



December 4, 2015

Ms. Gail Mount
Chief Clerk
North Carolina Utilities Commission
430 North Salisbury Street
Raleigh, North Carolina 27606-5926

Re: Duke Energy Progress, LLC and Duke Energy Carolinas, LLC Proposed
Modifications to Home Energy Improvement Programs
Commission Dockets No. E-2, Sub 936 and No. E-7, Sub 1032

Dear Ms. Mount:

I serve as the Energy Efficiency Program Manager for the North Carolina Sustainable Energy Association (“NCSEA”). My work at NCSEA focuses on creating and executing energy efficiency programs focusing on stakeholder collaboration, innovation, and the development and execution of solutions. The attached resume illustrates the extensive experience I’ve accrued as an energy professional since 1993.

I write to express support for the modifications proposed by Duke Energy Progress, LLC (“DEP”) and Duke Energy Carolinas, LLC (“DEC” or collectively “companies”) to their respective Home Energy Improvement Programs (“Programs” or “HEIPs”) filed in the above-referenced dockets. I support the proposed modifications to the HEIPs, but propose the following addition to the Programs that would increase their effectiveness: As proposed, duct-sealing is optional under the HEIPs; however, the companies should make duct-sealing mandatory when high-SEER HVAC units are installed. Because the sealing of supply ducts has been shown to be the dominant factor in increasing the efficiency of air delivery,¹ requiring appropriate duct-sealing will ensure maximum energy savings. To determine the appropriate duct-sealing measures to be implemented, I recommend that visual inspection and diagnostics, such as a duct blaster test, be mandatory as well.

¹ See generally, Joshua D. Rhodes, Brent Stephens, Michael E. Webber, *Using energy audits to investigate the impacts of common air-conditioning design and installation issues on peak power demand and energy consumption in Austin, Texas*, Energy and Buildings, Vol. 43, Issue 11, pp. 3271–3278 (November 2011), available at <http://escholarship.org/uc/item/8f0026hc>.



I am pleased to support the companies' proposed modifications to the HEIPs and respectfully request that they be approved, with the additional provision that appropriate duct-sealing be required when high-SEER HVAC units are installed.

I also want to take this opportunity to praise the companies for incorporating increased use of smart thermostats into the Programs. Smart thermostats and their related "apps" offer consumers increased control over their energy consumption and enable them to alter their behavior/preferences based on data. Access to such data has been shown to reduce energy consumption.² While smart thermostats may one day evolve to provide data comparable to that captured by the home's electric meter (e.g., kWh consumption data and demand data at 15 minute increments or in real-time), smart thermostats are not currently capable of providing consumers such data. For this reason, I want to draw the Commission's attention to the ongoing need to supplement consumers' access to smart thermostat data with improved consumer access to the home's electric meter data.³ I understand the Commission will continue to explore this issue in the companies' 2016 Smart Grid Technology Plans.

² See generally, Ben Foster & Susan Mazur-Stommen, *Results From Recent Real-Time Feedback Studies*, American Council for an Energy-Efficient Economy (February 2012), available at <http://aceee.org/research-report/b122>.

³ The companies have acknowledged that consumer access to data results in improved energy management and reduced energy consumption. For example, DEC has stated that:

[The DEC] MyHER program is not and was never intended to be a solicitation, but rather the provision of specific information to help customers understand their energy use and empower them to take control of their usage. . . . Customers have expressed their appreciation of the report, have become engaged in evaluating their energy usage and have become more energy efficient due to the MyHER program, which empowers them to take control of their energy usage.

DEC's Advance Notice of MyHER Program Changes, p. 2, Commission Docket No. E-7, Sub 1032 (7 November 2014) (emphasis added).



NC SUSTAINABLE ENERGY ASSOCIATION

Thank you for the opportunity to provide this consumer statement of interest regarding the companies' proposed modifications.

Sincerely,

/s/ Laura Langham

Laura Langham

Energy Efficiency Program Manager

cc: Parties of Record

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Dec 04 2015

Laura R. Langham

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EDUCATION

Texas A&M University. 1993

- Master of Science in Environmental Geography
- Focus: Sustainable Development

University of North Texas. 1991

- Bachelor of Science in Environmental Education

TRAINING

- Covey Leadership Training: Texas A&M University
- Focus Group Leadership Training: Texas A&M University
- Certification in Conflict Resolution, Restorative Justice, and Mediation Training: Albemarle Dispute Settlement Center
- Healthy Homes Practitioners Course: North Carolina State University
- Energy Efficiency & Alternatives - Education and Decision-making Course: Montana Weatherization Training Center - Montana State University
- Mentor and Counseling Leadership Training: The Hope Center at Pullen

MEMBERSHIPS

- Board of Directors - North Carolina Building Performance Association. 2015
- Member - NCSU Energy Council. 2013 - 2015
- Member - State Energy Office Energy Efficiency Team. 2010 – 2015
- Board of Directors - The Hope Center at Pullen. 2008 – 2015
- Founder/Member - North Carolina Climate Education Network. 2006 - 2009

AWARDS

- 2015 Industry Leader Award – North Carolina Building Performance Assoc.
- 2015 Environmental Residential Green Design Award - The City of Raleigh
- 2015 Green Brick Participation Award - North Carolina State University
- 2012 Extension Housing Outreach Award – Housing Education and Research Association
- 2010 Mediation and Conflict Resolution Award - Dare County Government

EXPERIENCE

Energy Efficiency Program Manager. North Carolina Sustainable Energy Association, Raleigh, NC. July 2015 – present

Residential Energy Efficiency Program Manager. North Carolina State University, Cooperative Extension, Raleigh, NC. August 2009 - July 2015

Home Energy Community of Practice Project Manager - North Carolina Cooperative Extension Service. 2012

North Carolina Youth Climate Advocacy Grant Manager. 2007 – 2009

Community Mediation Project Director, Mediation Coordinator and Lead Mediator. Albemarle Dispute Settlement Center. Nags Head, NC. 2002 – 2003

Competency Development Project Coordinator. Texas Extension Service, Texas A&M University. College Station, TX. 1995 - 1997

Sustainable Development Program Specialist. National Association of Counties (NACO). Washington, DC. 1993 - 1995