Heather Anderson State Regulation of Public Utilities Review Committee Post Office Box 142 Columbia, SC 29202. coombsn@scsenate.org

Dear Ms. Anderson & Public Utilities Review Committee,

I have been carefully following alternative energy technology developments for over six years. My background is electronics, GIS development and engineering.

1. What action do you anticipate from the U.S. Congress as to climate change legislation? What impact may this have on South Carolina?

The US Congress will increase their support for development of alternative energy resources. Kentucky recently unveiled their Comprehensive Energy Plan. South Carolina must move forward on this issue regardless of the federal government's timeline.

- 2. Does South Carolina have governmental resources available to study, plan, or act upon current or future energy policies? Are these resources sufficient? Are these resources appropriately empowered to act? Is there any overlapping of roles?
- 3. How do we use electricity in South Carolina? How is our use different from other states, with respect to amount of use and type of use? What factors drive this usage? What can we do to better use our energy resources? What demographic or other factors prohibit or inhibit our ability to be more energy efficient?

South Carolina currently does not have net metering. Other states already have programs in place. As far as government is concerned, net metering is the simplest and most cost effective way to begin utilizing alternative forms of energy, because the private sector, en mass, will pay for the infrastructure and make it happen. Giving corporations an incentive to produce their own electricity is a savvy way to quickly make use of alternative energy resources. This immediately eases the burden on public utilities, helps stabilize the power grid, and puts SC in a pro-active position.

I would put solar towers in the midlands. See PDFs
EnviroMission Ltd.pdf (http://www.enviromission.com.au/)
SolarMission, Solar Tower (http://www.solarmissiontechnologies.com/)
Abengoa Solar Tower & Trough PS10.pdf (http://www.abengoasolar.com/)

I would put windmills and tidal generating facilities along the coast, and ocean wave generating facilities in the ocean. See PDFs

AWS Ocean Energy.pdf (http://www.awsocean.com/PageProducer.aspx)

SDE Wave Power.pdf (http://www.sde.co.il/)

Siemens Wind Turbine.pdf (http://www.renewableenergyworld.com/rea/news)

Southampton Integrated Tidal Generator.pdf

(http://www.epsrc.ac.uk/PressReleases/CompactTidalGenerator.html)

UEK Corp Tidal Generator.pdf (http://uekus.com/Who_we_are.html)

Vertical-Axis Wind Turbines.pdf (http://cleantechnica.com/2008/06/20)

Waveswing.pdf (http://www.awsocean.com/PageProducer.aspx)

4. What types of renewable sources of energy are available in South Carolina? What is the expected cost to produce and transmit electricity from those resources?

Being a coastal state with a warm climate, South Carolina is in a unique position to make use of wind, tidal, wave and solar forms of alternative energy. It is important for you to understand that the research and development of technology <u>has already been done throughout the world</u>. Please see submitted article copies. This is a sampling of what is available.

South Carolina's warm/hot climate causes an increase in the need for electricity in the summer. As the state's population grows, electricity demands will follow. By utilizing the heat through solar chimneys, electrical generation will rise with the daily rise in electricity demand.

- 5. What types of non-native renewable resources are available to South Carolina? What is the expected cost to transmit electricity from those resources to South Carolina?
- 6. What programs that promote energy efficiency exist in our state? Are these programs affordable to all South Carolinians? Should they be affordable to all South Carolinians? Are energy efficiency measures a cost-effective alternative to the construction and operation of generation facilities? How should energy efficiency incentives be designed?
- 7. The heavy use of concrete and steel to construct coal and nuclear generating facilities in China, India, and other developing nations and the importation of fuel needed to create energy from those facilities has increased the price of these raw materials and commodities beyond most projections. Is this level of growth sustainable? Will prices continue to be driven by this global demand? How will South Carolina be affected by this global demand?

Nuclear power is not the answer. It is not cost effective—it is expensive. Need I remind you that South Carolina ranks 43rd in annual personal income per capita. (http://www.sciway.net/facts/)

NO safe place exists to store the waste for millions of years. This fact must be considered when calculating the cost of nuclear power. Nuclear power is no longer held in high esteem as High Tech and forward thinking. It is exactly the opposite. Nuclear power is the perpetual April Fool's joke upon the society that it serves. They are expensive to build, expensive to maintain—thus generating very expensive electricity. They are risky to run—

Remember 3 Mile Island? Remember "We Almost Lost Detroit?" (by John G Fuller, Ballantine Books, September 12, 1976).

8. How has the current economic situation affected the projections for energy use?

It is critical to move forward with alternative energy despite the ups and downs of the economy. Brazil shifted to alcohol for automobiles after the 1970s gas crisis. As a result they are in a much better position to weather ups and downs of petroleum non-availability of today than United States of America and other countries.

Sincerely

Leonard DiAsio, Jr. Private citizen

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