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[NORTH ANNA SCOPING COMMENT LETTERS, 66 FR 46294]

From: "rosenthals" <zips@firstva.com>  
To: <NorthAnnaEIS@nrc.gov>  
Date: Thu, Oct 25, 2001 9:02 AM  
Subject: COMMENTS ON LICENSE RENEWAL

**COMMENTS, CLARIFICATIONS AND QUESTIONS RELATED TO BOTH  
THE GENERIC ENVIRONMENTAL IMPACT STATEMENT AND THE  
SITE SPECIFIC ENVIRONMENTAL IMPACT STATEMENT FOR THE  
NORTH ANNA NUCLEAR POWER STATIONS' LICENSE RENEWAL  
APPLICATION**

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**AFFILIATION AND**

**CREDENTIALS:** President, Concerned Citizens of Louisa County

The CCLC is a 25-year-old all-volunteer non-profit organization involved with all issues at the North Anna Nuclear Power Stations and acts as an advocacy group on energy matters including conservation, alternative power generation, energy efficiency, and related energy and environmental concerns. The CCLC successfully prevented VA Power's plans to transship high level nuclear waste from Surry to North Anna through an NRC intervention and a federal court challenge; the CCLC contended that dry cask storage would be safer and more economical, and, although not perfect, would provide a better short and intermediate term solution. VA Power refused all compromises, denying the positives and possibility of dry casks, and contended that Surry would close if not granted their unconditional right to transship. The CCLC worked with Louisa County in bringing an NRC intervention, followed by VA Power's suit to overturn a County ordinance against storage of outside nuclear waste, and simultaneously worked with VA Power to lobby Congress and the NRC to approve the first use of dry casks at Surry, which prevented unnecessary radioactive shipments. The CCLC has also been involved with the following issues: high and low level waste storage; proposed MOX use at North Anna; environmental monitoring; dry cask storage at North Anna; worker health; community health; energy awareness; and many more issues. The CCLC negotiated and wrote an agreement between the County and VA Power which, among other items, requires an annual public meeting; the CCLC has participated in this meeting every year.

Jerry Rosenthal serves on Louisa County's North Anna dry cask committee, being the only non-elected non-politician to serve on any Board of Supervisor's committee.

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A.S. Kugler (ASK1)*

#### GENERAL COMMENTS:

These comments are in addition to, and complement, the statements I made on October 18, 2001 at the public meeting in Louisa.

I appreciate the openness and willingness of the NRC facilitator and staff to suggest that these additional notes and clarifications be sent and added to the record.

**GENERIC ENVIRONMENTAL ISSUES:** More than anything else, the concerns surrounding generic safety and environmental issues at nuclear plants are the most troubling. First and foremost are the issues of high and low level radioactive wastes. It is philosophically impossible to divorce the matters of waste from the operations of the plants or from the consideration of license renewal for extended operation. One cannot logically say that this matter is being taken care of in another venue when it clearly is not; in spite of repeated attempts by the NRC, the Congress, the nuclear industry, the DOE, the DOD, and others over many, many years, there is not, nor will there be in the near future, a permanent repository for the tons of high level wastes that are already stored and continue to be generated annually by this and other nuclear power plants. Because there currently is no approved off-site storage for the high level wastes, and even under the most optimistic forecasts of the NRC and utilities, these wastes will not be completely moved by either the original end date of the license, or even by the new end date (if the renewal is approved), the multiple matters of the storage of these wastes on site must be considered. Further, logic dictates that no renewal should even be considered unless and until the ultimate disposal has been approved and the facility(ies) open and operational. To ignore this fundamental issue in this relicensing matter is a fundamental flaw in the process.

Again, one must consider the low level wastes that are stored on site and continue to be generated. The Congressional mandate for the radioactive material generating states to band into regional compacts has been reduced to a shambles in the case of Virginia and the North Anna Power Station. There is no compact, no agreement, no plan. Barnwell has set a cut off date. Hundreds of tons of low level waste sit next to Lake Anna (mostly in the form of the old discarded generators) without a reasonable expectation of how, where, or when they will be disposed of properly.

When one considers that the wastes generated here will be a threat to human life and the environment for over 10,000 years, one must put that in some perspective. Known human history is only three thousand years old. No society, no government, no political system has ever continued intact for more than five hundred years, and most last only a few hundred. How can you, as a government agency, or as scientists, or as human beings, be so presumptuous as to assume that our government, our technological society, our value system, will continue unabated for 10,000 years? Or have you figured out a way to safeguard these wastes from abandonment, ignorance, deliberate tampering, or deliberate misuse. Our knowledge of the earth's environment and activities is in its infancy; we have accurate monitoring information for only a few centuries and our understanding of the earth's processes is based on limited information and conjecture. We cannot even accurately forecast the weather more than a week out, and yet, you are designing storage sites based on your "guesses" as to what has happened over the last million or so years and, using a uniformitarian

approach, extrapolating that out for the expected life of the storage facility. This is bad science, and our grandchildren and their grandchildren will pay for your arrogance and the short term greed of the nuclear industry.

