



**Environmental Scoping Comments on Duke Energy's W.H. Lee  
Combined Operating License Application by  
Sara Barczak, Safe Energy Director Southern Alliance for Clean Energy  
May 1, 2008, Gaffney, South Carolina**

Dear Transcriber -  
Please Note - only a  
portion was read  
@ the meeting due  
to time  
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Thanks

My name is Sara Barczak and I am the safe energy director with Southern Alliance for Clean Energy. We are a regional non-profit organization with members here in South Carolina, throughout Duke's service region, and across the Southeast concerned about the impacts energy choices have on our health, economy and environment. Thank you for having tonight's meeting to address the environmental scoping issues that should be evaluated as the NRC prepares the draft Environmental Impact Statement (EIS).

We have serious concerns about Duke's push to build two new reactors here at the Lee site. The uncertainties associated with new nuclear power plants continue to escalate, putting ratepayers, taxpayers, and the environment at increasing risk. These risks are not adequately addressed in the application.

We know that Duke has better ways to meet the region's increasing demand for energy, protect our water resources, and combat global warming. Investing more resources in the region's wind, solar, and bio-energy industries and promoting energy efficiency measures instead of costly nuclear power would benefit Duke and offer economic development opportunities for the region, without draining our water resources or our pocketbooks. Unfortunately, the Lee application does not adequately address these other energy options. Renewable energy technologies, like bioenergy, solar, and wind, which are not likely to be targeted by terrorists nor have the capacity, in terms of accidents, to kill thousands of people or permanently contaminate large land areas, should not be ignored by Duke. Energy efficiency measures also pose no health or safety risks to the public and Duke has significant resources to tap in this arena.

Duke has excellent wind resources within its service area and should be encouraged to invest more in developing this clean, safe energy resource instead of spending billions of dollars on the proposed Lee site. There is also potential for bioenergy production in their service territory. Clean forms of bioenergy represent a 'homegrown' energy source that can provide local jobs to rural areas that would also support farmers and the region's economy, while helping expand clean energy technologies. The use of solar technologies and other clean energy choices were summarily dismissed in the application. The draft EIS must include a more thorough analysis of energy alternatives.

The NRC needs to fully evaluate Duke's need for power along with alternative supply options, including energy efficiency and demand side management measures. We are concerned that Duke is overestimating capacity needs and the NRC needs to fully evaluate whether the additional generating capacity is truly needed. The NRC needs to include all of Duke's new power plant proposals, such as the new coal unit proposed for the Cliffside plant in NC.

The high cost of nuclear power plants will likely lead to cost overruns and rate increases; this is not mentioned in the application. The price for new reactors, such as Westinghouse's AP1000 design that TVA intends to use, has skyrocketed. Utilities in Florida pursuing the same reactor design have recently stated costs of \$6 to \$8.5 billion per reactor, nearly tripling their estimates from just one year ago. Just a few days ago, a Charlotte Business Journal article reported that Duke "conceded that its original cost estimate of \$6 billion is out of date." It was also recently decided by the NC Utilities Commission that Duke's updated cost estimates are trade secret and don't need to be made public. Does the NRC have access to these 'secret' costs? If so, how will the public know that the NRC compared the most current costs of the proposed new nuclear plant appropriately when comparing to other energy sources or energy efficiency measures? If the NRC is not able to see these 'secret' cost figures, how can the NRC appropriately determine that building new reactors is the right decision?

### Water Impacts

Nuclear power plants have a large impact on water quantity and quality. Nuclear power plants release radioactive contaminants and hazardous chemicals into surrounding water resources, contribute greatly to thermal pollution, negatively impact aquatic life, and require enormous volumes of water in order to operate—requiring more water use than other traditional forms of energy production and significantly more water than energy efficiency measures and clean energy technologies such as solar and wind. This reality is not mentioned in the application.

Duke and the NRC should already know that we are currently suffering from a historic drought. Yet Duke's application references the 2005 South Carolina Water Use Report Summary that says the last multi-year drought was in 1998.<sup>1</sup> Well, guess again. We're in a severe one now and Duke should have mentioned that in the application and the NRC certainly must consider this as it prepares the draft EIS.

According to Duke's application, the two Lee reactors will withdraw during normal use over 47 million gallons of water per day (mgd) from the Broad River and consume, or lose, on average over 35 mgd, returning only one quarter back to the river. The maximum withdrawals will be over 81 mgd with maximum consumption of over 41 mgd. So overall consumptive loss will be approximately 50-75%.<sup>2</sup> That is unacceptable. The application also mentions that average surface water use (public and industrial) in Cherokee County was 8.4 million gallons per day.<sup>3</sup> This means that on a daily basis the Lee plant could use six to ten times the amount of surface water used by everyone else in the county combined. The plant will be competing with other important water users in South Carolina and the region. Yet, the application does not acknowledge the impacts this may have, nor does it ponder the impacts this could have during severe drought conditions, such as we are currently experiencing. The NRC needs to address this in the draft EIS.

<sup>1</sup> Lee COL application, Rev. 0, p. 2.3-5

<sup>2</sup> Lee COL application, Rev. 0, Enviro. Rpt. Ch. 2, TABLE 2.3-14 ESTIMATED SURFACE WATER WITHDRAWAL AND CONSUMPTION FOR STATION OPERATIONS, <http://www.nrc.gov/reactors/new-licensing/col/lee.html#appDocuments>

<sup>3</sup> Lee COL application, Rev. 0, p. 2.3-23