

State of Florida



Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: May 17, 2021

TO: Adam J. Teitzman, Commission Clerk, Office of Commission Clerk

FROM: Damian Kistner, Engineering Specialist I, Division of Engineering *DK TB*

RE: Docket No. 20200054-EG - Petition for approval of proposed demand-side management plan, by Duke Energy Florida, LLC.

Please file the two attached documents, "Letter from Matthew R. Bernier, with attached modifications to the Standards for the RI Program Standards" and "Letter to Matthew R. Bernier dated May 17, 2021," in the above referenced docket file.

DK/pz

Attachment

COMMISSIONERS:
GARY F. CLARK, CHAIRMAN
ART GRAHAM
ANDREW GILES FAY
MIKE LA ROSA

STATE OF FLORIDA



DIVISION OF ENGINEERING
TOM BALLINGER
DIRECTOR
(850) 413-6910

Public Service Commission

May 17, 2021

Mr. Matthew R. Bernier
Duke Energy Florida, LLC.
106 East College Avenue, Suite 800
Tallahassee FL 32301
matthew.bernier@duke-energy.com

VIA EMAIL

Re: Docket No. 20200054-EG (Duke Energy Florida, LLC.) - Revisions to Program Standards – Residential Incentive Program

Dear Mr. Bernier:

On August 3, 2020, the Commission issued Order No. PSC-2020-0274-PAA-EG in Docket No. 20200054-EG, approving the Demand Side Management (DSM) Plan for Duke Energy Florida (DEF) and granting staff administrative authority to approve program standards. DEF filed program participation standards on September 17, 2020, which were administratively approved on October 29, 2020.

On May 7, 2021, DEF filed a letter requesting approval of modifications to its program standards for the Residential Incentive. The Commission staff has reviewed the requested modifications and has determined them to be consistent with the DSM Plan approved by the Commission in Order No. PSC-2020-0274-PAA-EG. Staff requests that DEF notify the Commission prior to any additional changes being made to the program standards as filed.

Sincerely,

A handwritten signature in blue ink that reads "Tom Ballinger".

Tom Ballinger, Director
Division of Engineering

TB:DK

cc: Office of Commission Clerk (Docket No. 20200054-EG)



Matthew R. Bernier
ASSOCIATE GENERAL COUNSEL

May 7, 2021

VIA ELECTRONIC FILING

Adam J. Teitzman, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: *Duke Energy Florida, LLC's Revisions to Program Standards – Residential Incentive Program*; Docket No. 20200054-EG

Dear Mr. Teitzman:

Duke Energy Florida, LLC (“DEF”), respectfully requests administrative approval of revisions to its Residential Incentive Program (“RI Program”) Standards.

On August 3, 2020, the Florida Public Service Commission issued Order No. PSC-2020-0274-PAA-EG in Docket No. 202000054-EG, approving DEF’s Demand Side Management (“DSM”) Plan, granting Staff administrative authority to approve DEF’s Program Participation Standards. DEF filed Program Participation Standards on September 17, 2020, which were administratively approved on October 29, 2020.

The attached modifications to the Standards for the RI Program Standards are being made for Program administration purposes. DEF has modified the language in the Standards to remove the specific insurance coverage requirements, and in place, has set the requirement to the greater of the minimum coverage required by the State or the minimum coverage required by the Trade Ally Agreement. Both a redline/strikethrough and clean version of the modified Standards are provided hereto as Attachment A.

Thank you for your assistance in this matter. If you have any questions, please feel free to contact me at (850) 521-1428.

Respectfully,

/s/ Matthew R. Bernier
Matthew R. Bernier

MRB/cmw
Enclosure

cc: Tom Ballinger

CERTIFICATE OF SERVICE
(Dkt. No. 20200054-EG)

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished to the following by electronic mail this 7th day of May, 2021, to all parties of record as indicated below.

/s/ Matthew R. Bernier

Attorney

Charles Murphy / Gabriella Passidomo Office of General Counsel Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 cmurphy@psc.state.fl.us gpassido@psc.state.fl.us	
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Docket No. 20200054-EG

DEF's Attachment A

Redline/Strikethrough Version of
Residential Incentive Program Standards Modifications

**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 residential, 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.

All installations must be accessible for verification by a DEF representative to ensure compliance with the Residential Incentive Program standards.

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 twenty-four (24) hours of the 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 documentation of a DEF with documentation and maintain in force ~~the insurance~~ the following types of insurance coverage. The Trade Ally must maintain coverage that meets the that meets the greater of the minimum coverage required by the State for license retention state required or the minimum coverage requirements specified in the Trade Ally agreement. coverage or the of following insurance type coverage to state required minimum insurance policies for license retention or the following minimum insurance policies, whichever is greater. This applies to all Program measures:
 - Workman's Compensation ~~as required by law~~ the Program
 - 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~~ Liability endorsed: -\$100,000 per occurrence to provide blanket coverage

4. INCENTIVES

The incentive payment structure is as follows:

