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To: Dyer, NRR

AUTHOR: Chad Simpson

AFFILIATION: SC

ADDRESSEE: J. Dyer

SUBJECT: Catawba nuclear power station.....MOX fuel lead test assemblies ....

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September 22, 2004

**COPY**

Chad Simpson  
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Rock Hill, SC 29732  
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J.E. Dyer, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Dear Director:

Thank you for your letter of Sept. 15, 2004, in response to my letter to Dr. Nils J. Diaz of Aug. 10, 2004.

I mean no disrespect, but how can I trust the federal government to do its job and keep me safe when it can't even fill a five-man Commission? As I gather from various reports, there is dissent among NRC staff about various issues related to the MOX plan, and I can't help but wonder if the Commission had two more members, would there also be more dissent within it? Frankly, I think that a body making such momentous decisions about our country's future ought to be at full-strength while doing so.

I'm not sure that I care why the Commission is missing two members, but I bet I can guess. It's the same reason why so many other federal government posts remain vacant: because the two dominant political parties can't get along and can't make joint decisions. Despite who says who is to blame, the fact remains that the federal government, led by its elected officials, is growing more dysfunctional on more issues because those officials are working harder against each other than they are together for the common good of the people they represent, like they're supposed to.

On the morning of Sept. 11, 2001, as I watched the Twin Towers burn and collapse, my first thought was: somebody messed up big time, and they're going to lose their job. And my second thought was, as I watched the Pentagon belching smoke: somebody's going to pay for that, big time, even if we have to pull them out of a line-up and drag them into war kicking and screaming. At this point, I consider those two predictions to be about half-right. As I consider the Sept. 11 Commission's conclusion that the government's responsibility for Sept. 11 was in its "failure of imagination."

As for my responsibility, as an average U.S. citizen, the best I can do is to be aware – and imaginative – and to speak up if I see or sense something. And what I see and sense here, with this plan, is what I would call a "failure of public process."

I challenge you to find 100 people (who don't work in the business or hold a Ph.D.) within a 100-mile radius of the Catawba Nuclear Station, or even 10 people in my zip code, who could answer even basic questions about the MOX fuel plan, much less speak to the deeper geopolitical issues involved. In short, we have no idea what you guys are talking about, much less a clear understanding of the doorway that Duke is preparing to open at Catawba. As for myself, I have yet to find in the public record answers to a number of questions that I have about the proposed project.

Allow me to state that I think the Cold War build-up of nuclear arsenals between the U.S.A. and the U.S.S.R. will most likely be recorded in history as a "failure of epic proportions," in terms of the diplomacy, stewardship and just plain common sense among the leaders of those two nations. It truly was madness.

And for these two nations, among others, to conduct that build-up with not only no intention whatsoever to use any of those weapons, but absolutely no idea of how to adequately protect and/or dispose of them over the very, very long-term haul, well, that's just a plain old "failure of foresight," but one which insures that hundreds of future generations will probably have to maintain the radioactive waste that we created in the 20<sup>th</sup> and 21<sup>st</sup> centuries.

Now, I like electricity as much as the next guy, and I like it even more when it's cheap, stable and provided professionally by a company of Duke's caliber. And like most people, I would say, who live near a nuclear power plant, I am mainly glad that it's not a coal-fired plant. Even though it seems relatively clean and stable, I can't say that I really understand nuclear energy. I definitely don't understand the physics and chemistry involved in converting weapons-grade plutonium into fuel for domestic commercial reactors designed to burn uranium, and I most definitely don't understand what it means for me and my family.

Part of that is my own fault for being ignorant, I think, but part of it is the fault of the federal government for not adequately informing the public about this issue and for not adequately supporting the public process, especially the right to dissent and be heard when one of the most important global issues of our time is being attempted to be solved in my backyard.

The Sept. 12, 2004, edition of The (Rock Hill, S.C.) Herald stated that, based on Duke's computer simulations, the NRC concluded that an accident with four MOX fuel test assemblies at the Catawba Station would not be "significantly more dangerous" than a uranium accident, and that the NRC issued a "finding of no significant hazard," which allows Duke to move forward with the testing – following a 30-day public comment period that expired Aug. 12.

According to The Herald, the NRC received two comments during that 30-day period, among millions who live within fall-out range of the Catawba Station.

