

Mendiola, Doris

Subject: FW: Public Comments re: Docket ID NRC-2012-0001 [SEIS for proposed Callaway 20-year license extension]

From: Kevin Kamps [mailto:kevin@beyondnuclear.org]

Sent: Thursday, April 10, 2014 5:44 PM

To: Fells, Carmen; Gallagher, Carol; Bladey, Cindy; OPA Resource; Brenner, Eliot; McIntyre, David; OPA4 Resource; Dricks, Victor; Uselding, Lara; CHAIRMAN Resource

Subject: Public Comments re: Docket ID NRC-2012-0001 [SEIS for proposed Callaway 20-year license extension]

Public Comments re: Docket ID NRC-2012-0001

Submitted via email to:

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April 10, 2014

**PUBLIC COMMENTS BY KEVIN KAMPS, BEYOND NUCLEAR
TO U.S. NUCLEAR REGULATORY COMMISSION
ON DRAFT SEIS FOR CALLAWAY ATOMIC REACTOR
PROPOSED 20-YEAR OPERATING LICENSE EXTENSION**

I serve as Beyond Nuclear's Radioactive Waste Specialist.

NRC's Public Comment Submission Process Confusion:

I attempted to submit my comments by the April 10, 2014 deadline originally published in the Federal Register Notice. Checking the Federal Register Notice just now, posted online at <https://www.federalregister.gov/articles/2014/02/24/2014-03845/license-renewal-application-for-callaway-plant-unit-1>, the comment deadline is clearly stated as April 10, 2014, today. But when I just now went to regulations.gov, to submit my comments via that means, the website informed me that the comment period was closed on April 7, 2014. Regulations.gov, the only online comment submission means provided, will no longer accept public comments, even though the April 10 deadline has not yet expired.

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Add=C. Fells (Cxf5)

Kay Drey, a Beyond Nuclear board member and long-time watchdog on the Callaway atomic reactor, yesterday warned me about all this confusion. She told me that a later NRC OPA press release gave the comment deadline as April 7, 2014, which created a lot of confusion, as it contradicted the Federal Register Notice. She also told me that NRC OPA official Dave McIntyre told her that her comments would be accepted until April 10, as the Federal Register Notice indicates. However, he did not inform her HOW to submit such comments, given that the [regulations.gov](http://www.regulations.gov) site will no longer accept comments, as it states that the public comment period closed on April 7.

Given all this confusion, I request that you direct my comments – as well as my board member Kay Drey’s comments, if she chooses to submit them in this way – that I have emailed directly to you at this time, to the docket for this proceeding, Docket ID NRC-2012-0001. I request that they be included as timely submitted public comments, as I was going by the original April 10, 2014 deadline published in the Federal Register Notice, cited above, and planned to submit online at [regulations.gov](http://www.regulations.gov), an option that has now been denied me, in contradiction to the Federal Register Notice cited above.

I have cc’d this email submission of my public comments to all those NRC Staff listed in the Federal Register Notice associated with this Docket ID NRC-2012-0001, as well as NRC OPA HQ Staff, as well as NRC Region IV OPA Staff, and finally the NRC Chairman.

My Public Comments:

It is our opinion that circumstances in past two months in New Mexico have seriously undermined the assumptions that have given rise to the generic conclusion that atomic reactors like Callaway can be allowed to continue in operation, generate incredibly lethal high-level radioactive waste products from fissioning, and that there will be adequate measures in place to keep those deadly genes bottled up for the necessary million years into the future.

(The U.S. EPA, under D.C. Circuit Court of Appeals orders issued in 2004 to rewrite its Yucca Mountain dumpsite regulations, without an arbitrarily short 10,000-year cut-off period, in 2008 admitted that commercial irradiated nuclear fuel is hazardous for a million years. However, even this unimaginably long timeframe is too short, for certain radioactive poisons contained in irradiated nuclear fuel are hazardous for far longer than a million years. Iodine-129, for example, has a 15.7 million-year half-life, and thus a hazardous persistence of 157 to 314 million years. In this sense, 40 or 60 years of electricity from the Callaway atomic reactor is but the fleeting byproduct. The actual product is forever deadly high-level radioactive waste, for which we have no solution in sight. In fact, we don’t even know what to do with the first cupful of high-level radioactive waste generated by Enrico Fermi at his Chicago Pile-1 during the Manhattan Project on December 2, 1942. Nor do we know what to do with the first cupful of commercial high-level radioactive waste, first generated in 1957 at Admiral Hyman Rickover’s Shippingport, Pennsylvania prototype reactor.)