Program Component	Incentive
Duct Test for Single-Family Homes	50% of test cost up to \$40 for the first unit tested for single-family homes with ducted electric air and heat
	50% of test cost up to \$30 for each additional unit at same address for single-family homes with ducted electric air and heat
Duct Leakage Repair for Single-Family Homes	Will pay the cost of duct repairs up to \$200 per system for single-family homes with ducted electric air and heat.
Attic Insulation (Ceiling Insulation Upgrade) for Single-Family Homes	Will pay for insulation upgrades for single-family homes. Will pay \$0.19 per square foot up to \$200 to bring insulation from R-19 or less to a minimum of R-38; up to \$400 to bring insulation from R-12 or less to a minimum of R-38; and up to \$800 to bring insulation from R-2 or less to a minimum of R38.
High Efficiency Heat Pump Replacing Resistance Heat for Multi-Family and Manufactured Homes	Will pay \$150 for High Efficiency Heat Pump system with a minimum cooling efficiency of 14.0 SEER and minimum heating efficiency of 8.2 HSPF replacing less efficient resistance heat/strip heat HVAC systems for Multi-Family and Manufactured Homes.
High Efficiency Heat Pump for Single-Family Homes	Will pay \$300 for a High Efficiency Heat Pump system with a minimum cooling efficiency of 14 SEER and minimum heating efficiency of 8.2 HSPF replacing less efficient resistance heat/strip heat HVAC systems for Single-Family Homes.

	Will pay \$150 for a High Efficiency Heat Pump system with a minimum cooling efficiency of 15 SEER and minimum heating efficiency of 8.2 HSPF replacing less efficient Heat Pump HVAC systems for Single-Family Homes.
High Efficiency Central Air Conditioner for Single-Family Homes	Will pay \$100 for a High Efficiency Central Air Conditioning system with a minimum cooling efficiency of 16 SEER replacing less efficient Central Air Conditioning system for Single-Family Homes.
Replacement Windows for Single-Family Homes	Will pay \$2.00 per square foot of east, west and south-facing window area up to a maximum incentive 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 for Single-Family Homes

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 twelve (12) months from date of installation to submit all required forms for the measure after which they will become ineligible for incentive.
3. 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 and insulation upgrade, 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), F.A.C.

6. DUCT TEST AND LEAKAGE REPAIR SINGLE-FAMILY HOMES

6.1 PARTICIPATION REQUIREMENTS

1. Multi-family and manufactured homes are not eligible to participate.
2. 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).
3. 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).
4. 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.
5. A minimum of 60 CFM at 25 Pa'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 on-site 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. CEILING INSULATION UPGRADE

7.1 PARTICIPATION REQUIREMENTS

1. Multi-family and manufactured homes are not eligible to participate.
2. Insulation recommendations must have been the result of a DEF audit.
3. Eligible residences must have whole-house cooling and/or electric heating.
4. 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-2.
(**Exception:** May exclude conditioned area for a recent addition.)
5. 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.
6. Any home with "Knob and Tube Wiring" must be documented or certified as not energized by a state-licensed electrician.

7.2 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 enough 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.

7.3 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.

8. HIGH-EFFICIENCY, ELECTRIC HEAT PUMPS MULTI-FAMILY AND MANUFACTURED HOMES

8.1 PARTICIPATION REQUIREMENTS

1. Single-family homes are not eligible to participate.
2. 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).
3. Customer must have electric resistance/strip heat.

8.2 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. Air handling units, mechanical closets and enclosed support platforms shall be sealed from unconditioned air.
8. Heat pump must be all electric.

8.3 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.
- ~~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 twelve (12) months from date of installation to submit all "High Efficiency Equipment Forms" after which they will become ineligible for incentive.

9. HIGH-EFFICIENCY, ELECTRIC HEAT PUMPS - SINGLE-FAMILY HOMES

9.1 PARTICIPATION REQUIREMENTS

1. Multi-family and manufactured homes are not eligible to participate.
2. 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).
3. 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. Air handling units, mechanical closets and enclosed support platforms shall be sealed from unconditioned air.
8. 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 a Class A, B, or C Air Conditioning Contractor.
- ~~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 twelve (12) months from date of installation to submit all “High Efficiency Equipment Forms” after which they will become ineligible for incentive.

10. HIGH-EFFICIENCY CENTRAL AIR CONDITIONER FOR SINGLE-FAMILY HOMES

10.1 PARTICIPATION REQUIREMENTS

1. Multi-family and manufactured homes are not eligible to participate.
2. 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).
3. The customer must not be replacing an existing heat pump.

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 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. Air handling units, mechanical closets and enclosed support platforms shall be sealed from unconditioned air.
8. System 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 a Class A, B, or C Air Conditioning Contractor.
- ~~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 twelve (12) 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.

Docket No. 20200054-EG

DEF's Attachment A

Clean Version of

Residential Incentive Program Standards Modifications

**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 residential, 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.

All installations must be accessible for verification by a DEF representative to ensure compliance with the Residential Incentive Program standards.

