.775 kW/ton IPLV: 0.615 kW/ton	FL: 0.750 kW/ton IPLV: 0.527 kW/ton
150-300 tons	FL: 0.680 kW/ton IPLV: 0.580 kW/ton	FL: 0.680 kW/ton IPLV: 0.486 kW/ton
over 300 tons	FL: 0.620 kW/ton IPLV: 0.540 kW/ton	FL: 0.610 kW/ton IPLV: 0.441 kW/ton
Air cooled		
Any size	FL: 9.562 EER IPLV: 12.50 EER	FL: 10.16 EER IPLV: 13.75 EER

10. SMALL HEAT PUMPS (≤ 65,000 Btu/h)

10.1 PARTICIPATION REQUIREMENTS

1. Must meet the Eligibility Requirements as outlined in Section 2.

2. The customer must provide proof of HVAC project cost, project completion date and an itemized inventory of equipment installed. This requirement is typically met by submitting copies of invoices or purchase orders.

3. Air Conditioning, Heating and Refrigeration Institute (AHRI) certified efficiency data at Standard Rating Conditions must be attached to the incentive form.

4. Cooling and heating load calculations must be performed if the capacity of the new high efficiency unit differs from that of the original unit or if the new high efficiency unit is adding cooling or heating to previously unconditioned space.

10.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. Installed equipment must be complete systems (i.e. both air handler and outdoor condensing units must be replaced in order to qualify for an incentive) including any supplemental devices, and shall be listed by Underwriters Laboratories (UL) or other nationally recognized testing laboratories in accordance with UL standards as appropriate.

2. All equipment installations must meet manufacturers' instructions and specifications and meet all state, county, and local codes.

3. All equipment shall be new and not refurbished, previously installed, or used.

4. Data/Server Rooms will be evaluated under the Custom Program on a per case basis.

5. The installed air handler/outdoor condensing unit combination must satisfy both the cooling and the heating minimum efficiency requirements described in Section 12.4.

6. Equipment efficiency ratings shall be obtained from a nationally recognized certification program directory or a manufacturer's rating certified to be in compliance with an approved Department of Energy (DOE) or Air Conditioning, Heating and Refrigeration Institute (AHRI) rating procedure (standard 210/240-94). All cooling-mode efficiency ratings eligibility will be based on EER if available. If

EER ratings are not available then SEER will be used to determine cooling-mode eligibility. All heating-mode efficiency ratings eligibility will be based on HSPF.

7. The contractor will be encouraged to use mastic on all new connections.

8. Air handling units, mechanical closets and enclosed support platforms shall be sealed from unconditioned air.

9. Heat pumps must be all electric.

10.3 CONTRACTOR REQUIREMENTS

1. Must meet the contractor requirements as outlined in Section 3.1. If a customer chosen contractor, the contractor must meet the contractor requirements as outlined in Section 3.2.

2. Must be a licensed Mechanical Contractor, Class A, B, or C Air Conditioning Contractor in the jurisdiction having authority.

11. PACKAGE TERMINAL HEAT PUMPS (PTHPs) REPLACING PTAC's and PTAC's REPLACING LESS EFFICIENT PTAC's

11.1 PARTICIPATION REQUIREMENTS

1. Must meet the Eligibility Requirements as outlined in Section 2.

2. The customer must provide proof of HVAC project cost, project completion date and an itemized inventory of equipment installed. This qualification is typically met by submitting copies of invoices or purchase orders.

3. Air Conditioning, Heating and Refrigeration Institute (AHRI) certified efficiency data at Standard Rating Conditions must accompany the incentive form.

4. Cooling and heating load calculations must be performed if the capacity of the high efficiency unit differs from that of the original unit or if the high efficiency unit is adding cooling or heating to previously unconditioned space.

11.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. Packaged terminal heat pump heating and cooling efficiencies (AHRI Standard 310/380 Rating Conditions) must meet or exceed the minimum efficiencies listed in Section 14.4. Packaged terminal heat pumps must be sized to handle the heating load at 31 degrees Fahrenheit outdoor air temperature without the use of backup strip heat. No incentive is offered for packaged terminal air-conditioners that use only electric resistance elements for heating.

2. Equipment efficiency ratings shall be obtained from a nationally recognized certification program directory or a manufacturer's rating certified to be in compliance with an approved DOE or AHRI rating procedure.

3. All equipment installations must meet manufacturers' instructions and specifications and meet all state, county, and local codes.

4. All equipment shall be new and not refurbished, previously installed, or used.

5. Package Terminal Heat pump must be all electric.

11.3 CONTRACTOR REQUIREMENTS

1. Must meet the contractor requirements as outlined in Section 3.1. If a customer chosen contractor, the contractor must meet the contractor requirements as outlined in Section 3.2.

2. Must be a licensed Mechanical Contractor, Class A, B, or C Air Conditioning Contractor in the jurisdiction having authority.

11.4 TECHNICAL SPECIFICATIONS ON EQUIPMENT ELIGIBILITY

PACKAGED TERMINAL HEAT PUMPS (PTHPs) (AHRI 310/380 Test Standards)		
Cooling Capacity (Btu/h)	**Heating Efficiency (COP)**	**Cooling Efficiency (EER)**
	Minimum Efficiency Eligible for Incentive	**Minimum Efficiency Eligible for Incentive**
<6,900	3.9	13
6,901-9,400	3.4	12.2
9,401-12,000	3.8	12.7
12,001-14,700	3.1	10.7
>14,700	3.0	9.6

No rebates are available for replacing PTHP's.

PACKAGED TERMINAL AIR CONDITONERS (PTACs) (AHRI 310/380 Test Standards)	
Cooling Capacity (Btu/h)	**Cooling Efficiency (EER)**
	Minimum Efficiency Eligible for Incentive
<6,900	12.8
6,901-9,400	12
9,401-12,000	11.2
12,001-14,700	10.4
>14,700	9.6

SINGLE–PACKAGE VERTICAL HEAT PUMP(ASHRAE Standard 90.1-2004)		
RETROFIT (BETTER BUSINESS)		
	Heating Efficiency (COP)	**Cooling Efficiency (EER)**
Cooling Capacity (Btu/h)	**Minimum Efficiency Eligible for Incentive**	**Minimum Efficiency Eligible for Incentive**
<65,000	3.3	9.8
>65,000 <135,000	3.2	9.7
>135,000 <240,0000	3.1	9.4

*For straight cooled equipment just EER only as COP is not required.

Above tables are based on current Florida Energy Code Standards.

12. UNITARY A/C HEAT PUMPS (> 65,000 Btu/h)

***also includes variable refrigerant flow multi split AC and heat pumps of all sizes**

12.1 PARTICIPATION REQUIREMENTS

1. Must meet the Eligibility requirements as outlined in Section 2.

2. The customer must provide proof of HVAC project cost, project completion date and an itemized inventory of equipment installed. This qualification is typically met by submitting copies of invoices or purchase orders.

3. Air Conditioning, Heating and Refrigeration Institute (AHRI) certified efficiency data, or equivalent (determined by DEF representative), at Standard Rating Conditions must be attached to the incentive form.

4. Cooling and heating load calculations must be performed if the capacity of the high efficiency unit differs from that of the original unit or if the high efficiency unit is adding cooling or heating to previously unconditioned space.

12.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. Installed equipment must be complete systems including any supplemental devices, and shall be listed by Underwriters Laboratories (UL) or other nationally recognized testing laboratories in accordance with Underwriters Laboratories (UL) standards, as appropriate.

2. Equipment efficiency ratings shall be obtained from a nationally recognized certification program directory or a manufacturer's rating certified to be in compliance with an approved DOE or AHRI rating procedure (AHRI 210/240-94 for less than 135,000 Btu/h and AHRI 340/360 for units greater than 135,000 Btu/h).

3. All equipment installations shall meet or exceed the minimum efficiencies listed in Section 15.4 and meet manufacturers' instructions and specifications and meet all state, county, and local codes.

4. All equipment shall be new and not refurbished, previously installed, or used.

5. The contractor will be encouraged to use mastic on all new connections.

6. Air handling units, mechanical closets and enclosed support platforms shall be sealed from unconditioned air.

7. HVAC equipment must be all electric.

12.3 CONTRACTOR REQUIREMENTS

1. Must meet the contractor requirements as outlined in Section 3.1. If a customer chosen contractor, the contractor must meet the contractor requirements as outlined in Section 3.2.

2. Must be a licensed Mechanical Contractor, Class A, B, or C Air Conditioning Contractor in the jurisdiction having authority.