Since there have been no commercial plants which have operated more than 35 years, any speculation on how or what might happen is just that -- speculation. Again, since there is no rush (the licenses do not expire for over 15 years), why speculate and take chances when waiting five or seven years will not threaten electrical supply or the utility in any way. In fact, Dominion (owner of VA Power and North Anna) is aggressively building gas fired plants (as they own natural gas companies doing exploration, production and transportation). They currently have enough excess electrical generating capacity to withstand the complete shutdown of both North Anna and Surry. The question arises, why rush when there is no need?

Nuclear proliferation is a crucial generic issue. The US government is rightfully concerned with plutonium production and its potential catastrophic effect on our country. How much plutonium will this plant produce in an additional 20 years of operation? North Anna is intimately tied with Russia (as a partner in the MOX program), and Russia is our greatest threat of plutonium contamination, terrorism, nuclear war, and nuclear blackmail! Check the records of the plant and see how many Russians have come through North Anna. It would only be prudent to investigate and report on matters concerning general proliferation in the context of license renewal.

There currently exists a national debate on overall energy policy. Why extend the life of these plants if the debate results in a decision that there are better, safer, more economical ways to generate or conserve energy? Why the rush now?

Other generic issues involve safety, and if and when there is an accident or terrorist attack, exactly what would be the environmental effect of a release. Any environmental study must include the possibilities of a substantial release of radioactivity due to: 1) large commercial or military airplane smashing into the concrete dome and cracking it, pouring burning jet fuel into the containment building; or the plane crashing into the control room; or the plane crashing into the storage pools or the dry cask facility; 2) multiple terrorist groups attacking the facility from land, lake, and/or the air; suicide terrorists; 3) earthquake greater than 6.5 on the Richter scale, and its effects, specifically on the storage pools which are on a known earthquake fault line; tornadoes; and 4) internal sabotage. How well prepared is Louisa or Virginia to handle an accident? Will we lose hundreds of volunteer fire and rescue workers and plant workers like Chernobyl? Will our land and water be turned into a radioactive isolation zone?

#### SITE SPECIFIC ISSUES:

MOX -- VA. Power had been asked at one of the annual meetings if they planned to use MOX fuel at North Anna. W.R. Matthews, then Station Manager and now Senior Vice-President, Nuclear Operations, wrote to the Board of Supervisors and to me, specifically stating that they would not use MOX. Within two years they reversed course and signed with the DOE, Duke and Cogema to participate in the US MOX program at North Anna. Subsequently they announced they were dropping the MOX program for North Anna. In a meeting of the dry cask committee, representatives of VA Power admitted to me and members of the Board of Supervisors that they only dropped

the MOX program for public relations reasons in order to satisfy the public and regulators in Connecticut while they were buying Millstone Nuclear Power Plant. They have not ended their contractual agreement with the DOE yet. With a clear message that VA Power is untrustworthy on this specific issue, MOX must be considered in this license renewal. The releases in the event of any accident would be different if MOX were being used; storage issues, in both the pools and the dry casks, are different. The long term effects on the core, including hot spots and extra plutonium in the rods, must be considered. Without going into greater scientific detail (all of which is easily available), MOX considerably alters both operations and potential accidents.

SEPTEMBER 11 -- The tragic events of September 11, 2001 are directly related to this license renewal. It is clear that terrorists (domestic as well as foreign) have the capability, knowledge, resources, and skills to carry out large scale attacks on specific targets. It is well known that nuclear power plants are an ideal target -- they are large and visible, and any significant damage could have catastrophic results. North Anna is only 65 miles from Dulles Airport and about that from Richmond International Airport. In addition, there are several other smaller commercial airports nearby -- in Charlottesville, in Orange, and even one in Louisa. In addition there are several military airbases in the area. In addition to the potential for damage from the air, there are threats to North Anna in other areas: an attack on the dam which would remove the cooling waters as well as destroy the downstream homes, businesses and farms; multiple terrorist groups attacking several areas of the facility (i.e., dam, storage and operations); use of biological or chemical weapons to disable the staff at the plant; and many other considerations. These are not science fiction, nor are they far fetched. It has happened, and there are constant threats that terrorists will strike again. For an environmental analysis of the effects of this type of attack to be useful, it must consider a worst-case scenario, with the effects on the Lake, downstream waters (North Anna River, York River, Chesapeake Bay), and downwind localities in all directions (so must include Louisa, Charlottesville, Richmond, Culpeper, Fredericksburg, even Washington, D.C.), and must include estimates of damage (dollar, life, property) and short, intermediate and long term effects. The head of the NRC said everything must be considered, and it is only appropriate to consider these possibilities at a time the utility is asking for license renewal.

