



# W.S. Lee Nuclear Plant Fact Sheet

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*Why it is a problem and what needs  
to be done to protect our communities.*

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## Nuclear Power is Expensive.

After money was spent developing the site decades ago, plans were abandoned to build reactors at the William States Lee site in Cherokee County near Gaffney, South Carolina. Instead, the cooling towers were used in the film "The Abyss." But now Duke wants to throw more money into the abyss by building two new Westinghouse AP1000 reactors, even as costs soar. Utilities pursuing the same reactor design in Florida have stated costs of ***\$6 to \$8.5 billion per reactor***, nearly tripling the estimated costs from just one year ago.

## Nuclear Power is Vulnerable to Terrorism.

FBI director Robert S. Mueller said, before the Select Committee on Intelligence in the US Senate in February 2005,  
***"Another area we consider target rich and vulnerable  
is the energy sector, particularly nuclear power plants."***

A severe accident successful terrorist attack could have devastating consequences. For instance, a 1982 Congressional report estimated that if a meltdown occurred ***at just one*** of Duke's Catawba reactors, also in SC, it could cause up to 88,000 injuries with costs of over \$100 billion (in 1980 dollars and Census figures).

[U.S. House of Rep., *Calculation of Reactor Accident Consequences for U.S. Nuclear Power Plants (Health Effects & Costs)*, Nov. 1st, 1982.]

## Nuclear Power Threatens Our Security.

***"Nuclear power entails potential security risks, notably the possible misuse of commercial or associated nuclear facilities and operations to acquire technology or materials as a precursor to the acquisition of a nuclear weapons capability."*** –Future of Nuclear Power, MIT, 2003

Nuclear power reactors create plutonium during their operating cycle—plutonium from which nuclear bombs can be manufactured. Plutonium is one of the most toxic man-made substances known, remaining radioactive for more than 240,000 years.



Lee site, above, from  
the set of "The Abyss"  
at [historicdecay.com](http://historicdecay.com)

## Nuclear Power Pollutes.

➤ ***Radioactive spent fuel (nuclear waste) is dangerous*** and remains radioactive for millions of years and we have yet to find a solution for effective nuclear waste management. Nuclear reactors create nuclear waste in your community.

➤ ***There is no safe level of radiation, no 'safe' dose.*** Radiation exposures damage reproductive cells and can lead to mutations from generation to generation in humans and animals. Each new exposure to radiation adds to the risk of: genetic mutations and cancer, damage to the immune system, spontaneous abortion, mental retardation, spina bifida, heart disease, leukemia and more.

[Nat'l Academy of Sciences, BEIR V & VII; World Health Organization, & more.]

➤ ***Nuclear power threatens our water supply.*** All reactors must be located next to large bodies of water to create steam to power the turbines and to continuously cool the fuel rods in the reactor core to prevent an accident. According to Duke's application for a Combined Operating License, Plant Lee is expected to withdraw an average of over 47 million gallons of water per day from the Broad River and lose nearly 75% or over 35 million gallons per day mostly to evaporation. The plant will be competing with other important needs in South Carolina and the region. The remaining water will be returned at temperatures well above the surrounding area. This hot water discharged to the river causes "thermal pollution" that can stress fish and other animals living in the area and negatively impact the surrounding environment.

## What can you do to help?

**Contact the U.S. Nuclear Regulatory Commission by May 20, 2008** as the agency develops the Environmental Impact Statement. The NRC is responsible for licensing new nuclear power plants and is reviewing Duke's application. The NRC will also hold a public meeting with be held in Gaffney, SC on May 1<sup>st</sup>.

- **Mail:** Chief, Rules and Directives Branch Division of Administrative Services Office of Administration, Mailstop T-6D59, U.S. NRC Washington, DC 20555-0001

- **By Email:** [Lee.COLAEIS@nrc.gov](mailto:Lee.COLAEIS@nrc.gov)

(Title your comments: "Duke W.S. Lee COL environmental scoping comments)

- For additional information, contact us or visit the NRC at <http://www.nrc.gov/reactors/new-licensing/col/lee.html>

**Urge Duke to redirect their investments** towards affordable, clean, & safe energy solutions such as energy efficiency, wind, solar and bio-energy.

**Join Southern Alliance for Clean Energy** at [www.cleanenergy.org](http://www.cleanenergy.org) and help build a strong coalition that will advance clean, safe, energy solutions across the region!

**For more information contact Southern Alliance for Clean Energy  
912.201.0354 or [www.cleanenergy.org](http://www.cleanenergy.org)**

Revised 4/16/08