



Southern
Environmental
Law Center

OFFICIAL COPY

201 West Main Street, Suite 14
Charlottesville, VA 22902-5065
434-977-4090
Fax 434-977-1483
SouthernEnvironment.org

December 29, 2008

FILED
DEC 30 2008
Clerk's Office
N.C. Utilities Commission

Ms. Renne Vance
Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4325

RE: NCUC Docket No. E-2, Sub 935, 936, 937, 938

Dear Ms. Vance,

Enclosed for filing with the Commission in the above-referenced dockets are the original and thirty (30) copies of the Southern Environmental Law Center's Comments in response to Carolina Power and Light's Applications in the above-referenced dockets on behalf of itself, the Natural Resources Defense Council, and the Southern Alliance for Clean Energy. By copy of this letter and enclosures I am serving the parties of record on the service list.

Yours truly,

Sarah Rispin

Enclosures

Clerk's
AL
7 Comm
Bennick
Kirby
Watson
Hoover
Kite
Hilborn
Sessions
Ericson
Jones
Ex Dir
3/5 Legal
3/5 Acctg
3/5 E&T Res
3/5 Elec

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKETS NO. E-2, Sub 935, 936, 937 & 938

DOCKET NO. E-2, Sub 935
Application by Carolina Power and Light
Company, d/b/a, Progress Energy
Carolinas, Inc., for Approval of Residential
Solar Water Heating Pilot Program

DOCKET NO. E-2, Sub 936
Application by Carolina Power and Light
Company, d/b/a, Progress Energy
Carolinas, Inc., for Approval of Residential
Home Energy Improvement Program

DOCKET NO. E-2, Sub 937
Application by Carolina Power and Light
Company, d/b/a Progress Energy Carolinas,
Inc. Petition for Approval of Residential
Solar Heating Pilot Program

And

DOCKET NO. E-2, Sub 938
Application by Carolina Power and Light
Company, d/b/a Progress Energy Carolinas,
Inc. Commercial, Industrial, Governmental
Energy Efficiency Program

FILED
DEC 30 2008
Clerk's Office
N.C. Utilities Commission

**COMMENTS OF SOUTHERN
ENVIRONMENTAL LAW
CENTER ON BEHALF OF
ITSELF, NATURAL
RESOURCES DEFENSE
COUNCIL, AND SOUTHERN
ALIANCE FOR CLEAN
ENERGY**

In response to Applications by Carolina Power and Light Company ("Progress" or "PEC") for Approval of Residential Solar Water Heating Pilot Program, Residential Home Energy Improvement Program, Residential Solar Heating Pilot Program, and Commercial, Industrial, Governmental Energy Efficiency Program ("PEC Programs"), submitted pursuant to North Carolina Utilities Commission ("Commission") Rule R8-68, the Southern Environmental Law Center ("SELC") on behalf of itself, Natural Resources Defense Council ("NRDC") and Southern Alliance for Clean Energy ("SACE") submits the following Comments:

The approach under which PEC's energy efficiency and demand response program has been developed and submitted for review and consideration raises serious concerns. As expressed in Mr. Brian Henderson's direct testimony of December 23, 2008, filed with the Commission in Docket No. E-2, sub 926 & 931, this piecemeal approach of individual initiatives may contain individually acceptable initiatives, but does not reflect a well thought out program plan. This is especially problematic in light of the fact that Progress has not formulated or announced any overall target for energy-efficiency savings or building flexibility into its system through demand response.

A comprehensive program plan that includes a description of all of the initiatives and their key features, and descriptors such as: (i) the barriers to energy conservation they address in concert, (ii) marketing strategies for the initiatives as a whole, (iii) how the initiatives will be deployed, (iv) interaction with stakeholders, and (v) annual and multi-year impacts through indicies such as demand and participation levels, is a critical part of exemplary programs around the country. This is lacking for PEC's energy-efficiency and demand-response programs. PEC needs to follow the lead of these programs and formulate a strategic set of complimentary program initiatives that address specific market barriers, and blend them together into a comprehensive program portfolio that maximizes the cross-cutting opportunities for efficient program design, marketing, deployment and evaluation.

To ensure the PEC Program gets off to a successful start, and to provide the level of quality programs and impact that the North Carolina customers deserve, the proposed Program needs to incorporate the lessons learned and best practices of exemplary programs around the country. A number of recommendations are presented below to enhance the currently proposed

individual Program initiatives, as well as recommending new initiatives to complement the proposed Program portfolio.

Residential Home Advantage Program (Docket No. E-2, Sub 928 and 935)

PEC's program initiative described in dockets E-2 sub 928 and E-2 sub 935 is directed at new residential construction and will provide an incentive of up to \$400 per dwelling unit for builders to build single-family, multi-family and manufactured housing units to ENERGY STAR standards. This amount of money, proposed to reimburse only a portion of the added cost of the more stringent envelope and higher efficiency HVAC devices, is far too small to incentivize the *higher up-front costs associated with building energy-efficient homes.*

In addition, the program initiative should also include separate financial incentives for ENERGY STAR refrigerators, dishwashers and clothes washer appliances. Without special designation for the appliances through dedicated marketing and incentives, the opportunity may not be pushed by the builder and/or not selected by the prospective homeowner.

