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March 23, 2012

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Clerk's Office
N.C. Utilities Commission

VIA HAND DELIVERY

Ms. Gail Mount
Deputy Clerk
North Carolina Utilities Commission
430 North Salisbury Street
Dobbs Building
Raleigh, NC 27603-5918

RE: Application of Duke Energy Carolinas, LLC for Approval of Save-a-Watt
Approach, Energy Efficiency Rider and Portfolio of Energy Efficiency
Programs (*Docket No E-7, Sub 831*)

Dear Ms. Mount:

Enclosed for filing in the referenced docket are an original and thirty (30) copies
of the Environmental Intervenors' Comments on Proposed Changes to Residential Smart
Saver Program. By copy of this letter, I am serving all parties of record on the service list.

Sincerely,

Robin G. Dunn

Robin G. Dunn

RGD
Enclosures
cc: Parties of Record

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Clerk's Office
N.C. Utilities Commission

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, Sub 831

In the Matter of:)	
Application of Duke Energy)	ENVIRONMENTAL INTERVENORS'
Carolinas, Inc. for Approval of Save-)	COMMENTS ON PROPOSED
a-Watt Approach, Energy Efficiency)	CHANGES TO RESIDENTIAL
Rider and Portfolio of Energy)	SMART \$AVER PROGRAM
Efficiency Programs)	

Pursuant to North Carolina Utilities Commission Rule R8-68, Environmental Defense Fund, Natural Resources Defense Council, Southern Alliance for Clean Energy and the Southern Environmental Law Center (collectively, the "Environmental Intervenor"), through counsel, respectfully submit the following comments and recommendations concerning Duke Energy Carolinas, LLC's ("DEC" or "the Company") February 22, 2012 proposal to add energy efficiency measures to the Company's Residential Smart Saver Program (the "Program").¹

DEC seeks Commission approval to add attic insulation and air sealing, duct sealing, duct insulation, central air conditioner tune-up, and heat pump tune-up to the Program. Based on their review of the Company's filing and communications with DEC staff and the Public Staff of the North Carolina Utilities Commission about the filing, Environmental Intervenor generally support DEC's proposed changes to the Program. Environmental Intervenor are pleased that the Company is enhancing its residential program offerings to capture additional energy efficiency opportunities from building envelope and heating, ventilation and air conditioning ("HVAC") measures, particularly

¹ These comments were prepared with the assistance of Natalie Mims, Energy Policy Manager at Southern Alliance for Clean Energy.

because the addition of these measures raises the Program's cost-effectiveness, as measured by the Total Resource Cost ("TRC") test.

Although Environmental Intervenors generally support the Company's proposal, they have certain concerns regarding certain elements of the filing, as discussed in detail below. To address these concerns, Environmental Intervenors recommend that the Company (i) provide consistent cost-effectiveness test scores for energy efficiency programs both before and after program modifications; (ii) provide kWh savings and participation by measure for program modifications; (iii) explain why DEC projects a 75 percent decrease in program participation over four years; and (iv) consider additional energy efficiency measures for existing residential customers.

I. It is difficult to compare the cost-effectiveness of the existing Residential Smart Saver program with that of the proposed modified program.

In this filing, the Company provides cost-effectiveness test scores for high and low incentive options; however, the Company does not provide the cost-effectiveness test scores for the existing Program. DEC filed updated program cost-effectiveness test scores in this docket on December 21, 2011, in which the Company provided two test scores for the Program. Both of the programs described in that filing focus on lighting, and it is difficult to know if either one incorporated the existing HVAC measures into the cost-test scores. The various cost-effectiveness test scores are shown in Table 1, below.

Table 1. Duke Energy Cost Test Scores for Residential Smart Saver Program

	UCT	TRC	RIM	Participant
E7 Sub 831 2011 Smart Saver update – property manager CFL	3.45	2.38	0.79	6.24

E7 Sub 831 Smart Saver update – discount CFL	3.17	2.66	0.78	9.13
Program modification Low incentive	2.25	1.91	0.76	4.37
Program modification High incentive	1.95	1.91	0.72	4.58

Environmental Intervenors recommend that in the future, consistent with the Joint Proposal filed in this docket on February 6, 2012 by DEC, the Public Staff and SACE regarding Commission program modifications, the Company provide program cost-effectiveness test scores before and after program changes.

II. Impact and participation rates of the new measures are not apparent in this application.

In DEC's Vintage 3 rider application filed March 23, 2011, the Company projected that it would save approximately 72 GWh from the Program across the entire DEC system.² After adjusting this to reflect North Carolina-only savings (approximately 72% of total savings), the Company projected that it would save approximately 52 GWh with the Program, which at the time did not include the additional HVAC and building envelope measures now proposed. In the current filing, the Company projects approximately 60.2 GWh in savings for the Program. These projections are shown in Table 2, below.

² Testimony of Timothy Duff, Exhibit 2 at 3, line 4, Docket No. E-7 Sub 979 (March 23, 2011).