Is that because virtually none of us good Southern folk down here care about what Duke, its "consortium," and the U.S. Department of Energy are up to at Catawba, or is it because we simply don't know or comprehend? Or maybe we were just too busy trying to put food on our tables that we couldn't find the time to sit down and write a letter to the NRC during one month this past summer – after reading up on the issue.

The Herald reports that NRC Spokeswoman Sue Gagner said that "the NRC staff will determine if it needs to respond to the two comments," and that Duke "had hoped for no comments ... [so] Duke and its consortium could have proceeded more quickly with the test even though the licensing changes were not given full regulatory approval." The Herald goes on to say that Duke sent the NRC "additional and amended information," presumably after the Aug. 12 deadline had passed.

So my first question is this: how can due public process occur when only one side gets to talk? No points for a 30-day window on an issue that was decades in the making, and will take decades to un-do. The fact that only two people commented in that window is a mockery of the democratic process.

Who is ultimately responsible and accountable for this test? I hope it's not the Duke engineer quoted in The Herald as comparing the dangers of plutonium to the dangers of gasoline. Isn't that comparable to comparing the destruction of a plutonium bomb to the destruction of a Molotov cocktail or a napalm bomb?

Who is providing independent oversight of this test? Doesn't the federal government have a vested interest in this plan? Can the NRC effectively regulate, and if necessary, censor the DOE? Is Duke's "consortium" equally liable under U.S. law?

How does anybody know for sure how MOX made from weaponized plutonium will react in the core, or in an accident, based on a computer simulation? Has this ever been done anywhere else? Is this MOX from weaponized plutonium as "absolutely" safe and desirable as the same Duke engineer who compared plutonium to gasoline says it is? How can I trust a company when I don't know what it's doing, or why?

Obviously, there is a profit motive for Duke. What kind and how much? Can I expect to see my electric bill decrease? By how much, and over what period of time? Is there a plan to market the region's cheap and plentiful electricity to high-tech industries and manufacturers? Have there been studies on what kind of effect a MOX plant will have on local economic development efforts, population growth, tourism, cancer rates and quality of life issues – or any other issues – for local residents?

If we did indeed win the Cold War, then why is Russia dictating how we will dispose of our bombs, and when? After all the tax dollars we spent and the lives we sacrificed to topple the Soviet Union, why are we now taking orders from the Russians?

What was the federal government's original plan for disposing of its old bombs? Taking them apart and storing them at a federal repository in Nevada? Why did that original plan change? Who changed the plan, and how many times did they change it over how many years? What's the rush? Why does Duke want to "proceed quickly" with this test?

Is burning the old bombs to boil water to create electricity really the best idea that we could come up with to get rid of the old bombs? As U.S. Rep John Spratt states in The Herald: "There is a lot of energy potential in this weapons material."

So much energy, in fact, that it seems wasteful to me to use it all up – some 34 metric tons – just to light a few trillion light bulbs. Is there no other way to use that energy more efficiently, and more safely? If not now, then perhaps in the future? Would there not be a way to use that energy to power future space ships? Or more efficient power plants? Or any number of as-yet-unrealized ventures that could open the doorway to the next evolution of human kind?

What really will become of the radioactive waste generated from burning the MOX fuel? Is the waste from weaponized MOX more radioactive or more dangerous than the waste from uranium? Is the waste going to Nevada, or staying in South Carolina? Or does that depend on who happens to be in office at the time? Does anyone

know for sure where this waste will definitely be for the next 20,000 years, and if not, how can we go forward with this plan? Isn't that similar to building a bunch of bombs that you never intend to use and don't know of how to dispose?

Per the FAQ page on the NRC's Web site, how can Duke truly have the "responsibility for ensuring that the facility is designed, constructed, and operated safely," if the DOE has already indemnified Duke? How can you simultaneously be both responsible and indemnified? What does that mean?

How does the DOE expect to ship this material half-way across the world and back again, and then across the country's highways and railways, without drawing the attention of a terrorist? While the containers may be able to withstand being dropped 30 or 40 feet, can they withstand a direct blast from 300 or 400 pounds of dynamite? And can a convoy protect itself and its cargo against 30 or 40 soldiers?