Further, the programs as described in PEC's filing do not make clear to what extent they will provide necessary training and technical assistance to help builders comply with ENERGY STAR features, including sizing, installation and beyond-code requirements. For example, to minimize air leakage and provide the strong quality assurance procedures that are necessary to making a home truly energy-efficient,¹ the program initiative should include extensive training activities for builders, sub-contractors and equipment installation contractors, particularly on minimizing duct and envelope leakage and the proper use of blower door tests, where applicable.

¹ It matters little, for instance, if builders choose to install double-paned windows, if they fail to properly seal around those windows when they are installed in the building frame. Potential savings from such windows would be entirely lost in such a case to additional leakage around the window opening.

Residential Home Improvement Program (Docket No. E-2, Sub 936)

PEC's proposed residential home improvement program initiative, which will address the need to retrofit existing homes to achieve energy conservation, is missing core features typically found in other utility undertakings. Further, the proposed Program has significant gaps in service to North Carolina customers that would be paying for it.

For example, the proposed Residential Home Energy Improvement Program does not include an appliance energy conservation component for the very large existing residential sector. The North Carolina residential sector accounts for 40% of PEC's annual sales,² and inefficient appliances are a major component of energy use. Tackling the problem of inefficient appliances in existing homes pulling a steady stream of excess energy from the grid should be the hallmark of any solid retrofit program. An ENERGY STAR appliance package, financed through on-bill financing, should be included in the initial energy conservation Program portfolio. In addition, on-bill financing should be offered for the proposed HVAC and window-replacement measures.

Residential Solar Water Heating Pilot Program (Docket No. E-2 Sub 937)

PEC's Residential Home Advantage Program initiative, Docket No. E-2 Sub 928, as originally filed, included provisions for an incentive of up to \$1000 per dwelling for participants who install solar domestic hot water systems. PEC, however, is now proposing to *remove* the

² Progress Energy Carolinas. NCUC Docket No. E-2, Sub 931. Exhibit No. 1. WP D-7.

solar water heating measure from the Residential Home Advantage Program and establish it as a stand-alone pilot initiative called the Residential Solar Water Heating Pilot Program.

While we are pleased that PEC is addressing the significant opportunity of renewable technologies, such as including solar water heating in their Program portfolio, we are concerned that downgrading the measure from a broadly available program to a stand-alone pilot is going in the wrong direction.

PEC indicates that having solar water heating as a pilot "...will allow it to determine if solar water heating is a cost effective measure suitable for wider application within its service territory."³ We view this as overly cautious, and disagree with PEC's approach. Solar measures *are* ready for wider deployment and there needs to be a stronger commitment now by PEC. In fact, to achieve cost-effectiveness, PEC should be mainstreaming solar water heating technology across all its programs in residential new construction and existing residential homes, as well as in small commercial facilities (such as dormitories, restaurants and laundries), that have even greater potential for cost-effective applications.

Solar water heating should be an integral component of the eligible measures that complements the traditional energy efficiency package. Proper solar design requires integration with designs for achieving energy efficiency to maximize the potential of solar water heating. Furthermore, downgrading the solar water heating program from something that is broadly available to a pilot program will give create a perception of risk among builders and contractors that could delay broader acceptance of the technology. Rather than downgrade the program, we

³ Residential Solar Water Heating Pilot Program. NCUC Docket No. E-2, Sub 937. Cover Letter from Mr. Len A Anthony, General Counsel – Progress Energy Carolinas, Inc. to Ms. Renee Vance, North Carolina Utilities Commission. October 31, 2008.

would recommend that PEC apply the successes of their Florida Solar Water Heater Rebate program⁴ to the opportunities in its North Carolina service territory.

**Commercial, Industrial, and Governmental Energy Efficiency Program
(Docket No. E-2, Sub 938)**

PEC's proposed Commercial, Industrial, and Governmental (CIG) Energy Efficiency Program, Docket No. E-2, Sub 938, is meant to replace the previously proposed and approved CIG Comprehensive Program and the CIG New Construction Program. This new proposed CIG Energy Efficiency Program incorporates features that are a significant improvement over those of the previous two non-residential program initiatives. However, there are several additional program enhancements that are recommended for the proposed CIG Energy Efficiency Program.

As proposed, the CIG Energy Efficiency Program will be appropriate for a portion of the non-residential sector. However, it does not address the barriers that often confronting smaller customers, who comprise a significant portion of the eligible audience. As widely recognized from previous utility programs, small businesses and small institutional customers often lack the staff resources or wherewithal to identify qualified contractors, prepare program paperwork to apply for incentives, and participate in DSM programs.