12.4 TECHNICAL SPECIFICATIONS ON EQUIPMENT ELIGIBILITY

Unitary AC and Heat Pumps (> 65,000 Btu/h)			
Equipment Type and Size Range	**2010 State Energy Code Standard**		**Minimum Efficiency Eligible for Incentive**
Air-Cooled	**Air Conditioner**	**Heat Pump**	
65,000-135,000 Btu/h	11.2 EER	11.0 EER 3.3 COP	11.9 EER 3.48 COP
135,001 Btu/h – 240,000	11.0 EER	10.6 EER 3.2 COP	11.69 EER 3.42 COP
240,001 – 760,000 Btu/h	10.0 EER	9.5 EER 3.2 COP	10.63 EER 3.27 COP
Over 760,000 Btu/h	9.7 EER	9.5 EER 3.2 COP	10.31 EER 3.13 COP
Water-Cooled	**Air Conditioner**	**Heat Pump**	
65,000-135,000 Btu/h	11.5 EER	12 EER 4.2 COP	12.5 EER 4.56 COP
over 135,000 Btu/h	11.0 EER	N/A	12.0 EER 4.38OP

12.5 TECHNICAL SPECIFICATIONS ON EQUIPMENT ELIGIBILITY

Variable Refrigerant Flow Multi-Split Air Conditioners and Heat Pumps			
Equipment Type	**Cooling Capacity (Btu/h)**	**Heating Type**	**Efficiency Level**
VFR Multi-Split AC's (Air Cooled)	<65,000	All	14.3 SEER
	>65,000 <135,000	No Heating – or has Electric resistance heating	12.3 EER
		All other types of heating	12.1 EER

	>135,000<240,000	No Heating – or has Electric resistance heating All other types of heating	12.1 EER 11.8 EER
	>240,000<760,000	No Heating – or has Electric resistance heating All other types of heating	11.0 EER 10.7 EER
VFR Multi-Split Heat Pumps (Air Cooled)	<65,000	All	14.3 SEER 8.4 HSPF
	>65,000 <135,000	No Heating – or has Electric resistance heating All other types of heating	12 EER 3.6 COP 11.8 EER 3.6 COP
	>135,000<240,000	No Heating – or has Electric resistance heating All other types of heating	11.6 EER 3.6 COP 11.4 EER 3.5 COP
	>240,000<760,000	No Heating – or has Electric resistance heating All other types of heating	10.4 EER 3.5 COP 10.2 EER 3.5 COP

HVAC SYSTEM RELATED IMPROVEMENTS

13. DEMAND CONTROL VENTILATION (DCV)

13.1 PARTICIPATION REQUIREMENTS

1. Must meet the Eligibility Requirements as outlined in Section 2.

2. Customer must provide documentation of the DCV system and what HVAC load reduction is projected.

13.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. DCV must include sensors that measure CO_2 levels (or other approved methods) and adjusts ventilation rate in spaces with varying occupancy through integrating sensor readings to control the outside air dampers.

2. Installation of DCV system and sensors shall be in accordance with the manufacturers' recommendations and specifications and meet all state, county, and local codes.

3. Commissioning the DCV system is recommended to ensure the ventilation system is working properly with the HVAC computer and sensors.

13.3 CONTRACTOR REQUIREMENTS

1. Must meet the contractor requirements as outlined in Section 3.1. If a customer chosen contractor, the contractor must meet the contractor requirements as outlined in Section 3.2.

2. Must be a licensed Mechanical Contractor, Class A, B, or C Air Conditioning Contractor in the jurisdiction having authority.

14. DUCT TEST AND LEAKAGE REPAIR

14.1 PARTICIPATION REQUIREMENTS

1. Must meet the Eligibility Requirements as outlined in Section 2.

2. Repair recommendations must have been the result of a DEF-approved duct test. (**Exception:** If during an energy audit or prior to duct test, the DEF representative validates the need for complete duct system replacement, a duct test is not required).

3. The customer's duct system must be in adequate condition to accommodate the duct test to be performed and not have been previously tested for the present occupant within a 5-year period. (**Exception:** Duct systems altered as a result of remodeled or added conditioned area.)

4. The duct must be easily accessible for repair. (Exception: aerosol sealing method.)

5. Commercial multi-family units will be qualified as individual units for incentive purposes. Multi-family unit's greater than one story in height may only have the top floor duct system(s) repaired.

6. All facilities must have centrally-ducted electric cooling and electric heat. If non-space heating combustion appliances exist, then the facility must pass a safety test prior to any duct sealing.

7. Duct and HVAC systems must be in adequate condition to accommodate duct leakage repair.

8. A minimum of 60 CFM @ 25 Pascal's of leakage per ton of HVAC equipment capacity and a minimum of 60% of the leakage sealed is the baseline for participation in aerosol duct sealing.

9. Facilities with drop or suspended (lay-in) ceilings are not eligible.

14.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. All equipment installations must meet manufacturers' instructions and specifications and meet all state, county, and local codes.

2. For conventional duct repair only mastic and fiber cloth or mastic with embedded fiber (mixed) may be used to seal the duct system. Tape may be used to hold the duct in place while the mastic is drying. If tape is used, the mastic must cover the tape completely and extend a minimum of 2" past the width of the tape. Mastic must meet Underwriters Laboratories (UL) 181 specifications for the material that the mastic being applied to.

3. Blower door or duct blaster procedures must be followed as specified in training or manufacturers' instructions, unless otherwise directed by DEF when performing the duct test.

4. Aerosol procedures must be followed as specified in training or manufacturers' instructions and will include:

- Complete pre-seal and post-seal leakage test using approved aerosol software
- Aerosol sealants shall meet the requirements of Underwriters Laboratories (UL) 723
- Seal all boot-to-ceiling and/or floor connections
- All areas of the duct system will be evaluated and cost-effective leaks will be sealed by conventional (6.2.2) or aerosol method
- Complete post-seal leakage test using approved aerosol software

14.3 CONTRACTOR REQUIREMENTS

1. Must meet the contractor requirements as outlined in Section 3.1. If a customer chosen contractor, the contractor must meet the contractor requirements as outlined in Section 3.2.

2. Must be a licensed Mechanical Contractor, or a Class A, B, or C Air-Conditioning contractor in the jurisdiction having authority.

3. All participating contractors must have attended and successfully completed a DEF-approved duct repair course.

4. In Commercial multi-family units, the contractor shall seal all joints and connections of the duct work, and no duct test is required. Multi- family unit's greater than one story in height may only have the top floor duct system(s) repaired. No combustion appliances (fireplaces, water heating, etc.) are allowed for multi-family due to safety concerns.

14.4 INSPECTION REQUIRMENTS

1. If inspecting for the Duct Test and Leakage portion of this program, all inspectors must have attended and successfully completed a DEF-approved Duct Diagnostic course.

15. ENERGY RECOVERY VENTILATION

15.1 PARTICIPATION REQUIREMENTS

1. Must meet the Eligibility Requirements as outlined in Section 2.

2. The customer must provide proof of energy recovery ventilation project cost, project completion date and an itemized inventory of equipment installed. This requirement is typically met by submitting copies of invoices.

3. Air Conditioning, Heating and Refrigeration Institute (AHRI) 1060 certified efficiency data must be attached to the incentive form.

4. The equipment must have a minimum of a Fifteen (15) year life with one membrane change out.

15.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. Installed equipment must be complete systems including any supplemental devices, and shall be listed by Underwriters Laboratories or other nationally recognized testing laboratories in accordance with Underwriters Laboratories (UL) standards as appropriate.

2. Equipment efficiency ratings shall be obtained from Air Conditioning, Heating and Refrigeration Institute (AHRI) rating procedure standard 1060-2000.

3. To be eligible for an incentive, the energy recovery ventilation unit AHRI 1060 rating must be greater than 65% total heating effectiveness.

4. All equipment installations must meet manufacturers' instructions and specifications and meet all state, county, and local codes.

5. All equipment shall be new and not refurbished, previously installed, or used.

6. The contractor will be encouraged to use mastic on all new connections.

15.3 CONTRACTOR REQUIREMENTS

1. Must meet the contractor requirements as outlined in Section 3.1. If a customer chosen contractor, the contractor must meet the contractor requirements as outlined in Section 3.2.

2. Must be a licensed Mechanical Contractor, Class A, B, or C Air Conditioning Contractor in the jurisdiction having authority.

