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**Molly McIntosh Jagannathan**  
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September 20, 2017

Ms. Lynn Jarvis  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4325

RE: Proposed Modifications to the Residential New Construction Program  
Docket No. E-2, Sub 1021

Dear Ms. Jarvis:

Enclosed for filing with and approval by the North Carolina Utilities Commission (the "Commission") are Duke Energy Progress, LLC's ("DEP" or the "Company") proposed modifications to its Residential Service - Residential New Construction Program ("RNC Program" or the "Program"). The RNC Program was originally approved by the Commission in its October 24, 2012 Order in Docket No. E-2, Sub 1021.

The proposed modifications to the RNC Program are intended to increase the cost-effectiveness of the Program by modifying incentives and by eliminating non-cost-effective measures and measures that are no longer applicable. As the Commission is aware, the Company's RNC Program incentivizes builders for the construction of energy efficient new residential housing rated at or above the current Energy Conservation Code High Efficiency Residential Option ("HERO") or for the installation of high efficiency air conditioners and heat pumps that meet minimum Program requirements.

DEP is requesting the Commission to approve the following modifications to the Program:

1. Eliminate the existing tier structure for HVAC incentives;
2. Remove incentives for HVAC equipment with a Seasonal Energy Efficiency Ratio ("SEER") of less than 15;
3. Remove Quality Installation and Heat Pump Water Heater measures, as they are typically included when building to HERO standards and rarely implemented on a stand-alone basis; and

4. Provide the maximum potential levels of incentives as opposed to fixed incentives in order to provide the Company with the ability to promptly react to changes in market conditions in a manner consistent with its flexibility guidelines approved by the Commission in its January 20, 2015 Order in Docket No. E-2, Sub 931. The current incentive amounts will be posted on the Company's website, [www.duke-energy.com](http://www.duke-energy.com).

DEP believes the requested Program modifications will increase cost-effectiveness. The Company has modeled the new RNC Program's cost-effectiveness results with the proposed modifications, and the results are provided in the following table:

Cost-Effectiveness Tests	Cost-Effectiveness Results
Utility Cost Test ( <i>UCT</i> )	1.75
Total Resource Cost Test ( <i>TRC</i> )	1.44
Rate Impact Measure Test ( <i>RIM</i> )	0.84
Participant Test	2.29

DEP requests that the Commission:

1. Approve the Residential Service - Residential New Construction Program and tariff provided as Attachment G hereto, until such time that the Commission orders otherwise;
2. Find that the Residential Service - Residential New Construction Program continues to meet the requirements of a "new" energy efficiency ("EE") program consistent with Rule R8-69;
3. Find that all costs incurred by DEP associated with the Residential Service - Residential New Construction Program will be eligible for consideration for cost recovery through DEP's annual Demand-Side Management ("DSM")/EE rider in accordance with Rule R8-69(b);
4. Approve the proposed utility incentives for inclusion in the annual DSM/EE rider in accordance with Rule R8-69; and
5. Approve the proposed program modifications on or before February 1, 2018, the Company's requested effective date.

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The attached filing package contains a more detailed description of this Program, prepared in accordance with Rule R8-68(c)(2) and (3).

Thank you for your attention to this matter. If you have any questions or need anything further, please let me know.

Respectfully submitted,

Electronically submitted

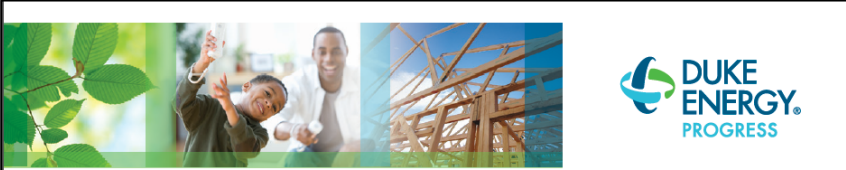
s/ Molly McIntosh Jagannathan

[molly.jagannathan@troutmansanders.com](mailto:molly.jagannathan@troutmansanders.com)