Table 2. Duke Energy Savings Projections (GWh) for Residential Smart Saver Program

	Vintage 3 application (E-7 Sub 979)	Residential Smart Saver program changes (E-7 sub 831)
Smart Saver for Residential Customers	51.7	60.2

While it may be reasonable that the Company will achieve another 10 GWh of savings with the five proposed measures (or that their forecasted savings have changed since the Vintage 3 filing), there is no supporting detail in this application indicating what the measure savings or participation rate are. The Company only provides an annual and cumulative savings and participation rate for all measures offered in the Program.

The lack of clear impact and participation data by measure is particularly important given that the majority of the Program savings have historically come from lighting measures. Further, the Company has not bundled all of this information together in past filings. For example, in its EM&V filing for the Program in Docket E-7, Sub 979, DEC filed the lighting and HVAC components separately. As mentioned above, the Company did not mention the HVAC component of the Program in the 2011 cost-effectiveness update.

In the application, DEC states that it anticipates that 60,700 customers will participate in the Program over four years, or about 2% of total program participation.³ Presumably, this is for the HVAC-only portion of the Program. It is unclear how many of these customers are participating in multiple measures, or participating in one program more than once. Cumulative participation rates for the Program as a whole and for the HVAC portion of the Program are shown in Table 3, below.

³ Application at page 3, (c)(3)(i)(b).

Table 3. Cumulative Participation Rates for Residential Smart Saver Program

	Cumulative program participation	HVAC cumulative participation
Smart Saver for Residential Customers	3,350,310	60,700

Environmental Intervenors encourage the Company to include clear impact and participation data by measure in its program change filings in the future to allow interested parties to understand how DEC anticipates that the program changes, including kWh savings and participation by measure, will impact their program and portfolio savings.

III. Program participation levels are projected to decline each year, without a clear explanation.

The application lists projected incremental annual participation levels for all measures. The Company projects that it will have declining participation in the Program each year. There is no explanation for why this will occur, and there is no discussion regarding what measures will drive the reduction in annual participation.

Table 4. Incremental Participation Rates for Residential Smart Saver Program

	Incremental participation	Delta
Year 1 (2012)	1,198,617	N/A
Year 2 (2013)	1,144,574	(54,043)
Year 3 (2014)	689,505	(455,069)
Year 4 (2015)	317,614	(371,891)

Environmental Intervenors encourage the Company to provide an explanation as to why the Program will lose almost 900,000 participants (~75%) over the four year program plan.

IV. Participant incentive levels are aligned with similar programs in North Carolina, but additional measures could be offered.

Environmental Intervenors reviewed DEC's participant incentives and the incentives for Progress Energy Carolinas' ("PEC") Home Energy Improvement Program⁴ to determine if the two companies are offering their customers comparable incentives for similar measures. DEC's high incentive is closer to the incentive level that PEC offers its customers, particularly for attic insulation and sealing and duct sealing. DEC plans to begin by offering the low incentive levels to its customers, and then increase the incentive level as the Company deems necessary to achieve the savings desired.

Table 5. Incentives by Measure for DEC and PEC Existing Residential EE Programs

	DEC Residential Smart Saver incentive	PEC Home Energy Improvement Program
Attic insulation and air sealing	\$250 - \$400	\$500
Duct sealing	\$100 - \$200	\$190 ⁵
Duct insulation	\$75 - \$350	None?
CAC tune up	\$50 - \$60	\$100
Heat pump tune up	\$50 - \$125	None?
HE heat pump or AC	\$300	\$300
HE room AC	None	\$25
Heat pump water heater	None	\$350
HE geothermal heat pump	None	\$300

⁴ Residential Service Home Energy Improvement Program HEIP-4, Docket No. E-2 sub 936 (November 1, 2011).

⁵ Duct leakage repair measure could include insulation and sealing.

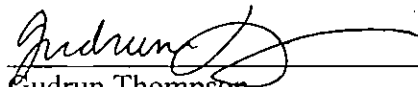
Environmental Intervenors recommend that DEC explore opportunities to offer additional energy efficiency measures to residential customers. There are no incentives offered for plug loads or consumer electronics, and there are not many advanced lighting options for residential customers. DEC could include measures that PEC is already offering, such as the incentive for a room air-conditioner, heat pump water heater, and a geothermal heat pump.

V. Conclusion and Recommendations.

In conclusion, Environmental Intervenors are pleased that the Company is enhancing its existing residential energy efficiency program offerings. We encourage the Company to be more transparent in future program change filings and to provide information that is comparable to how it has been presented in past dockets.

Based on the foregoing, Environmental Intervenors recommend that DEC take the following actions: i) provide consistent cost-effectiveness test scores for energy efficiency programs both before and after program modifications; (ii) provide kWh savings and participation by measure for program modifications; (iii) explain why DEC projects a 75 percent decrease in program participation over four years; and (iv) consider additional energy efficiency measures for existing residential customers.

Respectfully submitted this 23rd day of March, 2012.



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*Attorney for Environmental Defense Fund, Natural
Resources Defense Council, Southern Alliance for Clean
Energy and the Southern Environmental Law Center*

CERTIFICATE OF SERVICE

I certify that the persons on the service list have been served with the foregoing
Environmental Intervenors' Comments on Proposed Changes to Residential Smart Saver
Program either by electronic mail or by deposit in the U.S. Mail, postage prepaid.

This the 23rd day of March, 2012.



Robin G. Dunn