To reach these commercial customers, the proposed CIG Energy Efficiency Program must include a direct install component. PEC should retain one or more geographically based installation contractors that would perform on-site assessments, identify energy savings opportunities, and install the needed improvements at the customer's facility. The energy saving improvements such contractors would recommend would primarily include cost-effective

⁴ Progress Energy – Florida. <http://progress-energy.com/custservice/flares/save/solarheater.asp>

lighting upgrades and electric saving operational and maintenance measures. The cost of the service could be provided free-of-charge to the participating customer, or PEC's financial incentive could be applied against the cost of the installation, with the remaining balance paid by the customer directly to the contractor, or financed on the customer's utility bill.

Finally, the level of the proposed financial incentives for some of the measures seems out of line with those of other comparable utility programs. In particular, we recommend that the Commission review the motor and variable speed drive incentive levels, as they appear initially too low to drive consumer action. The incentive level should be strategically selected to create a "buzz" of interest among customers and contractors, which can build initial momentum for the Program. As the Program takes hold and matures, incentive levels can be adjusted accordingly.

Additional Program Initiatives

The importance of partnering with private sector contractors and installers in PEC's energy efficiency program deployment needs to be emphasized. Since utility staff will not be installing the actual energy efficiency measures in customer facilities, special attention needs to be focused on the network of private-sector energy service providers that will actually be doing the work. We recommend that the overall Program include components or dedicated initiatives to help build a more expanded network of energy service providers, installation contractors, and energy service companies ("ESCOs").

Sustained scaling up of energy efficiency programs has been shown to generate jobs for equipment installers, contractors, engineers, service technicians, ESCOs and other service providers, thereby stimulating local economic development during this time of economic recession. For example, the New York program has reported that an estimated net 4,700

additional jobs have been created and sustained specifically by their program.⁵ As these successes show, PEC's Program needs to be structured to help facilitate and quickly ramp up this service industry, so that it can effectively and in a timely manner handle the anticipated increase in energy efficiency services. If PEC has anticipated this issue, it is not evident in the program structure in the way that it is usually evident in those of other utilities in other states.

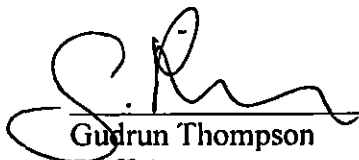
Conclusion

In sum, we recommend that PEC enhance its proposed Program strategy to reflect an expanded, state-of-the-art portfolio of energy-efficiency programs. The currently proposed individual initiatives need to include enhanced features to drive customer participation, a re-alignment of financial incentives, greater focus on ENERGY STAR appliances, expanded services for the smaller non-residential sector, a sustained commitment to mainstream solar hot water heating, and additional attention to building a long-term network of energy service providers across their service territory.

We further recommend that PEC resubmit the individual programs in the form of a strategic and complimentary Program Plan that establishes an energy efficiency target and defines the respective contributions from the various Program initiatives. To enhance the process of program design and the exchange of program information, planning and results, we also recommend that PEC establish an ongoing advisory group for a more open, transparent and stakeholder-driven process.

⁵ *New York Energy Smart program: Evaluation Status Report Year Ending December 31, 2007. Report to the System Benefits Charge Advisory Group. Final Report March 2008. New York State Energy Research and Development Authority (NYSERDA). Page 2-23.*

This, the 29th day of December, 2008.

 s/b/o Gudrun Thompson

Gudrun Thompson
Staff Attorney
Southern Environmental Law Center
200 W. Franklin Street, Suite 330
Chapel Hill, NC 27516
Telephone: (919) 967-1450
Fax: (919) 929-9421

Sarah Rispin
Staff Attorney
Southern Environmental Law Center
201 W. Main Street
Charlottesville VA 22902
Telephone: (434) 977-4090
Fax: (434) 977-1483

CERTIFICATE OF SERVICE

I hereby certify that the following persons on the docket mailing list have been served with Southern Environmental Law Center's Comments in response to Carolina Power and Light's Applications in Dockets No.'s E-2 sub 935, 936, 937 and 938 on behalf of itself, Natural Resources Defense Council, and Southern Alliance for Clean Energy, by deposit in the U.S. Mail, postage prepaid:

Len S. Anthony
Deputy General Counsel
Progress Energy Carolinas, Inc., Carolina
Power and Light Co.
PO Box 1551 PEB 17A4
Raleigh, NC 27602-1551

Antoinette R. Wike
Chief Counsel – Public Staff
North Carolina Utilities Commission
4326 Mail Service Center
Raleigh, NC 27699

Christopher Simmler
7005 Wheat Mill Place
Raleigh, NC 27613

Leonard G. Green
Assistant Attorney General
Attorney General's office
Utilities Section
PO Box 629
Raleigh, NC 27602-0629

This 29th day of December, 2008.


Tessa Hansen
Legal Assistant