16. HVAC COIL CLEANING

16.1 PARTICIPATION REQUIREMENTS

1. Must meet the Eligibility Requirements as outlined in Section 2.

2. The customer must provide proof of cleaning project cost, project completion date and an itemized inventory of equipment cleaned. This qualification is typically met by submitting copies of invoices.

3. Heating and cooling system must be all electric.

4. DEF must be informed of cleaning date to conduct random inspections during cleaning process.

5. The HVAC equipment will only be eligible for one cleaning over its lifetime.

6. To ensure quality and compliance any cleaning process used, by a customer or customer's vendor, must be observed and preapproved by a qualified DEF inspector to be eligible for an incentive. Additional supporting documentation may be required, such as proof that chemicals used are for use in HVAC systems.

16.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. Steam cleaning should use 305º F steam at 42 psi.

2. For PTAC/PTHP the cleaning process should start by removing the packaged HVAC units from the guest rooms.

3. The cleaning process should consist of removing the covers to gain access to the condenser and evaporator coils, blower fan(s) and other items in the air flow path. The entire unit is then cleaned.

4. A Business Energy Check or other pre-qualification method (as determined by DEF) is required prior to cleaning.

5. All equipment installations must meet manufacturers' instructions and specifications and meet all state, county, and local codes.

17. ROOF TOP UNIT RECOMMISSIONING

17.1 PARTICIPATION REQUIREMENTS

1. Must meet the Eligibility Requirements as outlined in Section 2.

2. The equipment will only be eligible for participation once over its lifetime.

17.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. All equipment tune-up and repairs must meet manufacturers' instructions and specifications and meet all state, county and local codes.

2. Only mastic and fiber cloth or mastic with embedded fiber (mixed) may be used to seal the duct system. Tape may be used to hold the duct in place while the mastic is drying. If tape is used, the mastic must cover the tape completely and extend a minimum of 2" past the width of the tape. Mastic must meet Underwriters Laboratories (UL) 181 specifications for the material that the mastic is being applied to.

17.3 CONTRACTOR REQUIREMENTS

1. Must meet the contractor requirements as outlined in Section 3.1. If a customer chosen contractor, the contractor must meet the contractor requirements as outlined in Section 3.2.

2. Must be a licensed Mechanical Contractor, Class A, B, or C Air-Conditioning contractor in the jurisdiction having authority.

17.4 DOCUMENT HVAC PERFORMANCE AND CONDITION BEFOREAND AFTER RECOMMISSIONING

1. Document equipment manufacturer, model and serial numbers.

2. Pre-and post-documentation form (provided by DEF) must be completed for each unit.

18. CHILLER/AIR CONDITIONER / HEAT PUMP TUNE-UP (*Does not include PTAC/PTHP*)

18.1 PARTICIPATION REQUIREMENTS

1. Customer must meet program eligibility requirements.

2. Customer must provide proof of project cost and project date. This is typically met by submitting copies of invoices.

18.2 MATERIAL AND INSTALLATION REQUIREMENTS

1. HVAC equipment must be all electric.

2. All equipment tune-up and repairs must meet manufacturer's instructions and inspections and meet all state, county and local codes.

18.3 CONTRACTOR REQUIREMENTS

1. Must meet the contractor requirements as outlined in Section 3.1. If a customer chosen contractor, the contractor must meet the contractor requirements as outlined in Section 3.2.

2. Contractor must be a licensed Mechanical Contractor, Class A, B, or C, in the jurisdiction having authority.

3. Contractor must perform, at a minimum, all work as outlined below for the customer to be eligible for the DEF AC/HP tune-up incentive.

18.4 DOCUMENTATION REQUIREMENTS

1. Document equipment manufacturer, model and serial numbers.

2. Pre-and post-documentation form (provided by DEF) must be completed for each unit.

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

FLORIDA CUSTOM INCENTIVE PROGRAM

DUKE ENERGY FLORIDA, LLC
PROGRAM PARTICIPATION STANDARDS
FLORIDA CUSTOM INCENTIVE PROGRAM

1. PROGRAM OVERVIEW

The objective of the Florida Custom Incentive Program of Duke Energy Florida, LLC (DEF) is to encourage customers to make capital investments for the installation of high efficiency technologies not covered by DEF's other DSM programs. Projects may include, but are not limited to, thermal energy storage projects, high efficiency machinery, whole-building construction projects, and other technologies specific to a particular industry or business process. Incentives will be determined on a project specific basis.

2. ELIGIBILITY REQUIREMENTS

1. The participant must located in the DEF service territory and be a commercially metered account.

2. Owners who do not occupy the facilities or renters of these types of facilities are eligible to participate in this program. If renters of a facility wish to participate in this program, they must submit written approval from the owner to do so.

3. Projects must pass the Participants cost effectiveness test and the RIM cost effectiveness test and provide at least $10,000 in net benefits to qualify for incentives.

4. Projects must have a payback period of no less than two (2) years.

5. Projects must not include fuel switching.

6. A Custom Incentive Program Pre-application Questionnaire must be completed and submitted for approval. DEF will evaluate the information provided in the Pre-application Questionnaire to determine if the project may be eligible for incentives through this Program. Approval must be granted prior to initiation of the project.

3. PARTICIPATION REQUIREMENTS

1. The customer will be required to submit an application for projects that are determined to be eligible. The application will include additional project specific details including efficiency ratings of equipment, details of project costs, demand and energy savings, as well as the savings load shape, and measure life.
2. The application must be approved and signed by an authorized representative of DEF.
3. DEF will evaluate projects to determine cost effectiveness and appropriate incentive levels.

4. EQUIPMENT AND INSTALLATION REQUIREMENTS

1. Completed projects must meet all federal, state and local codes and regulations.
2. Projects will be inspected to verify the demand and energy savings.
3. All equipment for which an incentive is paid shall be new and not refurbished or previously installed, or used. Incentives will not apply to equipment installed to provide back-up or redundancy.
4. All equipment installations shall meet manufacturers' instructions and specifications.
5. All projects must exceed local, state, and federal minimum efficiency standards.
6. Equipment must be all electric.
7. Other material and equipment specification requirements may be identified on an individual project basis.
8. The installed energy efficiency equipment may require instrumentation to collect data such as a DEF load profiler online or a chiller EMS to provide data on energy consumption to ensure the peak load shift has occurred.

5. INCENTIVES

1. Incentives are limited to fifty percent (50%) of the customer's actual total project cost for the energy efficiency measure(s).

2. The maximum incentive for a single project is $500,000.

3. Incentives may be paid in stages based on comparative performance metrics when there is uncertainty around the demand and energy reductions that will be achieved. Fifty percent (50%) of the approved incentive will be paid upon initial installation. The remaining incentive will be paid post-installation upon confirmation of the achieved impacts.

6. INCENTIVE PROCESSING

1. A Payment Request Form along with documentation of project costs and completion date must be submitted to DEF within ninety (90) days of completion of the project. This documentation must include an itemized inventory of the equipment installed along with equipment efficiency ratings from a nationally recognized certification program directory or a manufacturer's rating. For a new construction projects, the supporting documentation must be received within ninety (90) days of the Certificate of Occupancy, permanent meter set or final payment authorization form.

2. DEF will inspect installations to verify operability of the technology and/or to obtain information needed to calculate the approved custom incentive amount.

3. Project-supporting documents will be reviewed for program compliance.

4. Incentive payments will be based on the final approved incentive amount for each project. Incentive amounts may be adjusted if the project cost or achieved impacts vary from the preliminary estimates.

5. Incentives will be paid after review and/or savings verification has occurred.

6. If the vendor is the payee, the vendor must issue credit in the amount of the Florida Custom Incentive to the customer on the invoices provided with the payment request submission.

7. REPORTING REQUIREMENTS

The reporting requirements for this program will follow Rule 25-17.0021(5), Florida Administrative Code.

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

STANDBY GENERATION PROGRAM

DUKE ENERGY FLORIDA, LLC
PROGRAM PARTICIPATION STANDARDS
STANDBY GENERATION PROGRAM

1. PROGRAM OVERVIEW

The Standby Generation (SBG) Program of Duke Energy Florida, LLC (DEF) is a load control program designed to reduce DEF's demand based upon control of customer equipment. The program is voluntary and is available to business customers who have on-site generation capability and are willing to reduce their facility demand at the request of the company. The program is offered through the General Service Load Management-2 (GSLM-2) rate schedule.

2. ELIGIBILITY REQUIREMENTS

1. Customer must be eligible for service under the GS-1, GST-1, GSD-1 or GSDT-1 rate schedule.

2. The SBG meter must be accessible by DEF for the purposes of reading, inspecting and maintaining the standby generation metering equipment.

