

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-2, SUB 936

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Request by Duke Energy Progress, LLC,)	ORDER ON APPLICATION
for Approval of Modifications to Residential)	FOR APPROVAL OF PROGRAM
Home Energy Improvement Program)	MODIFICATIONS

BY THE COMMISSION: On October 2, 2015, Duke Energy Progress, LLC (DEP or Company), filed an application seeking approval of modifications to its Residential Home Energy Improvement Program (Program). DEP requests that the Commission:

1. Approve the Residential Service – Home Energy Improvement Program HEIP-5 tariff at the Commission's earliest convenience;
2. Approve the Program, as modified, to remain in effect through the evaluation period ending March 31, 2019;
3. Find that the Program, with modifications, continues to meet the requirements of a "new" energy efficiency (EE) program consistent with Rule R8-69 (*sic*: R8-68);
4. Find that all costs incurred by DEP associated with the Program will be eligible for consideration for cost recovery through the annual demand-side management and energy efficiency (DSM/EE) rider in accordance with Rule R8-69(b); and
5. Approve the proposed utility incentives for inclusion in the annual DSM/EE rider in accordance with Rule R8-69.

The Program was originally approved as a new EE program in the Commission's *Order Approving Program*, issued April 30, 2009, in Docket No. E-2, Sub 936. In addition to encouraging installation of high efficiency heat pumps and central air conditioning equipment, it now includes EE measures associated with duct repair, attic insulation and sealing, heat pump water heaters, high efficiency room air conditioners, and diagnostic maintenance on heat pumps and central air conditioners.

The proposed modifications included in the Company's October 2, 2015, Application include:

- Replacement of the existing single initial/maximum incentive structure for replacement HVAC¹ equipment, with a three-tier incentive structure based on the efficiency of the new HVAC system;
- Addition of a programmable, Wi-Fi-enabled smart thermostat measure;
- Addition of a “quality installation” provision to encourage the proper installation of HVAC systems; and
- Addition of a referral channel to guide interested customers to one or more DEP-approved HVAC contractors who have paid DEP a fee to be on the referral list.

On October 30, 2015, the Commission granted the Public Staff and other interested parties an extension of time until December 2, 2015, to file a protest, an intervention, or comments regarding the proposed Program.

On November 5, 2015, the North Carolina Building Performance Association filed a letter in support of DEP’s application. The letter indicates that a substantial portion of the EE work of home and building performance contractors is generated by utility-funded activities such as the Program.

On December 2, 2015, the Public Staff filed comments on the proposed modifications to the Program. A major concern raised by the Public Staff is the failure of the Program as a whole, and some of the individual measures even with the proposed modifications, to achieve cost-effectiveness under the Total Resource Cost (TRC) test. Specifically, the Public Staff commented that:

- The proposed new quality installation measure will be cost-effective under the TRC test.
- The proposed new smart thermostat has TRC results of 0.6 and 0.57 (referral and non-referral, respectively) and does not appear to enhance the overall cost-effectiveness of the Program.
- The modification to replace the single incentive for HVAC equipment replacement with a three-tier incentive generally will have a TRC above 1.0 for the referral channel but below 1.0 for the non-referral channel. The Public Staff has not been able to determine if the proposed change to a three-tier incentive, with or without referral fees, would enhance the TRC for the Program compared to the existing single-incentive with or without referral fees.

The Public Staff also recommended, to the extent any modifications are approved, that the modifications be as follows:

¹ HVAC stands for Heating, Ventilation, and Air Conditioning. A major goal of the Program is to incentivize customers to install higher efficiency heat pumps and central air conditioning equipment.

- The baseline efficiency standard for geothermal heat pumps be an Energy Efficiency Ratio (EER) of 16.
- DEP file its contractor agreement once drafted, and allow review and comment by the Public Staff.
- DEP file its quality installation checklist once drafted, and allow review and comment by the Public Staff.
- DEP include in its next Evaluation, Measurement and Verification (EM&V) report certain additional information.

On December 4, 2015, the North Carolina Sustainable Energy Association (NCSEA) filed a letter in support of the proposed modifications to the Program. NCSEA additionally recommended that duct-sealing be mandatory rather than optional when HVAC units with a higher Seasonal Energy Efficiency Ratio (SEER) are installed, and that visual inspection and diagnostics, such as a duct blaster test, be mandatory as well.