Molly McIntosh Jagannathan

Enclosures

<b>R8-68 Filing Requirements</b>	
<b>Residential New Construction, Duke Energy Progress</b>	
<b>Filing Requirements</b>	
<b>(c)(2)(i)(a)</b>	<p><b>Measure / Program Name</b></p> <p>Residential New Construction (“the “Program”)</p>
<b>(c)(2)(i)(b)</b>	<p><b>Consideration to be Offered</b></p> <p>The purpose of this Program is to provide incentives to encourage residential construction that meets or exceeds the whole house standards of the current Energy Conservation Code High Energy Residential Option (HERO) and the installation of high efficiency appliances.</p>
<b>(c)(2)(i)(c)</b>	<p><b>Anticipated Total Cost of the Measure / Program</b></p> <p>See Attachment B, Line 12.</p>
<b>(c)(2)(i)(d)</b>	<p><b>Source and Amount of Funding Proposed to be Used</b></p> <p>All Program costs will be funded by Duke Energy Progress (“Company” or “DEP”) and subject to recovery through DEP’s annual Demand-Side Management (DSM) and Energy Efficiency (EE) cost recovery rider consistent with Commission Rule R8-69(b). See Attachment B, Line 12.</p>
<b>(c)(2)(i)(e)</b>	<p><b>Proposed Classes of Persons to Whom This Will be Offered</b></p> <p>This Program is available to builders of single and multi-family residential dwellings (three stories or less) that meet or exceed the current HERO standards and are served on a residential retail schedule.</p> <p>This Program is also available to builders installing high efficiency equipment eligible for incentives, which include (but are not limited to) the following:</p> <ul style="list-style-type: none"> <li>• High efficiency electric HVAC equipment and/or services meeting or exceeding minimum Program standards to ensure sufficient energy savings; and</li> <li>• Other high efficiency equipment, products and services as determined by the Company on a case by case basis.</li> </ul> <p>Builders or designated representatives shall receive incentive(s) for either the inclusion of high efficiency equipment or construction meeting the HERO standard, but not both.</p>
<b>(c)(2)(ii)(a)</b>	<p><b>Describe the Measure / Program’s Objective</b></p> <p>This Program provides cash incentives to residential builders to encourage the use of energy efficient building practices and equipment/appliances for new home construction. Eligibility is based upon the HERO standard and upon requirements for energy efficient appliances .</p>
<b>(c)(2)(ii)(b)</b>	<p><b>Describe the Measure / Program Duration</b></p> <p>See Attachment A, Line 1.</p>
<b>(c)(2)(ii)(c)</b>	<p><b>Describe the Measure / Program Sector and Eligibility Requirements</b></p> <p>Residential builders who build new energy efficient homes and multi-family residences within DEP territory are eligible for the Program.</p> <ul style="list-style-type: none"> <li>• Dwellings that do not fall within the current HERO standard are not eligible for whole house incentives; however, incentives may be available for qualifying high efficiency appliances.</li> </ul>

<p><b>(c)(2)(ii)(d)</b></p>	<p><b>Examples of Communication Materials and Related Cost</b></p> <p>Marketing for the Program is projected as \$230,930 for 2018 and 2019.</p> <div data-bbox="483 252 1323 745" style="border: 1px solid black; padding: 10px;">  <p style="text-align: center;"><b>Cash in with energy-efficient new construction.</b></p> <p>With incentives up to \$9,000, we make it easier than ever for you to build energy-efficient homes. Our Residential New Construction Program provides generous cash incentives to builders and developers who build new energy-efficient homes and multi-family residences in our service territory.</p> <p>You may choose to participate in one of two types of incentives:</p> <p><b>Whole-House Incentives</b></p> <ul style="list-style-type: none"> <li>• Up to \$9,000 for builders in North Carolina and South Carolina who build to or above the 2012 North Carolina Energy Conservation Code's High Efficiency Residential Option (HERO) or the equivalent in South Carolina</li> </ul> <p><b>Equipment Incentives</b></p> <ul style="list-style-type: none"> <li>• An optional three-year Heating and Cooling Energy Usage Limited Guarantee you can offer your home buyers</li> <li>• Available on-site subcontractor training</li> <li>• Marketing support including advertising and promotional campaigns, signage and collateral</li> <li>• Up to \$725 for specific high-efficiency equipment such as water heaters and heating and cooling systems</li> </ul> <p>Find out how energy efficiency can pay off for your business. See below and reverse for more details about the program specifics and builder qualifications.</p> </div> <p>This Program may also be promoted by, but not limited to:</p> <ul style="list-style-type: none"> <li>• Direct Mail</li> <li>• Email</li> <li>• Company website (see above)</li> </ul>
<p><b>(c)(2)(ii)(e)</b></p>	<p><b>Estimated Number of Participants</b></p> <p>Estimated Participation – see Attachment A, lines 3-12. Please note the unit of measure is kWh .</p>
<p><b>(c)(2)(ii)(f)</b></p>	<p><b>Impact that each measure or program is expected to have on the electric public utility or electric membership corporation, its customer body as a whole, and its participating North Carolina customers;</b></p> <p>Estimated Program Impact - see Attachment A, lines 13-49</p>
<p><b>(c)(2)(ii)(g)</b></p>	<p><b>Any other information the electric public utility or electric membership corporation believes is relevant to the application, including information on competition known by the electric public utility or the electric membership corporation</b></p> <p>Not applicable.</p>
<p><b>(c)(2)(iii)(a)</b></p>	<p><b>Proposed Marketing Plan Including Market Barriers and how the Electric Public Utility Plans to Address Them</b></p> <p>The Company will market the Program through various channels that may include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Email</li> <li>• Direct mail</li> <li>• Company Website</li> </ul> <p>The Company may not be aware of all market barriers or understand the methods that can be used to address these market barriers. Potential market barriers include:</p>