2.1 PARTICIPATION REQUIREMENTS

1. Customer must have standby generation that will reduce utility system demand at the request of DEF.

2. Customer stand-by generation capacity must be at least 50 KW.

3. Customer must be within the range of the Company’s radio switch communications capability.

2.2 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. All installations must comply with all provisions of the National Electric Code (NEC) and any code or requirement of other authorities having jurisdiction.

2. Where necessary, the engineering for the metering and monitoring module installation will be done by a registered Florida engineer. The physical installation will be done by a licensed Florida electrical contractor selected by DEF. Appropriate permits will be secured for each installation by the contractor.

2.3 CONTRACTOR REQUIREMENTS

1. The contractor shall comply with all Load Management Standards as specified by the DEF Energy Management Department and stated in the most current copy of the Energy Management Operations Manual.

2. Contractors participating in the installation of metering and communications modules on the customer's equipment must meet the financial criteria set forth in the DEF Materials and Contracts Department policies and procedures.

3. The contractor must comply with all Federal, State and local codes and regulations.

4. Contractors are responsible for the work to be performed, the use of the contractor's own equipment and the supervision of employees in order to meet the work specifications and the required completion date.

5. Contractor shall indemnify and hold DEF harmless against any and all injuries, damages, claims or costs whatsoever caused by items furnished or services rendered.

6. Contractors will be insured as specified in the terms and conditions of their contract with DEF.

7. DEF reserves the right to request background checks of contractors working with the Standby Generation Program.

3. TECHNICAL SPECIFICATIONS ON EQUIPMENT ELIGIBILITY

1. Customers have the option to participate on either the Emergency or Non-Emergency schedule.

2. Prior to installation of equipment for the Non-Emergency schedule, customers must provide documentation certifying that the customer's generation equipment is RICE

NESHAP compliant as per the current version of EPA 40 CFR Part 63, subpart ZZZZ and 40 CFR part 60, subpart IIII and JJJJ.

4. INCENTIVES

Program Participants will receive an incentive in the form of billing credits in accordance with the provisions of the GSLM-2 tariff.

5. INCENTIVE PROCESSING

The initial readings will be recorded at the time of system testing, and the customer will receive an incentive on their bill each month thereafter according to the incentive calculation in the GSLM-2 tariff.

6. REPORTING REQUIREMENTS

The reporting requirements for this program will follow Rule 25-17.0021(5), Florida Administrative Code.

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

INTERRUPTIBLE SERVICE PROGRAM

DUKE ENERGY FLORIDA, LLC
PROGRAM PARTICIPATION STANDARDS
INTERRUPTIBLE SERVICE PROGRAM

1. PROGRAM OVERVIEW

The Interruptible Service (IS) Program of Duke Energy Florida, LLC (DEF) is a direct load control program that reduces DEF's demand during peak or emergency conditions. A load control switch is installed at the customer's premises allowing the load to be interrupted. DEF may interrupt the participant's service during periods of peak or emergency conditions. In return, the customer receives a credit on its monthly electric bill.

2. ELIGIBILITY REQUIREMENTS

1. Customer must be eligible for service under the IS-2 or IST-2 Rate Schedule.

2. The facility must be located in the DEF service territory and served by a metered DEF account.

3. Service is available at primary, transmission and secondary service voltages.

4. The customer must be a DEF non-residential customer.

5. The customer must not have load designated for use as a public shelter during periods of emergency or natural disaster by the appropriate governmental agency.

2.1 PARTICIPATION REQUIREMENTS

1. Participant must sign an agreement with DEF as to the terms and conditions of this service.

2. Average billing demand must be 500 kW or more.

3. Participant must allow DEF to install the required load control equipment.

4. Participant will be billed in accordance with the Interruptible Service tariffs.

5. Participant must agree to remain on this rate for a minimum initial term of five years from the commencement of service. To transfer to a non-interruptible rate schedule, the customer will be required to give DEF written notice at least thirty-six months prior to such transfer.

6. The participant must agree to have service interrupted during DEF capacity shortages.

3. INCENTIVES

Participants receive a credit based upon their monthly billing demand in accordance with the Interruptible Service Rate Schedules.

4. INCENTIVE PROCESSING

Participants receive a monthly credit on their electric bill.

5. REPORTING REQUIREMENTS

The reporting requirements for this program will follow Rule 25-17.0021(5), Florida Administrative Code.

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

CURTAILABLE SERVICE PROGRAM

DUKE ENERGY FLORIDA, LLC
PROGRAM PARTICIPATION STANDARDS
CURTAILABLE SERVICE PROGRAM

1. PROGRAM OVERVIEW

The Curtailable Service ("CS") Program of Duke Energy Florida, LLC (DEF) is an indirect load control program that reduces DEF's demand during peak or emergency conditions.

DEF will notify the participant in advance of an upcoming period of requested curtailment. Participants voluntarily curtail their load to a level at or below an agreed upon non-curtailable demand amount. In return, the customer receives a credit on its monthly electric bill.

2. ELIGIBILITY REQUIREMENTS

1. Customer must be eligible for service under the CS-2, CST-2, CS-3, or CST-3 Rate Schedules.

2. The facility must be located in the DEF service territory and served by a metered DEF account through one point of delivery.

3. Service is available at primary, transmission and secondary service voltages.

4. The customer must be a DEF non-residential customer.

5. The customer must not have load designated for use as a public shelter during periods of emergency or natural disaster by the appropriate governmental agency.

3. PARTICIPATION REQUIREMENTS

1. Participant must sign an agreement with DEF as to the terms and conditions of this service.

2. CS-2 and CST-2 Rate customers: Average billing demand must be 500 kW or more. Participant must agree to curtail the greater amount of a minimum of 25 kW or 25% of their average monthly billing demand.

3. CS-3 and CST-3 Rate customers: Average billing demand must be 2,000 kW or more and participant agrees to curtail its demand by a fixed contractual amount of not less than 2,000 kW.

4. Participant must allow DEF to install the required load control equipment.

5. Participant will be billed in accordance with the Curtailable Service tariffs.

6. Participant must agree to remain on these rates for a minimum initial term of two years from the commencement of service. To transfer to a firm rate schedule, the customer will be required to give DEF written notice at least thirty-six (36) months prior to such transfer.

7. The participant may voluntarily curtail to or below the agreed upon non-curtailable load during the periods of curtailment.

8. If a participant elects not to curtail and establishes a demand higher than the non-curtailable demand, then the non-curtailable demand amount is reset at the higher demand level.

9. For a complete list of requirements and special provisions of these Curtailable rates, please see the CS-2, CST-2, CS-3, and CST-3 Rate Schedules.

4. INCENTIVES

Participants receive a credit based upon their monthly billing demand in accordance with the Curtailable Service Rate Schedules.

5. INCENTIVE PROCESSING

Once all equipment has been installed and inspected, Participants rate will be changed to appropriate CS rate and billing adjustments will appear on the monthly billing statements.

6. REPORTING REQUIREMENTS

The reporting requirements for this program will follow Rule 25-17.0021(5), Florida Administrative Code.

III. DEMAND-SIDE RENEWABLE PROGRAMS

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

SOLAR WATER HEATING FOR LOW INCOME

RESIDENTIAL CUSTOMERS PILOT

DUKE ENERGY FLORIDA, LLC
PROGRAM PARTICIPATION STANDARDS
SOLAR WATER HEATING FOR LOW INCOME
RESIDENTIAL CUSTOMERS PILOT

1. PROGRAM OVERVIEW

The Solar Water Heating for Low-income Residential Customers Pilot of Duke Energy Florida, LLC (DEF) is designed to assist low-income households with energy costs by incorporating a solar thermal water heating system to their residence while it is under construction. DEF will collaborate with Florida approved non-profit builders/agencies to provide low-income households with a residential solar thermal water heater. The non-profit builder and/or residential participants will own the solar thermal system provided by DEF and enjoy all energy saving benefits. The program will end at year-end 2015.

The incentive for this program is the total cost of the solar thermal system plus the associated installation cost. The program will be limited to a targeted annual incentive cap of $150,000.

Goals of the program are:

Provide low-income residential customers with a solar thermal water heating system on their newly constructed home.

1. Identify and educate non-profit builders and low-income customers about energy saving opportunities to upgrade home energy efficiency.

