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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 Steve Johnson 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
STEVE JOHNSON
ON BEHALF OF
INTERVENERS
DOCKET NO. 2005-385-E

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

A. Steve Johnson, 116 Clarendon Drive, Clemson, SC 29631. I am a librarian at Clemson University.

Q: Please state your educational background.

A: Masters in Library Science

Q: What experience in the workplace have you had with renewable energies and with net metering?

A: I am a representative on the Clemson Environmental Committee. Clemson University is in its initial stages of installing solar electric panels. We have been involved with the Public Service Commission's PURPA public hearings on net metering for the public utilities, and we submitted a statement at that time.

Clemson as an institution is striving to increase its use of renewable forms of energy to cut down on greenhouse gas emissions and as alternative back-up systems. We are also interested in increasing use of renewables not only for our university but also for other institutions such as universities, schools, churches, hospitals, libraries, police and fire departments, governmental services at the City, County, and State levels. We know that as we increase and enlarge our solar facilities, net metering would be extremely important as an economic stimulus, as a cost-saving factor, Net metering would engender development and widespread use of renewables which would become a critical part of generating power for backup equipment in case of natural or other disasters.

Q: You believe very strongly in increasing the use of renewable energy. What energy sources have you explored for personal use?

A: I have a solar water heater in my home, 2 solar tube lights, and 3 solar attic fans.

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 and as you have studied these energies in your work on the Clemson Environmental Committee, what is your reaction to his statement?

A: My reaction is that, with the exception of hydroelectric and biomass, which account for extremely small portions of our energy consumption, all sources come from outside the state (coal, uranium, petroleum, natural gas.) South Carolina is more than 90% dependent on imported energy resources. If these were cut off or increased significantly in cost, this could cause a severe economic hardship for South Carolina *and its citizens*. The use of free, *plentiful* resources *from within* the state, such as solar or wind, would reduce our dependence on imported energy sources and the concomitant risk*s* involved.

Q: How can net metering help with energy costs and with greenhouse gas (CO2) emissions?

A: Both the federal government and the State of South Carolina have already taken steps in the direction of incentives. Individual and businesses can receive up to $2,000 a year in the form of credits on their federal income taxes, for purchasing hybrid vehicles, making their homes and businesses more energy efficient, and installing forms of renewable energy generation, such as solar and wind. The State of South Carolina also instituted a similar program for state income tax payers.

The only problem with these incentives is that they do not help not-for-profit enterprises and organizations that do not pay income taxes. These organizations exist in buildings that emit millions of tons of CO2 into the atmosphere each year, and at this

point in time, there is no government incentive to help them do otherwise. *Net metering would provide that incentive.*

In South Carolina there are

- 46 county administrative buildings
- 58 colleges and universities
- 99 hospitals
- over 150 libraries
- more than 200 city, county, and other law enforcement buildings
- more than 400 fire stations
- more than 600 city administrative buildings
- 1,486 (& growing) public and private schools
- 5.522 churches, synagogues, mosques, and temples

I am also representing my church, the Unitarian Universalist Fellowship of Clemson. We are currently looking into installing a PV system. The system would cost somewhere around $100,000. Without net metering, there would be an additional estimated financial outlay of $8,000. This figure represents the amount needed to purchase the required storage batteries and to build a room to house them. This is a significant additional increase in start-up costs. Not only would these have to be put into place, but the fellowship would have to monitor and maintain the room full of batteries and electric cables. It would be much simpler and safer to be hooked into the grid.

Q: Mr. Watts also suggested that the North Carolina system of net metering is the best one in his estimation for our state of South Carolina. What is your opinion concerning a model that fits South Carolina?

A: *The North Carolina system is borne of the fear from the utilities that they will lose revenues. This is a legitimate concern, so* what we need to do is to ensure that the utilities are compensated for maintaining the grid, even for net customers. *Some utility companies charge a small monthly service fee for net metering customers. This* ensures that they have adequate resources to maintain the grid, even if a significant portion of their

1 customers become net metering customers. For a detailed analysis of electric utilities i
2 regard to alternative energy, I cite Solar Revolution: the Economic Transformation of the
3 Global Energy Industry by Travis Bradford (MIT Press, 2006.)

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 Steve Johnson 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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John F. Hardaway

April 24, 2007
Columbia, South Carolina