<b>(c)(2)(iii)(a)</b> <i>(Continued)</i>	Residential New Construction, DEP	
	<b>Market Barrier</b>	<b>Actions to Address</b>
	Builders who want to participate in the Program may be forced to change some of their existing construction practices or seek alternative equipment vendors in order to comply with the eligibility requirements.	Incentive to offset portion of incremental cost upgrade, allows builder to stay ahead of upcode changes/cycle, provide a more efficient sustainable home, and reduce callbacks.
<b>(c)(2)(iii)(b)</b>	<b>Total Market Potential and Estimated Market Growth throughout the Duration of the Program</b>	
	Market potential represents the number of eligible customers based on the projected new residential building permits issued in the DEP territory. Projected new residential construction permits are 122,996 by end of year 2022.	
	Estimated Market Growth (Participation) - see Attachment A, Lines 3-12.	
<b>(c)(2)(iii)(c)</b>	<b>Estimated Summer and Winter Peak Demand Reduction by Unit Metric and in the Aggregate by Year</b>	
	Estimated Summer and Winter Peak Demand Reduction – see Attachment A, lines 13-17 and lines 23-24 and Attachment E, lines 1-10.	
<b>(c)(2)(iii)(d)</b>	<b>Estimated Energy Reduction per Appropriate Unit Metric and in the Aggregate by Year</b>	
	Estimated Energy Reduction - see Attachment A, lines 18-22 and lines 25-29	
<b>(c)(2)(iii)(e)</b>	<b>Estimated Lost Energy Sales per Appropriate Unit metric and in the Aggregate by Year</b>	
	Lost Energy Sales – see Attachment A, lines 30-39.	
<b>(c)(2)(iii)(f)</b>	<b>Estimated Load Shape Impacts</b>	
	See sections (c)(2)(iii)(c) and (c)(2)(iii)(d).	
<b>(c)(2)(iv)(a)</b>	<b>Estimated Total and Per Unit Cost and Benefit of the Measure / Program and the Planned Accounting Treatment for Those Costs and Benefits</b>	
	<p>Costs associated with this Program will be subject to deferral and amortization. DEP is also eligible to recovery a return on any outstanding deferred balance pursuant to R8-68(b)(6).</p> <p>Total estimated cost by category- see Attachment B, lines 6-9.</p> <p>Total estimated benefit- see Attachment B, line 11.</p> <p>Total estimated per unit cost by category – see Attachment D, lines 1-25.</p> <p>Data shown on Attachment B represents present value of cost and benefits over the life of the Program.</p>	

<p><b>(c)(2)(iv)(b)</b></p>	<p><b>Type, Amount, and Reason for Any Participation Incentives and Other Consideration and to Whom They Will be Offered, Including Schedules Listing Participation Incentives and Other Consideration to be Offered</b></p>																		
	<p>• Cash incentives will be paid for each of the following measures. Incentives are in fixed dollar amounts per measure, with the exception of HERO-Plus, which is paid on a \$/kWh saved basis, with savings to be confirmed by a qualified Home Energy Rating System (HERS) rater recognized by the Residential Energy Services Network (RESNET) or any Company-approved Energy Services Network.</p> <p style="text-align: center;"><b>Whole-House Measures</b></p> <table border="1" data-bbox="462 588 1469 1008"> <thead> <tr> <th style="background-color: #00b050; color: white;"></th> <th style="background-color: #2e5496; color: white;">Whole-House Eligibility Requirement</th> <th style="background-color: #2e5496; color: white;">Incentive</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">HERO</td> <td>Must meet Energy Conservation Code High Energy Residential Option (HERO).</td> <td style="text-align: center;">Up to \$750</td> </tr> <tr> <td style="text-align: center;">HERO-Plus</td> <td>Must meet HERO Standards and submit confirmed annual kWh savings from a Company-approved Energy Summary Report.</td> <td style="text-align: center;">Up to \$0.90/kWh Saved</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Equipment-Only Measures</b></p> <table border="1" data-bbox="462 1113 1469 1533"> <thead> <tr> <th style="background-color: #00b050; color: white;"></th> <th style="background-color: #2e5496; color: white;">Equipment Incentive Description</th> <th style="background-color: #2e5496; color: white;">Incentive</th> </tr> </thead> <tbody> <tr> <td></td> <td>High Efficiency Central Air Conditioning ≥ 15 SEER</td> <td style="text-align: center;">Up to \$300</td> </tr> <tr> <td></td> <td>High Efficiency Air Source Heat Pump ≥ 15 SEER</td> <td style="text-align: center;">Up to \$300</td> </tr> </tbody> </table>			Whole-House Eligibility Requirement	Incentive	HERO	Must meet Energy Conservation Code High Energy Residential Option (HERO).	Up to \$750	HERO-Plus	Must meet HERO Standards and submit confirmed annual kWh savings from a Company-approved Energy Summary Report.	Up to \$0.90/kWh Saved		Equipment Incentive Description	Incentive		High Efficiency Central Air Conditioning ≥ 15 SEER	Up to \$300		High Efficiency Air Source Heat Pump ≥ 15 SEER
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<p><b>(c)(2)(iv)(c)</b></p>	<p><b>Service Limitations or Conditions Planned to be Imposed on Customers Who do not Participate in the Measure / Program</b></p> <p>None</p>																		