2. Increase low-income households' participation in DEF's DSM programs.

3. Increase DEF's renewable energy portfolio.

2. ELIGIBILITY REQUIREMENTS

1. The premise must be in DEF's service area and be a newly constructed residential metered customer.

2. Do-it-yourself installations are not eligible for program participation.

3. All installations must be accessible for verification by DEF and/or its contractor(s) to ensure compliance with program standards.

4. Florida approved non-profit builders/agencies must submit an application and receive approval for the program incentives prior to installation.

5. DEF will work with multiple non-profit builders/agencies throughout its service territory to distribute solar thermal water heating systems. All non-profit builders/agencies shall complete a memorandum of understanding (MOU) with DEF stating the installation and ownership terms as well as the number of systems that they are eligible to receive in a given year.

6. Low-income and program eligibility will be based upon the requirements of the non-profit builders/agencies participating in the program.

7. The home must support a south facing solar installation with minimal shading obstructions.

3. CONTRACTOR REQUIREMENTS

The DEF contractor/low-income builder must comply with all local, state and federal rules and codes. The selected DEF contractor(s) and/or non-profit builder is/are responsible for all work performed and must meet and/or comply with the following requirements:

1. Contractor and/or subcontractor must have appropriate license(s) and meet current insurance requirements for work to be performed. DEF reserves the right to increase insurance requirements above state/federal minimum requirements at its discretion.

2. Contractor and/or subcontractor must comply with all federal, state, and local codes and regulations.

3. Contractors shall indemnify and hold harmless DEF from any and all losses, liabilities, injuries, damages, claims or costs whatsoever caused by items furnished or services rendered as a result of this Pilot Program.

4. DEF reserves the right to request background checks and drug screenings of contractors and/or subcontractors participating in this program.

5. DEF reserves the right to develop and post a list of contractors participating in this program.

6. Use of the DEF name or logo and any Pilot Program marks by contractors and/or subcontractors must be authorized by DEF in writing prior to use.

7. The contractor is responsible for the associated work to be performed, the

supervision of their employees and/or subcontractors, and the use of the contractor's own equipment (or rental equipment) to meet the work specifications.

8. All contractors must comply with DEF contractor procedures as well as the manufacturers' specifications specific to this Pilot Program. Failure to do so may result in termination of participation in any or all DEF programs.

9. Contractor and/or subcontractor shall notify DEF of any incident occurring during installation of a pilot program or any follow-up procedure immediately at the time of incident.

10. The contractor and/or subcontractor must correct any deficiency found in the installation or product when advised by a DEF representative and notify the DEF representative of compliance within thirty (30) days of the notification from the DEF representative.

11. Contractor and/or subcontractor doing business with DEF may be subject to additional requirements.

4. INCENTIVES

The incentive payment structure is as follows:

Program Component	Incentive
Solar Water Heating for Low Income Residential Customers Pilot	The solar thermal system will be provided at no cost to the non- profit builder or the residential participant

4.1 INCENTIVE PROCESSING

1. The contractor/builder will submit a completed application and all invoices to DEF within a forty-five (45) day period.

2. After a system has passed inspection, or if the system is not selected for inspection, completed invoices will be processed for payment. If, during this inspection DEF determines that the solar installation is unacceptable, a list of deficiencies will be provided to the contractor/builder. The contractor/builder will be responsible for correcting these deficiencies before re-inspection and processing of the invoice.

3. Incentives are paid to the contractor/builder.

5. REPORTING REQUIREMENTS

The reporting requirements for this program will follow Rule 25-17.0021(5), Florida Administrative Code.

6. EQUIPMENT/MATERIAL AND INSTALLATION SPECIFICATIONS

1. The solar energy system must comply with all local, state, and federal rules and codes.

2. Solar Domestic Water Heating systems must be certified and approved by the Florida Solar Energy Center (FSEC) and have an FSEC approval number.

3. The system shall be designed to meet a minimum of 50% of the water heating needs.

4. Solar pool heating or photovoltaic systems are not eligible for this program.

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

SOLAR WATER HEATING WITH ENERGY MANAGEMENT PROGRAM

DUKE ENERGY FLORIDA, LLC
PROGRAM PARTICIPATION STANDARDS
SOLAR WATER HEATING WITH ENERGY MANAGEMENT PROGRAM

1. PROGRAM OVERVIEW

The Solar Water Heating with Residential Energy Management Program of Duke Energy Florida, LLC (DEF) is designed to reduce system peak demand and increase renewable energy generation on the DEF's grid. The program will be limited to a targeted annual incentive cap of $200,000 for the solar water heating component of this program. The program will end at year-end 2015.

The program seeks to meet the following overall goals:

1. Obtain energy and demand reductions that are significant and measurable.

2. Enhance customers'/contractors' awareness of the capabilities of renewable energy technologies.

3. Educate customers/contractors about additional opportunities to generate/use renewable energy.

4. Develop and offer renewable energy measures to the marketplace.

5. Increase participation in the DEF's Residential Energy Management program.

2. ELIGIBILITY REQUIREMENTS

1. The premise must be in DEF's service area and be a residentially metered customer.

2. Do-it-yourself installations are not eligible for program participation.

3. All installations must be accessible for verification by DEF and/or its contractor(s) to ensure compliance with program standards.

4. The DEF account must have whole house electric cooling, heating, and water heating participating in DEF's Energy Management program (interruption schedules B or S, and C) and agree to the following:

    a. Receive twenty-five percent (25%) of associated Energy Management monthly credits for the aforementioned devices for the lifetime of their DEF account.

b. Program participation, with all required devices connected to Energy Management, establishes a minimum 3 year commitment. Participants opting out of the program or closing the account associated with the program will be required to reimburse a portion of the $550 initial rebate per the following reimbursement formula:

Energy Management Early Withdrawal Reimbursement Formula ($15.28) x (months of participation) - $550 = Required Customer Reimbursement
Examples:
($15.28) x (8 months of participation) - $550 = $122.24 - $550 = $ (427.76)
($15.28) x (20 months of participation) - $550 = $305.60 - $550 = $ (244.40)
($15.28) x (36 months of participation and beyond) - $550 = $550 - $550 = $0

5. The Solar Water Heater must be new and installed after effective program start date.

6. The DEF premise shall not have previously received a Solar Water Heater with Energy Management program incentive.

7. DEF must receive the completed incentive application within 12 months of the solar water heating system installation.

8. A DEF energy audit is required prior to system installation to qualify for the rebate. If system construction or installation occurs prior to the required audit, DEF has no obligation to make a rebate payment to the applicant.

9. Customers on DEF's Residential Energy Management program interruption schedule A & D are not eligible to participate in the Solar Water Heating with Energy Management program.

10. Applicant must provide DEF proof showing the installation passed the local building inspection, if applicable.

2.1 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. The solar energy system must comply with all local, state, and federal rules and codes.

2. Solar Domestic Water Heating systems must be certified and approved by the Florida Solar Energy Center (FSEC) and have an FSEC approval number.

3. The system shall be designed to meet a minimum of fifty percent (50%) of the water

heating needs.

4. Solar pool heating or photovoltaic systems are not eligible for this program.

3. CONTRACTOR REQUIREMENTS

1. The contractor and/or subcontractor must possess appropriate license(s) and comply with all appropriate federal, state, and local building and safety codes for all work performed.

2. The contractor and/or subcontractor shall indemnify and hold harmless DEF from any and all losses, liabilities, injuries, damages, claims or costs whatsoever caused by items furnished or services rendered.

3. DEF reserves the right to request background checks and drug screenings of contractors and/or subcontractors participating in the program.

4. DEF reserves the right to develop and post a list of the contractors participating in this program.

5. The contractor is responsible for the associated work to be performed, the supervision of their employees and/or subcontractors, and the use of contractors' own equipment (or rental equipment) to meet the work specifications.

6. The contractor shall provide customer with instruction manual and training on the solar system.

7. The contractor shall provide customers with explicit warranty information including the following:

   a. Length of warranty.

   b. Cost of material during warranty period.

   c. Cost of labor during warranty period.

8. The solar system must be installed in accordance with the manufacturers' recommendations and specifications.

9. The contractor must correct any deficiency found in the installation or product(s) associated with the program, when advised by a DEF representative, and notify the DEF representative of compliance within thirty (30) days of notification by DEF representative.

10. The contractor and/or subcontractor shall assist customers in completing application for incentives.

11. The contractor and/or subcontractor must follow all DEF and program marketing guidelines and requirements.

12. All contractors must comply with DEF contractor procedures. Failure to do so may result in termination of participation in any or all DEF programs.

