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April 24, 2007

Via E-Filing and Mail
Charles L. A. Terreni
Chief Clark/Administrator
South Carolina Public Service Commission
101 Executive Center Drive, Suite 100
Columbia, South Carolina 29210

RE: Petition of the Office of Regulatory Staff to Establish Dockets to Consider Implementing the Requirements of Section 1251 (Net Metering and Additional Standards) of the Energy Policy Act of 2005
PSC Docket No.: 2005-385-E

Dear Mr. Terreni:

Enclosed please find the original and one copy of the Direct Testimony and Exhibits of Stephen Morrison in the above referenced docket. I am filing this testimony on behalf of myself and Pamela Greenlaw, another of the interveners. I am not acting in a representative capacity for any party other than myself.

Please note that the attached documents are exact duplicates, with the exception of the form of the signature, of the e-filed copy submitted to the Commission in accordance with its electronic filing instructions.

By copy of this letter we are also serving all other parties of record. Please let me know it you have any questions.

Yours truly,

John F. Hardaway

jem
Enclosure

cc: Parties of Record

TESTIMONY OF
STEPHEN MORRISON
ON BEHALF OF
INTERVENERS
DOCKET NO. 2005-385-E

Q: Please state your name, address, and occupation.

A: Stephen Morrison, Mt. Rest SC. Self employed woodworker

Q: Please state your educational background and experience relative to or relevant to issues of power/energy development and usage.

A: Bachelors of Science from the University of Wyoming, Experience; owner of a grid connected solar electric system, perhaps the only one in SC

Q: What is the purpose of your testimony today?

A: The purpose of my testimony is to provide pertinent remarks regarding consideration of the implementation of Net Metering and certain Additional Standards as required under Section 1251 of the Energy Policy Act of 2005.

Q: Are you aware that the electric utilities in South Carolina subject to this proceeding of Docket #2005-385-E are the private, investor-owned utilities of Duke Energy Carolinas, LLC; Carolina Power & Light d/b/a Progress Energy Carolinas, Inc.' and South Carolina Electric and Gas?

A: Yes.

Q: Are you aware that under EPAct 2005 states must consider standards that encourage private, investor-owned electric utilities to use energy resources more efficiently?

1 **A:** Yes.

2 **Q:** **Are you also aware that Section 1251 of EPAct 2005 requires states to**
3 **consider the following:**

4 **1. "implementation of Net Metering Service,"**

5 **2. "development of a plan to minimize dependence on one fuel source & to**
6 **ensure the electric energy it sells to consumers is generated from a diverse**
7 **range of fuels and technologies, including renewable technologies" and**

8 **3. "development of a ten-year plan to increase the efficiency of the utility's**
9 **fossil fuel generation?"**

10 **A:** Yes.

11 **Q:** **What is your understanding of the term "Net Metering Service?"**

12 **A:** My understanding is derived from the defintion written in the PURPA
13 standards which states that net metering service is a term meaning "service to an
14 electric consumer under which electric energy generated by that electric
15 consumer from an eligible on-site generating facility and delivered to the local
16 distribution facilities may be used to offset electric energy provided by the electric
17 utility to the electric consumer during the applicable billing period."

18 **Q:** **What are the goals and purposes of net metering**

19 **A:** First, let me say for whom, or which classes of energy consumers, net
20 metering should be offered to ensure an effective program: residences,

commercial enterprises, industrial plants, agricultural establishments, schools and related school district buildings, government facilities, military bases. There are many goals of net metering services and wide-ranging benefits. These include the following:

Relief of burden and cost for utilities during peak demand

Reduction of economic losses from grid failures during times of peak use --losses to the utilities as well as to businesses Increase of security and safety through increased flexibility and reliability of energy production during times of grid failures--black outs, brown-outs

- Increase of energy efficiency as a result of shorter transmission distances between power generation and usage
- Stimulation of local, long-lasting economic growth via support of diversified, renewable energy technologies
- Reduction of reliance on fossil fuels and related environmental, health, and regulatory costs (equipment for sulfur dioxide, mercury, nitrogen, and carbon dioxide containment.)
- Assumption of personal and collective responsibility in South Carolina for energy choices that positively impact the harmful effects of global climate disruption.
- Help to off set the cost of installing an alternative energy system by offsetting monthly bills.