<b>(c)(2)(v)</b>	<b>Cost-Effectiveness Evaluation (including the results of all cost-effectiveness tests and should include, at a minimum, an analysis of the Total Resource Cost Test, the Participant Test, the Utility Cost Test, and the Ratepayer Impact Measure Test) Description of the Methodology Used to Produce the Impact Estimates, as well as, if Appropriate, Methodologies Considered and Rejected in the Interim Leading to the Final Model Specification</b>
	See Attachment B, line 13 for cost-effectiveness test scores. Savings estimates were derived using the DSMore evaluation tool with inputs based on:  <ul style="list-style-type: none"> <li>(1) Actual program costs and deemed savings/impacts as observed from the current DEP Residential New Construction Program; and</li> <li>(2) Current and projected new residential building permits issued in the DEP territory.</li> </ul>
<b>(c)(2)(vi)</b>	<b>Commission Guidelines Regarding Incentive Programs (provide the information necessary to comply with the Commission's Revised Guidelines for Resolution of Issues Regarding Incentive Programs, issued by Commission Order on March 27, 1996, in Docket No. M-100, Sub 124, set out as an Appendix to Chapter 8 of these rules)</b>
	The Program does not provided any inducement or incentive affecting participant's decision to install or adopt natural gas or electric service.
<b>(c)(2)(vii)</b>	<b>Integrated Resource Plan (explain in detail how the measure is consistent with the electric public utility's or electric membership corporation's integrated resource plan filings pursuant to Rule R8-60)</b>
	Energy and capacity reductions from this program will be included for planning purposes in future integrated resource plans.
<b>(c)(2)(viii)</b>	<b>Other (any other information the electric public utility or electric membership corporation believes relevant to the application, including information on competition known by the electric public utility or the electric membership corporation)</b>
	Not applicable.
<b>Additional Filing Requirements</b>	
<b>(c)(3)(i)(a)</b>	<b>Costs and Benefits- Any Costs Incurred or Expected to be Incurred in Adopting and Implementing a Measure / Program to be Considered for Recovery Through the Annual Rider Under G.S. 62-133.9</b>
	See Attachment C, lines 11-35.
<b>(c)(3)(i)(b)</b>	<b>Estimated total costs to be avoided by the measure by appropriate capacity, energy and measure unit metric and in the aggregate by year</b>
	See Attachment A, lines 40-49.
<b>(c)(3)(i)(c)</b>	<b>Estimated participation incentives by appropriate capacity, energy, and measure unit metric and in the aggregate by year</b>
	Incentive per cumulative kW - see Attachment E, lines 21-25 Incentive per cumulative kWh - see Attachment F, lines 16-20 Incentive per participant - see Attachment D, lines 11-15



<p><b>(c)(3)(i)(d)</b></p>	<p><b>How the electric public utility proposes to allocate the costs and benefits of the measure among the customer classes and jurisdictions it serves</b></p> <p>The program costs for EE programs targeted at North Carolina and South Carolina retail residential customers are allocated to North Carolina retail jurisdiction based on the ratio of North Carolina retail kWh sales to total retail kWh sales, then recovered only from North Carolina residential customers.</p>
<p><b>(c)(3)(i)(e)</b></p>	<p><b>The capitalization period to allow the utility to recover all costs or those portions of the costs associated with a new program or measure to the extent that those costs are intended to produce future benefits as provided in G.S. 62-133.9(d)(1)</b></p> <p>No costs from this program will be capitalized.</p>
<p><b>(c)(3)(i)(f)</b></p>	<p><b>The electric public utility shall also include the estimated and known costs of measurement and verification activities pursuant to the Measurement and Verification Reporting Plan described in paragraph (ii)</b></p> <p>Total portfolio evaluation costs are estimated to be 5% of total program costs.</p>
<p><b>(c)(3)(ii)(a)</b></p>	<p><b>Measurement and Verification Reporting Plan for New Demand-Side Management and Energy Efficiency Measures: Describe the industry-accepted methods to be used to evaluate, measure, verify, and validate the energy and peak demand savings estimated in (2)(iii)c and d above</b></p> <p>Evaluation, measurement and verification (EM&amp;V) actions will provide an independent, third-party report of energy savings attributable to the Program, including an impact analysis and process evaluation.</p> <p>The process evaluation will include program manager interviews to assess current operations and participating builder interviews to assess satisfaction with program operations and incentive redesign structures.</p> <p>The goal of the impact evaluation is to assess the energy savings attributable to the Program. The independent, third-party EM&amp;V consultant will determine the detailed analysis methodologies, sample design and data collection activities.</p> <p>The impact evaluation is expected to consist of reviewing implementer data tracking records, conducting on-site metering and verification as needed, and modeling engineering simulations in association with billing analysis to verify savings. Net-to-gross impacts (free ridership and spillover) will be determined through participant builder surveys, non-participant builder surveys and HERS Raters surveys.</p> <p>Where applicable, a statistically representative sample of participants will be selected for the analysis. The Company intends to follow industry-accepted methodologies for all measurement and verification activities, consistent with International Performance Measurement Verification Protocol (IPMVP) Options A, C or D depending on the measure.</p>