AGING OF INFRASTRUCTURE -- Because North Anna has already had problems with aging wires (prompting a recent shutdown), every internal structure, both fixed and operational, should be carefully examined. Please compare with all plants over 40 years old, or are there any?

HIGH LEVEL WASTE STORAGE -- There are earthquake fault lines under the storage pools. What would happen if there were an earthquake and the pools leaked? Were the pools built to last this long? with how much fuel in them (the amount of the stored fuel has quadrupled, at least)? What are the effects of aging, heat, radioactivity on the general structure, on the concrete, on the active and passive systems?

**DRY CASK STORAGE** -- The County and VA Power have an agreement concerning the use of dry cask storage. The County may deny further pad construction. If there is no place to put the high level wastes, is it prudent to approve license renewal? How much space would it take to hold all the wastes if there is no permanent repository? Is there space available? Where? What would happen if a plane hit the dry casks? What about dynamite in a truck blowing up in the ISFSA (Independent Spent Fuel Storage Area)? How is security there compared to the operations area? What would happen if a cask were cracked and dumped into the Lake?

**LOW LEVEL STORAGE** -- With north Carolina dropping out, the Southeastern Compact is dead. Barnwell has put an end date on accepting out of state rad waste. Where will these wastes go? When? When will the generators be cut up and disposed? What would be the effect if a tornado hit the stored generators and threw them into the Lake?  
Is any low level waste now being disposed of in the local landfill? How much? What are the environmental effects?

**DOE TAKEOVER OF THE WASTES** -- There has been open discussion, in light of the federal government's failure to provide an environmentally safe permanent repository for the spent fuel, that the title of these high level wastes be given to the DOE and the DOE be responsible for the wastes on site. This matter must be seriously considered. The DOE has an unblemished record of failure in dealing with all matters nuclear. Every facility has serious environmental problems. Granting a license renewal to the utility, with the possibility of the DOE operating on site, is very, very, very risky.

**POSSIBLE SALE OF THE PLANT** -- There is an ongoing consolidation in the nuclear industry. Again, rushing into license renewal on the assumption that this plant will be operated by this utility is not logical. Perhaps the license renewal could be contingent on this utility continuing its ownership and operations, and if there were a sale, the new owner must apply for extended operations.

**NEED FOR INDEPENDENT MONITORING** -- There exists a need for independent monitoring of all environmental matters -- air, water, lake bottom, vegetation. In addition, there should be independent monitoring of workers' health and community health (epidemiological studies over time). These should be funded by the utility and overseen by completely independent (not utility or state or federal) professionals. This requirement in a license renewal will help provide greater public trust in the process. Has there been problems in the past? YOU BET! Example: the Louisa Board of Supervisors visited the plant and all the warning buzzers were turned off after the visitors were inadvertently exposed to radioactivity which would have sent off the buzzers. The buzzers were turned off "so not to worry these people"!

**PEBBLE BED REACTOR** -- There has been talk already that Dominion is interested in putting a pebble bed reactor at North Anna. This matter should be considered (and hopefully rejected) in any possible license renewal of the existing Westinghouse reactors.

**SOCIOECONOMIC FACTORS** -- A study should be completed to show the composition of the workers at North Anna in comparison to the general population. Some parameters -- race, income, age, gender, education, place of birth -- and compare this with the top 10% of the income bracket at the plant and with the top 25% and with the entire contingent of workers and to the population (Louisa, Spotsylvania) as a whole. This information will be most informative.

Many of the speakers praised VA Power for its positive economic effects on the community and the taxes paid. What would be the effect if the plant did not get a license renewal? How would the County budget be affected? What would happen to land and house values? On the same course, what would happen if there were an accident at the plant? What would happen to land and house values? How much insurance does VA Power have, and who and what would it cover?

#### **FINAL THOUGHTS**

The failure of the NRC to maintain its Website in light of Sept. 11 is a significant issue, both in terms of public access and information, and in that if a web site is a potential problem, how much more so is a nuclear plant!

Please postpone any further consideration of the license renewal in light of three main issues: 1) Time is not critical in this relicensing, whereas getting more and better information on many of the matters spoken to above is most important. 2) Large centralized power, and nuclear power in specific, is particularly vulnerable to terrorism, the potential effects of which must be carefully considered. 3) Dominion has ample reserves of generating capacity, and more could easily be added via gas fired turbines, so there is no threat of loss of electricity.