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 twenty-four (24) hours of the 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 provide documentation of and maintain in force the following types of insurance coverage. The Trade Ally must maintain coverage that meets the greater of the minimum coverage required by the State for license retention or the minimum coverage requirements specified in the Trade Ally agreement. This applies to all Program measures:
 - Workman's Compensation
 - General Contractual and Automobile Bodily Injury Liability
 - General and Automobile Property Damage Liability
 - General and Vehicle Liability

4. INCENTIVES

The incentive payment structure is as follows:

Program Component	Incentive
Duct Test for Single-Family Homes	50% of test cost up to \$40 for the first unit tested for single-family homes with ducted electric air and heat
	50% of test cost up to \$30 for each additional unit at same address for single-family homes with ducted electric air and heat
Duct Leakage Repair for Single-Family Homes	Will pay the cost of duct repairs up to \$200 per system for single-family homes with ducted electric air and heat.
Attic Insulation (Ceiling Insulation Upgrade) for Single-Family Homes	Will pay for insulation upgrades for single-family homes. Will pay \$0.19 per square foot up to \$200 to bring insulation from R-19 or less to a minimum of R-38; up to \$400 to bring insulation from R-12 or less to a minimum of R-38; and up to \$800 to bring insulation from R-2 or less to a minimum of R38.
High Efficiency Heat Pump Replacing Resistance Heat for Multi-Family and Manufactured Homes	Will pay \$150 for High Efficiency Heat Pump system with a minimum cooling efficiency of 14.0 SEER and minimum heating efficiency of 8.2 HSPF replacing less efficient resistance heat/strip heat HVAC systems for Multi-Family and Manufactured Homes.
High Efficiency Heat Pump for Single-Family Homes	Will pay \$300 for a High Efficiency Heat Pump system with a minimum cooling efficiency of 14 SEER and minimum heating efficiency of 8.2 HSPF replacing less efficient resistance heat/strip heat HVAC systems for Single-Family Homes.
	Will pay \$150 for a High Efficiency Heat Pump system with a minimum cooling efficiency of 15 SEER and minimum heating efficiency of 8.2 HSPF replacing less efficient Heat Pump HVAC systems for Single-Family Homes.

<p>High Efficiency Central Air Conditioner for Single-Family Homes</p>	<p>Will pay \$100 for a High Efficiency Central Air Conditioning system with a minimum cooling efficiency of 16 SEER replacing less efficient Central Air Conditioning system for Single-Family Homes.</p>
<p>Replacement Windows for Single-Family Homes</p>	<p>Will pay \$2.00 per square foot of east, west and south-facing window area up to a maximum incentive 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 for Single-Family Homes</p>

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 twelve (12) months from date of installation to submit all required forms for the measure after which they will become ineligible for incentive.
3. 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 and insulation upgrade, 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), F.A.C.

6. DUCT TEST AND LEAKAGE REPAIR SINGLE-FAMILY HOMES

6.1 PARTICIPATION REQUIREMENTS

1. Multi-family and manufactured homes are not eligible to participate.
2. 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).
3. 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).
4. 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.
5. A minimum of 60 CFM at 25 Pa'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.
3. All participating Trade Allies must attend and successfully complete DEF-approved duct repair training.

6.4 INSPECTION REQUIREMENTS

All on-site 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. CEILING INSULATION UPGRADE

7.1 PARTICIPATION REQUIREMENTS

1. Multi-family and manufactured homes are not eligible to participate.
2. Insulation recommendations must have been the result of a DEF audit.
3. Eligible residences must have whole-house cooling and/or electric heating.
4. 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-2.
(**Exception:** May exclude conditioned area for a recent addition.)
5. 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.
6. Any home with "Knob and Tube Wiring" must be documented or certified as not energized by a state-licensed electrician.

7.2 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 enough 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.

7.3 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.

8. HIGH-EFFICIENCY, ELECTRIC HEAT PUMPS MULTI-FAMILY AND MANUFACTURED HOMES

8.1 PARTICIPATION REQUIREMENTS

1. Single-family homes are not eligible to participate.
2. 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).
3. Customer must have electric resistance/strip heat.

8.2 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. Air handling units, mechanical closets and enclosed support platforms shall be sealed from unconditioned air.
8. Heat pump must be all electric.

8.3 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.
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 twelve (12) months from date of installation to submit all "High Efficiency Equipment Forms" after which they will become ineligible for incentive.

9. HIGH-EFFICIENCY, ELECTRIC HEAT PUMPS - SINGLE-FAMILY HOMES

9.1 PARTICIPATION REQUIREMENTS

1. Multi-family and manufactured homes are not eligible to participate.
2. 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).
3. 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. Air handling units, mechanical closets and enclosed support platforms shall be sealed from unconditioned air.
8. 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 a Class A, B, or C Air Conditioning Contractor.
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 twelve (12) months from date of installation to submit all “High Efficiency Equipment Forms” after which they will become ineligible for incentive.

10. HIGH-EFFICIENCY CENTRAL AIR CONDITIONER FOR SINGLE-FAMILY HOMES

10.1 PARTICIPATION REQUIREMENTS

1. Multi-family and manufactured homes are not eligible to participate.
2. 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).
3. The customer must not be replacing an existing heat pump.

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

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. Air handling units, mechanical closets and enclosed support platforms shall be sealed from unconditioned air.
8. System 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 a Class A, B, or C Air Conditioning Contractor.
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 twelve (12) 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.