<b>(c)(3)(ii)(b)</b>	<b>Measurement and Verification Reporting Plan for New Demand-Side Management and Energy Efficiency Measures: Provide a schedule for reporting the savings to the Commission</b>
	The Company will report savings associated with this Program in its annual DSM/EE cost recovery proceedings.
<b>(c)(3)(ii)(c)</b>	<b>Measurement and Verification Reporting Plan for New Demand-Side Management and Energy Efficiency Measures: describe the methodologies used to produce the impact estimates, as well as, if appropriate, the methodologies it considered and rejected in the interim leading to final model specification</b>
	See (c)(2)(v).
<b>(c)(3)(ii)(d)</b>	<b>Measurement and Verification Reporting Plan for New Demand-Side Management and Energy Efficiency Measures: Identify any third party and include all of the costs of that third party, if the electric public utility plans to utilize an independent third party for purposes of measurement and verification</b>
	The Company will use a third party evaluator. See section (c)(3)(i)(f) for cost.
<b>(c)(3)(iii)</b>	<b>Cost Recovery Mechanism- Describe the Proposed Method of Cost Recovery From its Customers</b>
	The Company seeks to recover program costs, net lost revenues and a utility incentive pursuant to DEP's Commission-approved DSM/EE cost recovery mechanism.
<b>(c)(3)(iv)</b>	<b>Tariffs or Rates- Provide Proposed Tariffs or Modifications to Existing Tariffs That Will be Required to Implement Each Measure / Program</b>
	The tariff proposed by the Company for this Program is included as Attachment G.
<b>(c)(3)(v)</b>	<b>Utility Incentives- Indicate Whether it Will Seek to Recover Any Utility Incentives, Including, if Appropriate, Net Lost Revenues, in Addition to its Costs</b>
	The Company seeks net lost revenues and a utility incentive pursuant to DEP's Commission-approved DSM/EE cost recovery mechanism.

**Attachment A**  
**Participation**

<b>Residential New Construction Program</b>		
1	Measure Life (Average)	20
2	Free Rider % (Average)	12.1%
3	Incremental Participants Year 1	10,993,869
4	Incremental Participants Year 2	10,993,774
5	Incremental Participants Year 3	11,160,021
6	Incremental Participants Year 4	11,382,578
7	Incremental Participants Year 5	11,495,197
8	Cumulative Participation Year 1	10,993,869
9	Cumulative Participation Year 2	21,987,643
10	Cumulative Participation Year 3	33,147,664
11	Cumulative Participation Year 4	44,530,242
12	Cumulative Participation Year 5	56,025,439
13	Cumulative Summer Coincident kW w/ losses (net free) Year 1	4,325
14	Cumulative Summer Coincident kW w/ losses (net free) Year 2	8,407
15	Cumulative Summer Coincident kW w/ losses (net free) Year 3	12,320
16	Cumulative Summer Coincident kW w/ losses (net free) Year 4	16,311
17	Cumulative Summer Coincident kW w/ losses (net free) Year 5	20,342
18	Cumulative kWh w/ losses (net free) Year 1	12,405,285
19	Cumulative kWh w/ losses (net free) Year 2	24,111,831
20	Cumulative kWh w/ losses (net free) Year 3	35,335,048
21	Cumulative kWh w/ losses (net free) Year 4	46,782,144
22	Cumulative kWh w/ losses (net free) Year 5	58,342,280
23	Per Participant Weighted Average Coincident Saved Winter kW w/ losses	0.0004
24	Per Participant Weighted Average Coincident Saved Summer kW w/ losses	0.0004
25	Per Participant Average Annual kWh w/ losses (net free) Year 1	1.128
26	Per Participant Average Annual kWh w/ losses (net free) Year 2	1.097
27	Per Participant Average Annual kWh w/ losses (net free) Year 3	1.066
28	Per Participant Average Annual kWh w/ losses (net free) Year 4	1.051
29	Per Participant Average Annual kWh w/ losses (net free) Year 5	1.041
30	Cumulative Lost Revenue (net free) Year 1	\$1,214,610
31	Cumulative Lost Revenue (net free) Year 2	\$2,419,804
32	Cumulative Lost Revenue (net free) Year 3	\$3,634,780
33	Cumulative Lost Revenue (net free) Year 4	\$4,932,599
34	Cumulative Lost Revenue (net free) Year 5	\$6,305,253
35	Average Lost Revenue per Participant (net free) Year 1	0.110
36	Average Lost Revenue per Participant (net free) Year 2	0.110
37	Average Lost Revenue per Participant (net free) Year 3	0.110
38	Average Lost Revenue per Participant (net free) Year 4	0.111
39	Average Lost Revenue per Participant (net free) Year 5	0.113
40	Total Avoided Costs/MW saved Year 1	\$113,565
41	Total Avoided Costs/MW saved Year 2	\$116,208
42	Total Avoided Costs/MW saved Year 3	\$118,922
43	Total Avoided Costs/MW saved Year 4	\$121,774
44	Total Avoided Costs/MW saved Year 5	\$124,787
45	Total Avoided Costs/MWh saved Year 1	\$38
46	Total Avoided Costs/MWh saved Year 2	\$39
47	Total Avoided Costs/MWh saved Year 3	\$40
48	Total Avoided Costs/MWh saved Year 4	\$57
49	Total Avoided Costs/MWh saved Year 5	\$60

