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Date: 12/28/2007 1:00:48 PM
Subject: "Comments on the draft EIS for the Vogtle Early Site Permit."

Chief, Rules and Directives Branch
Division of Administrative Services, Office of Administration
Mailstop T-6D59
US Nuclear Regulatory Commission
Washington, DC 20555-0001

Dear Sirs:

I have attached a comment for your consideration in the pending review of the Southern Company's license application.

Sincerely,
Hartmut Ramm, PhD
Young Harris College Professor Emeritus of Physics and Physical Geography
3887 Nowlin Rd. NW
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Federal Register Notice: 72 FR 52586
Comment Number: 62

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From: Dolph Honicker [djhonicker@msn.com]

Sent: Tuesday, December 25, 2007 4:25 PM

To: kristabrewer@bellsouth.net; hramm@bellsouth.net; yomi@eco-act.org; crivard000@aol.com; edarnold@mindspring.com; baldleap@mindspring.com; djhonicker@msn.com; bobbie@wand.org; atom.girl@mindspring.com

Subject: FW: Comments on the draft EIS for the Vogtle Early Site Permit

Merry Christmas all,

Here's the draft of the comments for the EIS that I submitted to Patty Durand to send out for the Ga. State Chapter of Sierra on December 11. She emailed me yesterday that she had a final draft that she was submitting yesterday and would send me a copy. which I did not get. I held this until she had an opportunity to use whatever she wanted since she had asked me to not release it until she did. Feel free to use any of this that you want to. I just want to see it reach NRC by the deadline of Dec. 28.

I'd appreciate your b.c.c.ing me your comments that you submit to NRC.

Thanks,

Jeannine

Subject line: "Comments on the draft EIS for the Vogtle Early Site Permit."

Chief, Rules and Directives Branch
Division of Administrative Services, Office of Administration
Mailstop T-6D59
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Washington, DC 20555-0001

E-mail: Vogtle_EIS@nrc.gov

Re: Comments on the draft EIS for the Vogtle Early Site Permit:

Gentlemen,

Please add these comments to your Vogtle Final EIS and respond to them.

Vogtle's Draft NUREG 1872, section 5.3.2, Water-Use Impacts, page 5-6, lines 7 - 12 state:

"The existing VEGP (Vogtle Nuclear Power Plant) Units 1 and 2 are among the largest water users in the region. Likewise, the proposed Units 3 and 4 ... would also become major users of surface water and groundwater. ...The ratio of total groundwater withdrawals to surface water would be approximately 9 percent."

Line 37 lists the maximum withdrawal from the river for the two new reactors as 57,784 gallons per minute.

That translates to 1,440 minutes per day, and equals 83,208,960 gallons of water per day as the maximum withdrawal from the Savannah River. An additional 9% from the Cretaceous Aquifer and the Tertiary Aquifer would equal 7,488,806.4 gallons per day of groundwater, for a total of 90,697,766.4 gallons of water per day for the two proposed units.

Since these units will be added to the existing two units, the total maximum water usage should these two units be approved would be double that amount, for a total maximum usage of 181,395,532.8 gallons of water per day. Approximately one third of that would be returned to the river up to 50 degrees hotter than when it was withdrawn and contaminated with chemicals and radioactive toxins. Two thirds will be evaporated, or consumed.

We are currently in the worst drought in history, level 4, yet your EIS only considers droughts to level 3. Page 5-6, lines 40-41. "Comparable levels for drought level 4 are not shown in Table 5-1 since they cannot be calculated because the river discharge is not specified."

On page 5-7, lines 24-25, states: "As in Table 5-1 comparable levels for drought level 4 are not shown in Table 5-2."

Therefore, the Vogtle EIS is deficient in only considering drought level 3. With Georgia now in drought level 4, this severity must be considered and corrected in your final EIS.

Section 5.3.3, Water-Quality Impacts, on page 5-13, lines 23-26 state:

"Surface-water impacts include thermal and chemical changes in the Savannah River resulting from effluents discharged by the plant. Groundwater impacts include changes in water quality of the surrounding environment because of plant withdrawals, primarily from the Cretaceous aquifers."

Section 5.3.3, lines 30-33 state:

"The GDNR classified the Savannah River at the VEGP (Vogtle Nuclear Power Plant) site for fishing water use (GDNR 2007a). The water-quality standards for temperature are not to exceed 32.2 degrees C. (90 degrees F) and at no time is the temperature of the receiving waters to be increased more than 2.8 degrees C (5 degrees F) above the the intake temperature.

(It should be noted here that when the Tennessee River registered 90

degrees F for a 24-hour period Aug. 16 Unit 2 at the Browns Ferry Nuclear Plant was forced to shut down).

Page 5-14, lines 6-7 state:

"The independent assessment performed by the staff assumed Drought Level 3 conditions were in effect."

Page 5-15, lines 1-2 state:

"The temperature difference between the ambient river and the discharge effluent were therefore calculated to be 28 degrees C (50 degrees F).

So, even at Drought level 3, while we are currently in Drought level 4, the maximum effluent discharges are calculated to be 10 times hotter than the maximum allowed.

Chemical changes in the Savannah River are mentioned and quoted above in section 5.3.3.

Page 5-16 lines 35 and 36 state:

""The staff extended its thermal impact assessment using the CORMIX model to consider the potential impacts of chemical pollutants in the discharge to the Savannah River."

No mention is made of the specific chemicals or their radiotoxicity. Dilution is the only consideration. Fishing is allowed. No mention of the concentration of the chemicals or the radiotoxicity concentration in the fish, and the resultant detrimental health effects on people is included. Therefore, this EIS is deficient, and this must be corrected, or the license denied.