And finally, even though the NRC's recent "finding of no significant hazard" concludes that an accident at Catawba with four MOX fuel rods would not be "significantly more dangerous" than a uranium accident, did the NRC consider whether such an accident would be significantly more likely with the MOX fuel rods, or without?

In conclusion, I ask again that the NRC continue accepting public comment, not only for the test assembly, but for the proposed project as a whole. As Duke continues to provide the NRC with new information, the public has a right to review that information and challenge it if it is wrong or incomplete. I understand that a number of environmental organizations have filed challenges against the plan; at least one NRC staff member has filed a Differing Professional Opinion on the MOX safety issue; and a number of NRC staff have dissenting views on chemical safety issues. I also know for a fact that there are other individuals, including Duke staff at Catawba, who question the safety and wisdom of this plan. I ask you to continue listening to them, and to us.

I thank you for your consideration, and for your kind letter of Sept. 15, 2004. I hope that my response within seven days from receipt of your letter falls within the "reasonable time" that NRC staff will consider any further comments.

Sincerely,



Chad Simpson

P.S.: The ADAMS number ML030760734 that you referred me to led me to a dead link: "The page cannot be displayed."

cc:

/ Dr. Nils J. Diaz, Chairman, U.S. Nuclear Regulatory Commission  
U.S. Rep. John Spratt, U.S. Congress  
Mayor Doug Echols, City of Rock Hill  
Editor Terry Plumb, The Herald



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

September 15, 2004

COPY

Mr. Chad Simpson  
1068 Wendy Road  
Rock Hill, South Carolina 29732

Dear Mr. Simpson:

I am responding to your letter to Dr. Nils J. Diaz, Chairman, U.S. Nuclear Regulatory Commission (NRC), dated August 10, 2004, which was in response to the NRC staff's notice that was published in the *Federal Register* on July 12, 2004, "Notice of Opportunity To Comment and Proposed No Significant Hazards Consideration Determination." That Notice is related to the proposed use of mixed oxide (MOX) fuel lead test assemblies (LTAs) at Duke Energy Corporation's (licensee) Catawba Nuclear Station, Units 1 and 2 (Catawba).

Your letter describes your own general responses to the issue of the proposed use of MOX LTAs at Catawba and asks that the 30-day comment period provided in the notice be extended. Your letter did not provide a basis for your request to extend the comment period. The NRC staff does not intend to extend the comment period for that specific notice; however, the NRC staff will consider any further comments if they are received within a reasonable time.

Your letter also stated that you want to know more about the issue. The licensee's letter to the NRC staff dated February 27, 2003, Section 5.4, contains a description of the United States government's participation in the excess weapons-grade plutonium disposition program. Included in this discussion is the following statement from the Department of Energy:

"The fundamental purpose of the program is to ensure that plutonium produced for nuclear weapons and declared excess to national security needs (now and in the future) is never again used for nuclear weapons . . ."

The licensee's letter may be obtained electronically from the NRC's Agencywide Documents Access and Management System (ADAMS) Public Electronic Reading Room on the Internet at the NRC Web site, <http://www.nrc.gov/reading-rm/adams.html>. See ADAMS number ML030760734. Additional information may also be obtained from a website that the NRC staff maintains for the overall MOX program at <http://www.nrc.gov/materials/fuel-cycle-fac/mox/licensing.html>. This website includes the following questions as well as other information:

- What is MOX?
- Is MOX fuel currently produced in the U.S. or elsewhere?
- What is the NRC's regulatory responsibility for MOX?
- How does the uranium fuel cycle produce depleted uranium?
- How is MOX fabricated?
- Would MOX fuel be used in reactors in the same way that uranium fuel is now used?

C. Simpson

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- What is the difference between weapons-grade plutonium and reactor-grade plutonium?
- Would MOX fuel be reprocessed? How would used MOX fuel be stored?

You can be assured that the NRC staff will not issue any authorization for the use of MOX fuel at Catawba until we have adequate assurance that all requirements for the safe operation of the Catawba plant will be met.

I trust that this information is responsive to your request for information on the use of MOX fuel at Catawba. If you should need further information in regards to the proposed use of MOX LTAs at Catawba, please contact me or Mr. Robert Martin, the NRC staff's Project Manager for Catawba at 301-415-1493.

Sincerely,



J. E. Dyer, Director  
Office of Nuclear Reactor Regulation

FAX: 301-415-8333