**Attachment B**  
**Cost-Effectiveness Evaluation**

<b>Residential New Construction Program</b>					
		<b>UCT</b>	<b>TRC</b>	<b>RIM</b>	<b>Participant</b>
1	Avoided T&D Electric	\$13,372,649	\$13,372,649	\$13,372,649	\$0
2	Cost-Based Avoided Elec Production	\$55,541,152	\$55,541,152	\$55,541,152	\$0
3	Cost-Based Avoided Elec Capacity	\$20,607,948	\$20,607,948	\$20,607,948	\$0
4	Participant Elec Bill Savings (gross)	\$0	\$0	\$0	\$94,499,434
5	Net Lost Revenue Net Fuel	\$0	\$0	\$55,776,154	\$0
6	EM&V Costs	\$5,106,845	\$5,106,845	\$5,106,845	\$0
7	Implementation Costs	\$4,456,807	\$4,456,807	\$4,456,807	\$0
8	Incentives	\$40,827,794	\$0	\$40,827,794	\$40,827,794
9	Other Utility Costs	\$681,597	\$681,597	\$681,597	\$0
10	Participant Costs	\$0	\$52,062,985	\$0	\$58,974,780
11	<b>Total Benefits</b>	<b>\$89,521,749</b>	<b>\$89,521,749</b>	<b>\$89,521,749</b>	<b>\$135,327,228</b>
12	<b>Total Costs</b>	<b>\$51,073,042</b>	<b>\$62,308,233</b>	<b>\$106,849,196</b>	<b>\$58,974,780</b>
13	<b>Benefit/Cost Ratios</b>	<b>1.75</b>	<b>1.44</b>	<b>0.84</b>	<b>2.29</b>
<b>Data represents present value of costs and benefits over the life of the program.</b>					

**Attachment C**  
Program Costs by Year

<b>Residential New Construction Program</b>		
1	Incremental Participants Year 1	10,993,869
2	Incremental Participants Year 2	10,993,774
3	Incremental Participants Year 3	11,160,021
4	Incremental Participants Year 4	11,382,578
5	Incremental Participants Year 5	11,495,197
6	Total Participant Costs Year 1	\$13,185,600
7	Total Participant Costs Year 2	\$13,152,350
8	Total Participant Costs Year 3	\$13,351,102
9	Total Participant Costs Year 4	\$13,617,245
10	Total Participant Costs Year 5	\$13,751,777
11	EM&V Costs Year 1	\$1,142,425
12	EM&V Costs Year 2	\$1,138,954
13	EM&V Costs Year 3	\$1,156,012
14	EM&V Costs Year 4	\$1,178,832
15	EM&V Costs Year 5	\$1,190,422
16	Implementation Costs Year 1	\$997,360
17	Implementation Costs Year 2	\$993,678
18	Implementation Costs Year 3	\$1,008,691
19	Implementation Costs Year 4	\$1,028,812
20	Implementation Costs Year 5	\$1,038,973
21	Total Incentives Year 1	\$9,132,525
22	Total Incentives Year 2	\$9,104,025
23	Total Incentives Year 3	\$9,241,592
24	Total Incentives Year 4	\$9,425,884
25	Total Incentives Year 5	\$9,519,035
26	Other Utility Costs Year 1	\$152,969
27	Other Utility Costs Year 2	\$153,906
28	Other Utility Costs Year 3	\$154,867
29	Other Utility Costs Year 4	\$155,852
30	Other Utility Costs Year 5	\$156,862
31	Total Utility Costs Year 1	\$11,425,279
32	Total Utility Costs Year 2	\$11,390,563
33	Total Utility Costs Year 3	\$11,561,162
34	Total Utility Costs Year 4	\$11,789,380
35	Total Utility Costs Year 5	\$11,905,292