4. INCENTIVES

The incentive structure is as follows:

Program Component	Incentive
The Solar Water Heating with Energy Management program	$550 per residence toward the purchase of a new solar thermal water heater.
	25% of associated Energy Management monthly credits for required devices (whole house electric cooling, heating, and water heating).
	100% Energy Management monthly pool pump credit, if applicable.

4.1 INCENTIVE PROCESSING

1. Complete and send program form to specified DEF address. The form will record information such as:

   - Customer information - name, premise information, occupants living at the premise, account number, and telephone number.

   - Contractor information - name, license number, address, and telephone number.

   - System information - manufacturer, model number, installation date, permit number and the Florida Solar Energy Center (FSEC) certification number.

   - A copy of the contractor invoice.

2. Upon receipt of the completed form, DEF will select systems for verification.

3. If the system passes verification, or is not selected for verification, the form will be processed for payment.

4. All incentive payments are paid to the customer.

5. REPORTING REQUIREMENTS

The reporting requirements for this program will follow Rule 25-17.0021(5), Florida Administrative Code.

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

RESIDENTIAL SOLAR PHOTOVOLTAIC PILOT

DUKE ENERGY FLORIDA, LLC
PROGRAM PARTICIPATION STANDARDS
RESIDENTIAL SOLAR PHOTOVOLTAIC PILOT

1. PROGRAM OVERVIEW

The Residential Solar Photovoltaic (PV) Pilot of Duke Energy Florida, LLC (DEF) is designed to reduce the initial investment required to install a qualified renewable solar energy system in homes in DEF's service territory. The program will be limited to a targeted annual incentive cap of $2,750,000. The program will end at year-end 2015.

The program seeks to meet the following overall goals:

1. Provide residential customers with a higher return on investment in PV systems.

2. Increase renewable energy generation within DEF's service territory.

3. Increase participation in existing residential DSM measures.

2. ELIGIBILITY REQUIREMENTS

1. The premise must be in DEF's service territory and be a residentially metered customer.

2. Do-it-yourself installations are not eligible for program participation.

3. All installations must be accessible for verification by DEF and/or its contractor(s) to ensure compliance with program standards.

4. The customer must make application to DEF for participation in this program. DEF must approve the application before the incentive is guaranteed. (See Section 4.1 for application process).

5. The PV system must be new and installed after effective program start date.

6. The DEF premise shall not have previously received a Residential Solar Photovoltaic program incentive.

7. The applicant must be a customer of record within DEF's service territory.

8. A DEF audit is required prior to system installation to qualify for the rebate. If system construction or installation occurs prior to the required audit, DEF has no

obligation to make a rebate payment to the applicant.

9. The PV system must be rated between 2 kW and 10 kW (dc power rating) to qualify for this program. No rebates apply for residential systems rated less than 2 kW or more than 10 kW.

10. The residential PV system must be directly interconnected with the DEF power system in accordance with Rule 25-6.065: Interconnection and Net Metering of Customer-Owned Renewable Generation.

11. Applicant must provide DEF proof showing the installation passed the local building inspection, if applicable.

2.1 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. The solar PV system must comply with all local, state, and federal rules and codes.

2. Solar PV systems must be certified and approved by the Florida Solar Energy Center.

3. The PV system shall meet all applicable IEEE, UL, IEC, and NFPA Standards related to interconnection, distributed resources and Photovoltaic Systems that are in effect as of the date of installation, including the following standards or their successors:

   a. IEEE 1547, "IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems".

   b. UL Standard 1741, "Standard for Safety for Static Inverters and Charge Controllers for use in Distributed Resources".

   c. UL Standards 1703, "Standard for Safety: Flat Plate Photovoltaic Modules and Panels".

   d. IEEE Standard 1262-1995, "Recommended Practice for Qualification of Photovoltaic Modules" or IEC Standard 61646.

   e. IEEE Standard 929 "Recommended Practice for Utility Interface of Photovoltaic (PV) Systems".

   f. NFPA 70, "The National Electrical Code".

4. The residential PV system must be directly interconnected with the DEF power system and meet all of the requirements of the following applicable interconnection Tiers as stated in DEF's Interconnection Procedures (or succeeding versions):

   a. Tier 1 (=10 kW) No application fee, disconnect switch or insurance requirement; simply complete the application and interconnection contract.

b. Tier 2 (> 10kW and <=100kW) Application fee of $240, proof of general liability insurance of $1 million, the installation of an externally accessible, lockable a/c disconnect switch located in close proximity to the meter location, in addition to the completed application and signed contract are required for this level of installation.

c. Tier 3 (> 100kW and <=2000kW) Application fee of $750, proof of general liability insurance of $2 million, the installation of an externally accessible, lockable a/c disconnect device located in close proximity to the meter location in addition to the completed application are required for this level of installation. Given the complexity and variability of systems of this size, there may be other protection equipment required beyond the disconnect switch which will be determined through the interconnection study that would be performed by Duke Energy. Upon receipt of the application fee and initial information on the generation system and location, Duke Energy will perform an analysis to determine interconnection requirements and will notify the customer of the results within sixty (60) days.

3. CONTRACTOR REQUIREMENTS

1. The contractor and/or subcontractor must possess appropriate license(s) and comply with all appropriate federal, state, and local building and safety codes for all work performed.

2. The contractor and/or subcontractor shall indemnify and hold harmless DEF from any and all losses, liabilities, injuries, damages, claims or costs whatsoever caused by items furnished or services rendered.

3. DEF reserves the right to request background checks and drug screenings of contractors and/or subcontractors participating in the program.

4. DEF reserves the right to develop and post a list of the contractors participating in this program.

5. The contractor is responsible for the associated work to be performed, the supervision of their employees and/or subcontractors, and the use of contractors' own equipment (or rental equipment) to meet the work specifications.

6. The contractor shall provide the customer with instruction manual and training on the solar system.

7. The contractor shall provide customers with explicit warranty information including

the following:

a. Length of warranty.

b. Cost of material during warranty period.

c. Cost of labor during warranty period.

8. The solar system must be installed in accordance with the manufacturers' recommendations and specifications.

9. The contractor must correct any deficiency found in the installation or product(s) associated with the program, when advised by a DEF representative, and notify the DEF representative of compliance within thirty (30) days of notification by DEF representative.

10. The contractor and/or subcontractor shall assist customers in completing application for incentives.

11. The contractor and/or subcontractor must follow all DEF and program marketing guidelines and requirements.

12. All contractors must comply with DEF contractor procedures. Failure to do so may result in termination of participation in any or all DEF programs.

4. INCENTIVES

The incentive for this program is a maximum payment of $2.00 per watt (up to $20,000) of the DC power rating up to a maximum of 10 kW on a new photovoltaic system.

4.1 INCENTIVE APPLICATION

1. Customer must complete and submit an Application for participation under the Program prior to installation of the generating system.

   a. For an Application to be approved by DEF, the system must be rated by a certified solar contractor to produce a minimum of 1000 kWh/year of ac energy per kW dc rating.

   b. If System construction or installation occurs before Application acceptance, then DEF may, in its sole and absolute discretion, determine that the Applicant's System is ineligible for the Program. In such event, DEF shall have no obligation to make any Program payment to Applicant.

2. Upon approval, DEF will assign a reservation number to the Application, and notify the Applicant of said reservation number and amount.

3. Within ninety (90) days of the Application acceptance, the Applicant must submit the completed DEF solar incentive form and supporting documents; providing proof of completion, local inspection(s) and readiness for DEF verification.

4. Failure to submit the completed DEF solar incentive form and supporting documents within ninety (90) days shall void the reservation number and amount.

    a. Funding reservations will be reallocated to the program and if there is additional funding available, the applicant may reapply for the incentive.

    b. Applicants may apply for an extension. Extensions will be granted on a case by case basis based on a review of the project advancement.

5. Reservations for a year's funding will begin October 1 of the previous year and close September 30 of the funding year.

    a. The reservation process for incentives will be on a first come first served basis.

    b. Once the $2,750,000/year program funding has been allocated, no additional reservations for that year will be accepted.

    c. Incentives will only be awarded to systems that are specifically reserved for the given year.

4.2 INCENTIVE PROCESSING

1. Complete and send program form to specified DEF address. The form will record information such as:

    - Customer information - name, premise information, occupants living at the premise, account number, and telephone number.

    - Contractor information - name, license number, address, and telephone number.

    - System information - manufacturer, model number, installation date, permit number, and production projections (kWh).

    - A copy of the contractor invoice.