Q: You have offered quite a number of benefits of renewable energy usage in your list of goals and purposes of net metering. Please elaborate using specifics for each goal or purpose.

A: Relief of burden and cost for utilities during peak demand; the system that I have, produces the bulk of its power during the time when the utility is experiencing peak demand.

My system produces and sells the majority of its power during the time of peak demand, mid summer days, their by reducing the burden on the utility.

Increase of energy efficiency as a result of shorter transmission distances between power generation and usage

Edison's vision for the electric grid was a large number of small producers spread over a large area, not giant centralized producers. Steve, I believe that was J.P. Morgan who wanted small producers, not Edison. Edison wanted tight control on profits.

Stimulation of local, long-lasting economic growth via support of diversified, renewable energy technologies

Reduction of reliance on fossil fuels and related environmental, health, and regulatory costs (equipment for sulfur dioxide, mercury, nitrogen, and carbon dioxide containment.)

Assumption of personal and collective responsibility in South Carolina for energy choices that positively impact the harmful effects of global climate disruption

Net metering would provide economic incentive for consumers who want options. As a SC resident, parent and business owner, I can assure you that people want alternative energy options. Because of the way we use solar energy to prompt our business and use our business to promote solar energy, I talk everyday with people about the issue. From builders, carpenters, electricians on site, to million dollar homeowners we work for, to other parents at preschool and so on, everyone is interested. We may all be too busy in our lives to get around to writing all the letters we should, but believe me, people want options and want more ways to be involved in change.

Q: One of the standards is to increase utilization of renewable energy technologies.

Are you aware of the following energy technologies being used and credited in net metering services across the USA?

- **solar**
- **photovoltaics**
- **biomass**
- **fuel cells**
- **geothermal**
- **hydro --large**
- **hydro--small**
- **landfill gas**
- **wind**
- **tidal energy**
- **CHP**

A: Yes.

Q: Which of these have you explored for personal use?

Describe your personal experiences with renewable energy in your home or as a consumer in a work setting.

A: Because of our home site, solar was the only good option for us. I can elaborate on the experience if necessary.

Although, I do not actually work directly in the field, because of my involvement, I get phone calls to my business almost weekly requesting info about solar.

Q: Mr. Watts has testified that the generation resource mix of the 3 investor-owned electric utilities in South Carolina is diverse. He stated "the mix includes energy from all the major proven technological sources of generation." As a user of alternative energies, what is your reaction to his statement (assertion)?

A: My reaction one of dismay as I look at Exhibit ARN-1.

Exhibit ARN-1 includes fuel type and purchased power of only 5 items: nuclear, coal, natural gas/oil, hydro, and purchased. As listed earlier in my testimony there are many other proven technologies that should be included in future mix plans. I believe the current mix is insufficient in diversity.

Q: In light of the fact that you are directly involved with usage of alternative, renewable energies, what is your opinion of the recommendation by ORS

that the investor-owned electric utilities in South Carolina offer net metering service to their customers?

A: I fully support the recommendation.

Q: What is your opinion of the recommendation by ORS for implementing net metering in South Carolina by following the North Carolina model?

A: The North Carolina model is a low starting point. As my teacher friend says it's like the old BSAP test students in SC schools used to take. It's a minimum that gives inadequate results.

Since the Utility Facility Siting and Environmental Protection Act includes requirements "that will serve the interests of system economy and reliability and that consideration be given to the nature and economics of the various alternatives." The North Carolina net metering program does not do either. We need to use a proven model recommended by analysists with long experience with current net metering to discover a program that will be the best fit for our state.

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA

DOCKET NO.: 2005-385-E

IN RE:
Petition of the Office of Regulatory Staff to)
Establish Dockets to Consider Implementing)
the Requirements of Section 1251 (Net)
Metering and Additional Standards) of the)
Energy Policy Act of 2005)

CERTIFICATE OF SERVICE

This is to certify that I, John F. Hardaway, have this date served one (1) copy of the Direct Testimony and Exhibits of Stephen Morrison in the above referenced matter to the person(s) named below by causing said copy to be deposited in the United States Postal Service, first class postage prepaid and affixed thereto, and addressed as shown below:

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Deputy General Counsel, Regulatory Affairs
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John F. Hardaway

April 24, 2007
Columbia, South Carolina