**Attachment D**  
Program Costs per Participant

<b>Residential New Construction Program</b>		
1	Average Per Participant EM&V Costs Year 1	\$0.104
2	Average Per Participant EM&V Costs Year 2	\$0.104
3	Average Per Participant EM&V Costs Year 3	\$0.104
4	Average Per Participant EM&V Costs Year 4	\$0.104
5	Average Per Participant EM&V Costs Year 5	\$0.104
6	Average Per Participant Implementation Costs Year 1	\$0.091
7	Average Per Participant Implementation Costs Year 2	\$0.090
8	Average Per Participant Implementation Costs Year 3	\$0.090
9	Average Per Participant Implementation Costs Year 4	\$0.090
10	Average Per Participant Implementation Costs Year 5	\$0.090
11	Average Per Participant Incentives Year 1	\$0.831
12	Average Per Participant Incentives Year 2	\$0.828
13	Average Per Participant Incentives Year 3	\$0.828
14	Average Per Participant Incentives Year 4	\$0.828
15	Average Per Participant Incentives Year 5	\$0.828
16	Average Per Participant Other Utility Costs Year 1	\$0.014
17	Average Per Participant Other Utility Costs Year 2	\$0.014
18	Average Per Participant Other Utility Costs Year 3	\$0.014
19	Average Per Participant Other Utility Costs Year 4	\$0.014
20	Average Per Participant Other Utility Costs Year 5	\$0.014
21	Average Per Participant Total Utility Costs Year 1	\$1.039
22	Average Per Participant Total Utility Costs Year 2	\$1.036
23	Average Per Participant Total Utility Costs Year 3	\$1.036
24	Average Per Participant Total Utility Costs Year 4	\$1.036
25	Average Per Participant Total Utility Costs Year 5	\$1.036

**Attachment E**  
Program Costs per kW

<b>Residential New Construction Program</b>		
1	Cumulative Winter Coincident kW w/ losses (net free) Year 1	3,926
2	Cumulative Winter Coincident kW w/ losses (net free) Year 2	7,625
3	Cumulative Winter Coincident kW w/ losses (net free) Year 3	11,171
4	Cumulative Winter Coincident kW w/ losses (net free) Year 4	14,787
5	Cumulative Winter Coincident kW w/ losses (net free) Year 5	18,440
6	Cumulative Summer Coincident kW w/ losses (net free) Year 1	4,325
7	Cumulative Summer Coincident kW w/ losses (net free) Year 2	8,407
8	Cumulative Summer Coincident kW w/ losses (net free) Year 3	12,320
9	Cumulative Summer Coincident kW w/ losses (net free) Year 4	16,311
10	Cumulative Summer Coincident kW w/ losses (net free) Year 5	20,342
11	EM&V Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 1	\$264
12	EM&V Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 2	\$135
13	EM&V Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 3	\$94
14	EM&V Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 4	\$72
15	EM&V Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 5	\$59
16	Implementation Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 1	\$231
17	Implementation Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 2	\$118
18	Implementation Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 3	\$82
19	Implementation Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 4	\$63
20	Implementation Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 5	\$51
21	Incentives / Cumulative Summer Coincident kW w/ losses (net free) Year 1	\$2,112
22	Incentives / Cumulative Summer Coincident kW w/ losses (net free) Year 2	\$1,083
23	Incentives / Cumulative Summer Coincident kW w/ losses (net free) Year 3	\$750
24	Incentives / Cumulative Summer Coincident kW w/ losses (net free) Year 4	\$578
25	Incentives / Cumulative Summer Coincident kW w/ losses (net free) Year 5	\$468
26	Other Utility Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 1	\$35
27	Other Utility Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 2	\$18
28	Other Utility Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 3	\$13
29	Other Utility Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 4	\$10
30	Other Utility Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 5	\$8
31	Total Utility Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 1	\$2,642
32	Total Utility Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 2	\$1,355
33	Total Utility Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 3	\$938
34	Total Utility Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 4	\$723
35	Total Utility Costs / Cumulative Summer Coincident kW w/ losses (net free) Year 5	\$585

**Attachment F**  
Program Costs per kWh

<b>Residential New Construction Program</b>		
1	Cumulative kWh w/ losses (net free) Year 1	12,405,285
2	Cumulative kWh w/ losses (net free) Year 2	24,111,831
3	Cumulative kWh w/ losses (net free) Year 3	35,335,048
4	Cumulative kWh w/ losses (net free) Year 4	46,782,144
5	Cumulative kWh w/ losses (net free) Year 5	58,342,280
6	EM&V Costs / Cumulative kWh w/ losses (net free) Year 1	\$0.092
7	EM&V Costs / Cumulative kWh w/ losses (net free) Year 2	\$0.047
8	EM&V Costs / Cumulative kWh w/ losses (net free) Year 3	\$0.033
9	EM&V Costs / Cumulative kWh w/ losses (net free) Year 4	\$0.025
10	EM&V Costs / Cumulative kWh w/ losses (net free) Year 5	\$0.020
11	Implementation Costs / Cumulative kWh w/ losses (net free) Year 1	\$0.080
12	Implementation Costs / Cumulative kWh w/ losses (net free) Year 2	\$0.041
13	Implementation Costs / Cumulative kWh w/ losses (net free) Year 3	\$0.029
14	Implementation Costs / Cumulative kWh w/ losses (net free) Year 4	\$0.022
15	Implementation Costs / Cumulative kWh w/ losses (net free) Year 5	\$0.018
16	Incentives / Cumulative kWh w/ losses (net free) Year 1	\$0.736
17	Incentives / Cumulative kWh w/ losses (net free) Year 2	\$0.378
18	Incentives / Cumulative kWh w/ losses (net free) Year 3	\$0.262
19	Incentives / Cumulative kWh w/ losses (net free) Year 4	\$0.201
20	Incentives / Cumulative kWh w/ losses (net free) Year 5	\$0.163
21	Other Utility Costs / Cumulative kWh w/ losses (net free) Year 1	\$0.012
22	Other Utility Costs / Cumulative kWh w/ losses (net free) Year 2	\$0.006
23	Other Utility Costs / Cumulative kWh w/ losses (net free) Year 3	\$0.004
24	Other Utility Costs / Cumulative kWh w/ losses (net free) Year 4	\$0.003
25	Other Utility Costs / Cumulative kWh w/ losses (net free) Year 5	\$0.003
26	Total Utility Costs / Cumulative kWh w/ losses (net free) Year 1	\$0.921
27	Total Utility Costs / Cumulative kWh w/ losses (net free) Year 2	\$0.472
28	Total Utility Costs / Cumulative kWh w/ losses (net free) Year 3	\$0.327
29	Total Utility Costs / Cumulative kWh w/ losses (net free) Year 4	\$0.252
30	Total Utility Costs / Cumulative kWh w/ losses (net free) Year 5	\$0.204