On December 14, 2015, DEP filed Reply Comments. DEP emphasized that the proposed modifications will significantly lower program costs and high efficiency HVAC equipment costs used in the Application should decline in the future, which would increase the TRC result modeled for its Application. DEP noted that there would be an 18-month period for lower efficiency units to be cleared from inventory following the January 2015 change in baseline efficiency standard. Moreover, by the fourth quarter of 2015, DEP observed a decline in HVAC equipment costs of almost 10%. DEP asserted that the declining HVAC equipment costs would improve the TRC result, and that it was important to maintain the Program as HVAC represents 30-40% of the energy use of a typical residential customer. According to DEP, cancellation of the Program would inhibit the market transformation needed to bring down HVAC equipment prices, and would deter contractors from participating in the Program in the future, according to DEP.

The Company proposed that it file quarterly reports on customer costs, and that the Program as modified continue through March 2017, at which time it could be reevaluated. DEP also agreed with the Public Staff that an EER of 16 was appropriate as the baseline for geothermal heat pumps, that it would file its contractor (Trade Ally) agreement for referrals, that it would file the checklist to be used for the quality installation measure, and that it would adopt the Public Staff's EM&V recommendations to the extent practicable and not cost prohibitive.

Following the filing of DEP's Reply Comments, the Public Staff and Company reached agreement on a resolution to propose to the Commission. Under the agreement, which was filed on February 4, 2016, DEP and the Public Staff agreed to seek Commission approval of the modifications to the Program, as amended by the Public Staff recommendations that DEP accepted in its Reply Comments, and with the exception that if the Program does not have a TRC above 1.0 by March 1, 2017, then the Program will terminate effective March 31, 2017. Furthermore, if the projected TRC is below 1.0 at March 1, 2017, or if the actual TRC for 2016 and the early part of 2017 is below 1.0, the Company will not be allowed to recover incentives (i.e., portfolio performance incentive or net lost revenues) for vintage 2016 and any part of 2017.

The Public Staff presented this matter at the Commission's Regular Staff Conference on February 8, 2016, and recommended that the Commission approve the Program modifications subject to the terms of the February 4, 2016, agreement between DEP and the Public Staff.

The Commission finds and concludes that DEP's application, as revised by the agreement filed on February 4, 2016, is reasonable and should be approved. While the conservative assumptions utilized in the Application project a TRC result that is not sufficient for ongoing approval of the Program under DEP's Mechanism, the Reply Comments provide a reasonable basis for projecting that the TRC will be higher in the future than originally modeled. The Company remains at risk for losing its incentives associated with the Program for the 2016 vintage year and any part of the 2017 vintage year if the actual TRC result is not above 1.0 for those periods. The Program will be terminated March 31, 2017, unless it has a projected TRC result above 1.0 by March 1, 2017.

Further, the Commission finds and concludes that the appropriate ratemaking treatment for the Program, including program costs, allocation of any common EM&V costs between Duke Energy Carolinas, LLC, and DEP, net lost revenues, and performance incentives, should be determined in DEP's annual cost recovery rider approved pursuant to Commission Rule R8-69.

IT IS, THEREFORE, ORDERED as follows:

1. That the proposed modifications to the Residential Home Energy Improvement Program are hereby approved pursuant to Commission Rule R8-68.
2. That the Commission shall determine the appropriate ratemaking treatment for the Residential Home Energy Improvement Program, including program costs, net lost revenues, and portfolio performance incentives, in DEP's annual cost recovery rider, in accordance with G.S. 62-133.9, Commission Rule R8-69, and the Mechanism, and;
3. That if the Residential Home Energy Improvement Program does not have a projected TRC result greater than 1.0 by March 1, 2017, the Program shall be terminated effective March 31, 2017, and DEP shall refund any vintage year 2016 and 2017 portfolio performance incentive and net lost revenues that are associated with the Program and that DEP has collected in rates.
4. That if the Residential Home Energy Improvement Program does not have a projected TRC result greater than 1.0 by March 1, 2017, or it does not have an actual TRC for vintage year 2016 (and 2017, as applicable) greater than 1.0, DEP shall refund any vintage year 2016 and 2017 portfolio performance incentive and net lost revenues that are associated with the Program and that DEP has collected in rates.

5. That the Public Staff's recommendations regarding use of a baseline EER of 16 for geothermal heat pumps, the filing and review of the contractor referral agreement template, the filing and review of the quality installation checklist, and additional EM&V information shall be implemented to the extent practicable and not cost prohibitive.

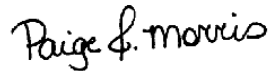
6. That DEP shall discuss in its Collaborative meetings the recommendations from NCSEA.

7. That DEP shall file with the Commission, within 10 days following the date of this order, a revised tariff showing the effective date of the tariff and revised EER standards for geothermal heat pumps.

ISSUED BY ORDER OF THE COMMISSION.

This the 9th day of February, 2016.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in black ink that reads "Paige J. Morris". The signature is written in a cursive, flowing style.

Paige J. Morris, Deputy Clerk

Commissioner Lyons Gray did not participate in this decision.