Dilution is not a solution to radioactive pollution. The National Academy of Sciences Biological Effects of Ionizing Radiation, (BEIR VII) report has recognized that there is no level below which radiation is harmless.

Fetuses and young children are more radiosensitive than adult men. Internal doses from inhalation and ingestion of radionuclides are far more deadly than external doses.

In the 1970's guideline 1.42 was replaced by guideline 1.109 that is still in use today. Guideline 1.42, calculated the dose to a 1-year old child drinking milk from a cow that would have grazed near the proposed Hartsville Nuclear Plant to be 335 millirems to the thyroid from I-131. You abolished that guideline, and substituted guideline 1.109 that reduced that dose to 1.1 millirems. This calculation method only considers adult men, and external doses.

By excluding the most radiosensitive segments of the population, women, young children and fetuses, this translates, in the words of the late Dr. John Gofman, to "random, premeditated murder."

In the MOX EIS, inhalation is identified as the most dangerous pathway for humans yet it is not considered in calculating doses. Include ingestion of food that has bioaccumulated radionuclides. Both inhalation and ingestion account for internal doses that are hundreds of times more dangerous than external doses.

Strontium 90 acts like calcium when it is ingested. It concentrates in bones and bombards the bone marrow. In as little as 5 years, leukemia is clinically detectable. Sr. 90 is released from nuclear plants and concentrates in milk. Sometime in the 1980's monitoring milk near nuclear plants for SR. 90 was discontinued. "Don't look, don't tell."

Monitoring for SR 90 in milk must be reinstated.

Sr. 90 is just one of many radionuclides in routine and accidental releases. Others cause cancer, birth defects, and other diseases, not just to the present generation, but for untold generations to follow.

The complete fuel cycle must be considered. The radon released from the mill tailings produced in the mining and milling of uranium required to fuel a single reactor for 1 year will cause deaths to future generations that will run into the hundreds, according to Dr. Walter P. Jordon, retired assistant director of the Oak Ridge National Lab., in a memorandum to the NRC in 1977.

Consideration of women, young children, and fetuses, plus inhalation and ingestion that contribute to internal doses, must be considered and made a part of your calculation method, which should then be peer reviewed before it is adopted. No additional licenses should be granted until this deficiency is corrected. All licences that have been granted using guideline 1.109 must be readdressed and the deficiency corrected. The NRC was established to protect the health of the public, therefore, it is your responsibility to uphold that obligation.

Alternative uses of the site should be fully addressed. New technology is being developed that will be less expensive and safer, not only for the public, but for the utility as well. Nanosolar Powersheets won the Popular Science 2007 award for the best new development. Reducing the cost of silicon based solar photovoltaic panels by 90%, they will make the need for additional electricity from coal or nuclear moot.

Oceanlinx has developed wave powered modules that can produce electricity and desalinate water, although not simultaneously. Hydrogen is the byproduct of their desalination process. The cost of the electricity production using their turbines is comparable to wind generated electricity.

The potential for wind generated electricity in the west exceeds the total amount of electricity needed for the entire U.S. Energy efficiency and conservation are better buys to combat climate change and they are available now. They pose no threat of terrorist attack or proliferation danger.

If these sustainable technologies and strategies were adopted by Southern Co., the Vogtle site could be left for wildlife habitats and at far less costs to the taxpayers and rate payers. Trees remove carbon dioxide and release oxygen. Leaving Vogtle as a natural area is far better solution to climate change than your proposal to build two additional nuclear reactors.

The financial ability of the utility to build this facility without government subsidies must be considered. Considering the fact that future appropriations may delete subsidies, their inclusion is unjustified in deciding the financial qualifications of the utility to build and operate this facility. If the utility is not financially qualified to build and operate a safe nuclear plant, minus government handouts, then this license must be disapproved.

Construction of every nuclear plant has caused rates to increase. This is already happening because of the Vogtle proposed expansion. As rates rise, consumers reduce their usage. The orders that are anticipated for the electricity that these units are designed to produce may not materialize. The material to build them will also be more costly than anticipated, and may not be available at all. Most if not all the equipment must be imported. Cost have historically exceeded their initial estimates for nuclear reactors, and these Vogtle reactors will be no exceptions to that rule.

Nuclear waste going to Barnwell, S.C. will cease in 2008. Yucca Mountain is not open and perhaps will never open to accept spent fuel; therefore, complete plans for onsite storage of all of Vogtle's nuclear waste, including the decommissioned plant itself, must be included. The spent fuel pool must be located in such a hardened facility that it will be impervious to a terrorist attack, including an airplane or rocket attack. Long term storage, beyond even the life of the plant, and capable of being maintained for the thousands of years that the waste will remain a threat to life on this planet, must be included.

Monitoring in all directions, for air, water, and milk, must be included. Monitors must be place in concentric circles, from the fence line, then at no greater than 1/2 mile intervals up to and including out to at least 50 miles in all directions. Real time monitoring results must be available to the public. All milk

produced in this 50 mile radius must be monitored for SR 90 on a daily basis, prior to being mixed with unpolluted milk.

Dilution is not the solution for radioactive pollution.

Evacuation plans must extend beyond the current 10-mile limit. If sheltering in place is the preferred option, then all residences and schools within a 50 mile radius must be prepared at the expense of the utility, for such an emergency. Since this is not an expense that would be incurred with any other electric generating option, the cost will immediately render moot consideration of this nuclear option.

Finally, terrorists attacks, including that of a fully fueled jetliner, against the control rooms, spent fuel pools and the reactor containment buildings of all 4 Vogtle reactors must be considered.

Respectfully submitted.