Duke Energy Progress, LLC  
(North Carolina Only)

RP-9

## RESIDENTIAL NEW CONSTRUCTION PROGRAM RNC-5

### PURPOSE

The purpose of this Program is to provide incentives to encourage residential construction that meets or exceeds the whole house standards of the current Energy Conservation Code High Energy Residential Option (HERO).

### AVAILABILITY

This Program is available to builders of single and multi-family residential dwellings (three stories or less) that meet or exceed the current HERO standards and are served on a residential retail schedule. Details of the HERO and HERO-Plus standard requirements are available on the Company website, [www.duke-energy.com](http://www.duke-energy.com).

Dwellings that do not fall within the current HERO standard are not eligible for whole house incentives.

At builder's discretion, the qualified builder may offer the home-buyer a Guarantee on the total annual electric HVAC energy consumption of the dwelling.

This Program is also available to builders installing high-efficiency installed equipment eligible for incentives which include (but are not limited to) the following:

High Efficiency electric HVAC equipment and/or services meeting or exceeding minimum Program standards to ensure sufficient energy savings; and

Other high efficiency equipment, products and services as determined by the Company on a case by case basis.

### INCENTIVES AVAILABLE TO BUILDERS

The Company's maximum incentives for the installation of high efficiency equipment or meeting HERO/HERO-Plus standards are as follows:

- |   |                        |
|---|------------------------|
| 1. High Efficiency Air Source Heat Pump or Central Air Conditioning | Up to \$300            |
| 2. Meet or exceed HERO standard                                     | Up to \$750            |
| 3. Meet or exceed HERO-Plus standard                                | Up to \$0.90/kWh saved |

For installations on and after February 1, 2018, builders or designated representatives shall receive incentive(s) for either the inclusion of high efficiency equipment or construction meeting the HERO standard, but not both.

The Company reserves the right to adjust the incentive(s) on a periodic basis as determined appropriate due to efficiency standard changes or changes to market conditions.

The effective incentive payments for eligible equipment or whole house standards are posted on the Company's website at [www.duke-energy.com](http://www.duke-energy.com).

Upon Company's approval of the builder's application, incentive payment(s) are applicable to the builder or builder's designee.

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

Additional Program requirements such as minimum square footage required, minimum and maximum kWh savings are available on the Company website, [www.duke-energy.com](http://www.duke-energy.com).

### INCENTIVES AVAILABLE TO HOMEOWNERS

At builder's discretion, the qualified builder may offer the homeowner a Guarantee on the total annual electric HVAC energy consumption of the dwelling.

The Guarantee is applicable solely to the initial homeowner and offers payment based on annual electric heating and cooling energy consumption that exceeds estimated consumption based upon the HERO standard used in constructing the dwelling.

The Guarantee shall apply for no longer than three years from registration. Guarantee incentives are only available at the end of each full year (12 months) of electric service.

Upon Company's review of valid homeowner claims for payments, including a review of prudent energy management practices as defined in the Guarantee, a homeowner shall receive a qualifying payment.

### RESPONSIBILITY OF PARTIES

The builder or designated representative shall complete and submit an application with supporting documentation. For each qualifying home built by an approved Program participant that meets all of the minimum standards and requirements of the Program, the Guarantee will start on the first day of the second calendar month after the date of sales closing or lease signing.

Applications for equipment incentives must include purchasing and contractor servicing invoices.

Applications for whole house incentives must include HERO compliance verification, and for HERO-Plus, a REM/Rate TM Home Summary Report (or any Company-approved Energy Software modeling report) as assessed by a qualified HERS rater recognized by the Residential Energy Services Network (RESNET) or any Company-approved Energy Services Network.

The homeowner agrees to exercise prudent energy management of the home, as defined in the Responsibilities section of the Heating and Cooling Limited Usage Guarantee.

### COMPANY RETENTION OF PROGRAM BENEFITS

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

### GENERAL

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

Supersedes Program RNC-3  
Effective for service rendered on and after February 1, 2018  
NCUC Docket No. E-2, Sub 1021