- DEF Application for participation with valid reservation number.

2. Upon receipt of the completed form, DEF will select systems for verification.

3. If the system passes verification, or is not selected for verification, the form will be processed for payment.

4. All incentive payments are paid to the customer.

5. REPORTING REQUIREMENTS

The reporting requirements for this program will follow Rule 25-17.0021(5), Florida Administrative Code.

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

COMMERCIAL SOLAR PHOTOVOLTAIC PILOT

DUKE ENERGY FLORIDA, LLC
PROGRAM PARTICIPATION STANDARDS
COMMERCIAL SOLAR PHOTOVOLTAIC PILOT

1. PROGRAM OVERVIEW

The Commercial Solar Photovoltaic (PV) Pilot of Duke Energy Florida, LLC (DEF) is designed to reduce the initial investment required to install a qualified renewable solar energy system. The program will be limited to a targeted annual incentive cap of $1,400,000. The program will end at year-end 2015.

The program seeks to meet the following overall goals:

1. Provide commercial customers with a higher return on investment in PV systems.
2. Increase renewable energy generation within DEF's service territory.
3. Increase participation in existing commercial DSM measures.

2. ELIGIBILITY REQUIREMENTS

1. The premise must be in DEF's service territory and be a commercially metered customer.
2. Do-it-yourself installations are not eligible for program participation.
3. All installations must be accessible for verification by DEF and/or its contractor(s) to ensure compliance with program standards.
4. The customers must make application to DEF for participation in this program. DEF must approve the application before the incentive is guaranteed. (See Section 4.1 for application process).
5. The PV system must be new and installed after effective program start date.
6. Each commercial customer can participate with one PV system per premise. Since the quantity of rebates are limited, customers with multiple premises "sites" that are individually metered and physically separated may apply for multiple incentives; however, they will be evaluated on a case by case basis based upon prospective allocations.
7. The applicant must be customer of record in DEF's service territory.

8. A DEF energy audit is required prior to system installation to qualify for the rebate. If system construction or installation occurs prior to the required audit, DEF has no obligation to make a rebate payment to the applicant.

9. The PV system must be rated between 2kW and 100kW (dc power rating) to qualify for this program. No rebates apply for commercial systems rated less than 2 kW or more than 100 kW.

10. The commercial PV system must be directly interconnected with the DEF power system in accordance with Rule 25-6.065: Interconnection and Net Metering of Customer-Owned Renewable Generation.

11. Applicant must provide DEF proof showing the installation passed the local building inspection, if applicable.

2.1 EQUIPMENT AND INSTALLATION SPECIFICATIONS

1. The solar PV system must comply with all local, state, and federal rules and codes.

2. Solar PV systems must be certified and approved by the Florida Solar Energy Center.

3. The PV system shall meet all applicable IEEE, UL, IEC, and NFPA Standards related to interconnection, distributed resources and Photovoltaic Systems that are in effect as of the date of installation, including the following standards or their successors:

   a. IEEE 1547, "IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems".

   b. UL Standard 1741, "Standard for Safety for Static Inverters and Charge Controllers for use in Distributed Resources". UL Standards 1703, "Standard for Safety: Flat Plate Photovoltaic Modules and Panels".

   c. IEEE Standard 1262-1995, "Recommended Practice for Qualification of Photovoltaic Modules" or IEC Standard 61646.

   d. IEEE Standard 929 "Recommended Practice for Utility Interface of Photovoltaic (PV) Systems".

   f. NFPA 70, "The National Electrical Code".

4. The commercial PV system must be directly interconnected with the DEF power system and meet all of the requirements of the following applicable interconnection Tiers as stated in DEF's Interconnection Procedures (or succeeding versions):

   a. Tier 1 (=10 kW) No application fee, disconnect switch or insurance requirement;

simply complete the application and interconnection contract.

b. Tier 2 (> 10kW and <=100kW) Application fee of $240, proof of general liability insurance of $1 million, the installation of an externally accessible, lockable a/c disconnect switch located in close proximity to the meter location, in addition to the completed application and signed contract are required for this level of installation.

c. Tier 3 (> 100kW and <=2000kW) Application fee of $750, proof of general liability insurance of $2 million, the installation of an externally accessible, lockable a/c disconnect device located in close proximity to the meter location in addition to the completed application are required for this level of installation. Given the complexity and variability of systems of this size, there may be other protection equipment required beyond the disconnect switch which will be determined through the interconnection study that would be performed by DEF Upon receipt of the application fee and initial information on the generation system and location, DEF will perform an analysis to determine interconnection requirements and will notify the customer of the results within sixty (60) days.

3. CONTRACTOR REQUIREMENTS

1. The contractor and/or subcontractor must possess appropriate license(s) and comply with all appropriate federal, state, and local building and safety codes for all work performed.

2. The contractor and/or subcontractor shall indemnify and hold harmless DEF from any and all losses, liabilities, injuries, damages, claims or costs whatsoever caused by items furnished or services rendered.

3. DEF reserves the right to request background checks and drug screenings of contractors and/or subcontractors participating in the program.

4. DEF reserves the right to develop and post a list of the contractors participating in this program.

5. The contractor is responsible for the associated work to be performed, the supervision of their employees and/or subcontractors, and the use of contractors' own equipment (or rental equipment) to meet the work specifications.

6. The contractor shall provide customer with instruction manual and training on the solar system.

7. The contractor shall provide customers with explicit warranty information including

the following:

a. Length of warranty.

b. Cost of material during warranty period.

c. Cost of labor during warranty period.

8. The solar system must be installed in accordance with the manufacturers' recommendations and specifications.

9. The contractor must correct any deficiency found in the installation or product(s) associated with the program, when advised by a DEF representative, and notify the DEF representative of compliance within thirty (30) days of notification by DEF representative.

10. The contractor and/or subcontractor shall assist customers in completing application for incentives.

11. The contractor and/or subcontractor must follow all DEF and program marketing guidelines and requirements.

12. All contractors must comply with DEF contractor procedures. Failure to do so may result in termination of participation in any or all DEF programs.

4. INCENTIVES

The incentive for this program is a tiered rebate, based on the PV DC power rating, as follows:

a. Up to $2.00 per Watt for the first 10 kW

b. Up to $1.50 per Watt for each increment of capacity above 10 kW up to 50 kW

c. Up to $1.00 per Watt for each increment of capacity above 50 kW up to a maximum total system size of 100 kW

4.1 INCENTIVE APPLICATION

1. Customer must complete and submit an Application for participation under the Program prior to installation of the generating system.

a. For an Application to be approved by DEF, the system must be rated by a certified solar contractor to produce a minimum of 1000 kWh /year of ac energy per kW dc rating.

b. If System construction or installation occurs before Application acceptance, then DEF may, in its sole and absolute discretion, determine that the Applicant's System is ineligible for the Program. In such event, DEF shall have no obligation to make any Program payment to Applicant.

2. Upon approval, DEF will assign a reservation number to the Application, and notify the Applicant of said reservation number and amount.

3. Within ninety (90) days of the Application acceptance, the Applicant must submit the completed DEF solar incentive form and supporting documents; providing proof of completion, local inspection(s) and readiness for DEF verification.

4. Failure to submit the completed DEF solar incentive form and supporting documents within ninety (90) days shall void the reservation number and amount.

a. Funding reservations will be reallocated to the program and if there is additional funding available, the applicant may reapply for the incentive.

b. By case basis based on a review of the project advancement.

5. Reservations for a year's funding will begin October 1 of the previous year and close September 30 of the funding year.

a. The reservation process for incentives will be on a first come first served basis.

b. Once the $1,400,000/year program funding has been allocated, no additional reservations for that year will be accepted.

c. Incentives will only be awarded to systems that are specifically reserved for the given year.

4.2 INCENTIVE PROCESSING

1. Complete and send program form to specified DEF address. The form will record information such as:

- Customer information - name, premise information, account number, and telephone number.

- Contractor information - name, license number, address, and telephone number.
- System information - manufacturer, model number, installation date, permit number, and production projections (kWh).
- A copy of the contractor invoice.
- DEF Application for participation with valid reservation number.

2. Upon receipt of the completed form, DEF will select systems for verification.
3. If the system passes verification, or is not selected for verification, the form will be processed for payment.
4. All incentive payments are paid to the customer.

5. REPORTING REQUIREMENTS

The reporting requirements for this program will follow Rule 25-17.0021(5), Florida Administrative Code.

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

PHOTOVOLTAIC FOR SCHOOLS PILOT

DUKE ENERGY FLORIDA, LLC
PROGRAM PARTICIPATION STANDARDS
PHOTOVOLTAICS FOR SCHOOLS PILOT

1. PROGRAM OVERVIEW

The Photovoltaic for Schools Pilot of Duke Energy Florida, LLC (DEF) is designed to assist public and postsecondary schools with energy costs while promoting energy education. This program will provide participating public schools with new photovoltaic (PV) systems at no cost to the school. The program will end at year-end 2015.

Public schools that are customers of DEF can apply for participation in this program. The program will be limited to an annual target of one system with a rating up to 100 kW installed on a postsecondary public school and up to (10) 10 kW systems with battery backup option installed on public schools, preferably serving as emergency shelters. Postsecondary school participation will be prioritized based on criteria such as attendance and energy consumption associated with their main campus, as well as the schools' plan to use the solar array as an educational and research tool. Public schools will be selected using a competitive process that aligns with Florida's SunSmart E-Shelters Program Application with an emphasis placed on the schools commitment to energy efficiency and renewable energy education. DEF will have the option to own and operate the equipment for the first five years after installation, at the end of which time the ownership and maintenance responsibilities will transfer to the customer. The incentive for this program is the total equipment cost of the solar PV system plus the associated installation.

This program places an emphasis on energy education and promotes environmental stewardship. As such, DEF residential customers participating in the Winter-Only Energy Management or Year Round Energy Management residential demand response programs can elect to contribute their monthly credit toward a fund designed to support and promote energy education. The fund will accumulate associated participant credits for a period of two (2) years, at which time the customer may elect to renew for an additional two (2) years. All proceeds collected from participating customers and their associated monthly credits, will be used to promote energy efficiency and renewable energy educational opportunities.

Goals of the program are to:

1. Eliminate the initial investment required to install a renewable solar PV system.

2. Increase participation in existing residential Demand Side Management measures through energy education.

3. Increase solar education and awareness in DEF communities and schools.

2. ELIGIBILITY REQUIREMENTS

1. The building/facility must be a public educational facility and have a metered DEF commercial account.

2. DEF will have the option to own and maintain the photovoltaic system for the first five (5) years after installation. At the end of the five (5) year period, the school shall assume ownership and all associated maintenance and operating costs of the photovoltaic system. Alternatively, should DEF elect not to own the photovoltaic system, the school must agree to own, operate and maintain all equipment immediately upon installation, and commissioning of the system.

3. Public schools serving as emergency shelters will be preferred and receive a photovoltaic system up to 10 kW in size with the potential to also receive a battery backup component. The sizing of the PV system and batteries will be based upon the application criteria and physical campus constraints.

4. Postsecondary schools will receive a photovoltaic system up to 100 kW. The sizing of the PV system will be based upon the application criteria and physical campus constraints.

5. The school shall meet all applicable DEF Interconnection requirements.

6. All installations must be accessible for verification by a DEF representative and/or its contractor(s) to ensure compliance with program standards and, in the instance of DEF system ownership, ongoing maintenance.

7. The School's PV system must be directly interconnected with the DEF power system in accordance with Rule 25-6.065: Interconnection and Net Metering of Customer-Owned Renewable Generation.

3. CONTRACTOR REQUIREMENTS

DEF will select a contractor to conduct the installation. The DEF contractor(s) must comply with all local, state and federal rules and codes. The selected DEF contractor(s) and/or project facilitator is/are responsible for all work performed and must meet and/or comply with DEF requirements.

4. INCENTIVES

The incentive payment structure is as follows:

Program Component	Incentive
Photovoltaic for Schools Pilot – Postsecondary Schools	The solar PV system will be provided at no cost to the school (approximately $750,000 /system).
Photovoltaic for Schools Pilot – Emergency Shelters	The solar PV system will be provided at no cost to the school (approximately $130,000 /system).

5. REPORTING REQUIREMENTS

The reporting requirements for this program will follow Rule 25-17.0021(5), Florida Administrative Code.

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

RESEARCH AND DEMONSTRATION PILOT

DUKE ENERGY FLORIDA, LLC
PROGRAM PARTICIPATION STANDARDS
RESEARCH AND DEMONSTRATION PILOT

1. PROGRAM OVERVIEW

The purpose of this program of Duke Energy Florida, LLC (DEF) is to support research and demonstration (R&D) initiatives for renewable energy pilot programs. This program will provide the opportunity for real-world field testing of renewable technologies. Because all of DEF's renewable programs will end on December 31, 2015, this program will also end.
Targeted expenditures for this program in 2015 will be five percent (5%) of the annual expenditure cap for renewable programs established by the Commission in Order PSC-09-0855-FOF-EG. As directed by the Commission, this program will end after 2015.

Each R&D project will be designed to support the development of future solar and renewable energy pilot programs, and in general, each project will proceed through the following phases:

- Project concept or idea development
- Project research and design, including estimated costs and benefits
- Field test, modeling, general research, and theoretical testing

2. ELIGIBILITY REQUIREMENTS

Eligibility will be determined during the project research and design phase, and will be dependent on the type of project being proposed and investigated. Field demonstrations will normally involve only a limited number of customers. Participants in field demonstration projects must allow DEF and its contractors access to the facility for installation, maintenance and monitoring of equipment. DEF will be solely responsible for determining the technologies to be evaluated under this program.

3. CONTRACTOR REQUIREMENTS

DEF may use contractors to support the installation, maintenance, and monitoring, of equipment and to perform research and other requirements of projects in this program. The DEF contractors must comply with all local, state and federal rules and codes and all

DEF contractor requirements.

4. INCENTIVES

As part of this program, DEF may compensate participants in field demonstration projects for their willingness to support the technology evaluation. Incentives will be project specific, captured as an expenditure, and commensurate with the impact to the participants.

5. REPORTING REQUIREMENTS

A status report will be filed as a component of the Energy Conservation Cost Recovery Projection and True-Up filings, and will include a summary of activities, accomplishments and expenditures for this program.

IV. TECHNOLOGY DEVELOPMENT PROGRAM

DUKE ENERGY FLORIDA, LLC

PROGRAM PARTICIPATION STANDARDS

TECHNOLOGY DEVELOPMENT PROGRAM

DUKE ENERGY FLORIDA, LLC
PROGRAM PARTICIPATION STANDARDS
TECHNOLOGY DEVELOPMENT PROGRAM

1. PROGRAM OVERVIEW

The purpose of the Technology Development Program of Duke Energy Florida, LLC (DEF) is to enable DEF to investigate technologies and pursue research, development and demonstration projects that may lead to the development of new cost-effective demand and energy efficiency programs. The program is designed to allow DEF to investigate technologies and develop new programs from initial concept through submittal to the Florida Public Service Commission (FPSC) for consideration and approval. In general, each proposed technology development project will proceed according to the following schedule. Each milestone will represent a decision point to continue or discontinue the project based upon economic knowledge available at the time.

1. Project concept or idea development
2. Project research and design, including estimated costs and benefits
3. Field demonstration program
4. Evaluation of field demonstration program, including cost-effectiveness
5. If accepted for continuation as a program, application to the FPSC for approval to implement the program

Expenditures up to $800,000 annually may be made and recovered through the energy conservation cost recovery clause for all energy efficiency and conservation projects that are proposed and investigated. All costs, including incentives and rebates that are offered, will be included as part of the pre- approved project expenditures under this program. In order to accurately account for expenses, each investigation will have a "job order" created according to established corporate procedures which will be the repository for all investigation expenses. A record of program expenses will be maintained in accordance with Rule 25-17.015, Florida Administrative Code.

2. ELIGIBILITY REQUIREMENTS

Customers that is eligible to participate in field demonstration projects will be determined during the project research and design phase, and will be dependent on the type of project being proposed and investigated. Field demonstrations will involve only a limited number of customers. Participants in field demonstration projects must allow DEF and its contractor's access to the facility for maintaining and monitoring the evaluation equipment. DEF will be solely responsible for determining the technologies

to be evaluated under this program.

3. INCENTIVES

As part of this program, DEF will compensate participants in field demonstration projects for their willingness to work with DEF on the technology evaluation.

4. REPORTING REQUIREMENTS

If any single project's expenditures exceed $100,000, a status report will be filed as a component of the Energy Conservation Cost Recovery Projection and True-Up filings. If any project (or combination of projects) expenditures are projected to exceed the $800,000 annual limit, DEF will apply to the FPSC staff for approval to proceed with the particular project which would cause DEF to exceed the limit.