On February 4, 2014, assumptions of very low probability crumbled at the Energy Department’s Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico, when a fire in a large salt truck raged for hours, deep underground. Ten days later, an even more unlikely mishap nonetheless happened: radioactive wastes containing plutonium and other trans-uranic poisons blew through the WIPP ventilation system, traveling 2,150 feet up to the surface, contaminating at most recent count 21 workers at the surface, and spreading radioactive material, including americium and plutonium, into the environment, which has fallen out some distance downwind.

Nearly two months after the fire, WIPP remains closed, and what happened underground remains unclear. It is not known whether the leak and the truck fire are connected; the collapse of a ceiling of one of the facility’s storage chambers, and/or a waste-drum breach could be to blame for the radioactivity release. As DOE contractors have sent robot probes to explore WIPP’s subsurface shafts, tunnels, and chambers, and the first

DOE scout teams clad in triple-layered protection suits and Self-Contained Breathing Apparatus (SCUBA) are taking their tentative first steps underground to try to determine the root cause of the radioactivity release, the extent of subterranean contamination, and the risks associated with decontamination and potential “restart” of WIPP, the future of the world’s only operating high-hazard radioactive waste repository is uncertain.

The truck fire is believed to have started when diesel fuel or hydraulic fluid leaked inside a truck’s engine compartment. The fire consumed the driver’s compartment and the truck’s large front tires, which produced copious amounts of thick black smoke, prompting 86 workers to be evacuated. Six workers were treated at the Carlsbad hospital for smoke inhalation, and another seven were treated at the site. Workers have not been allowed back in the mine since.

The Feb. 14th radioactivity release compounded this prohibition on workers entering the underground all the more, apart from the small teams of scouts in thick protective suits mentioned above, at least until the extent of underground contamination is determined, as well as what will be required in the way of decontamination for worker protection during facility operations.

The Energy Department investigation report of March 14 concluded the truck fire could have been prevented had the contractor and Energy Department site managers bothered, after being repeatedly warned, to remove a buildup of flammable material in the mine, to regularly maintain trucks and equipment, and to correct emergency response deficiencies. Moreover, the automatic fire suppression system had been turned off before the fire.

Then there was also the radioactivity leak, which may or may not be connected to the truck fire. Among the various possible causes of the radioactivity leak is a waste drum breach, now under consideration. Waste drums containing trans-uranics generate hydrogen, methane, and other volatile gases, which, if unvented, can build up and breach their burial container. If exposed to an ignition source, such gases could also explode.

Concerns have also been raised about the possibility of a storage room ceiling or wall collapse. Eventually, when WIPP closes, sometime after 2030, the salt formation is expected to slowly “flow” and “grow,” and eventually seal off the drums of radioactive waste. But this was not expected to happen until long after the repository is filled and closed. If a collapse has already occurred, just 15 years after the facility opened, it will raise additional questions about WIPP’s ability to ensure engineered barriers and institutional controls will work for a 10,000 year period, as required by law and regulation. (As mentioned above, EPA’s court-ordered, current Yucca Mountain regulations, for commercial irradiated nuclear fuel and nuclear weapons complex high-level radioactive waste disposal, require a million years of hazard being taken into account under federal regulations.)

Environmental groups including Beyond Nuclear, Missouri Coalition for the Environment, and three dozen others, engaged as a coalition in the NRC’s pending “Nuclear Waste Confidence” Environmental Impact Statement proceeding, have warned, authoritatively, of the dangers of storing commercial irradiated nuclear fuel in bedded salt formations.

On behalf of this environmental coalition, Dr. Arjun Makhijani, President of Institute for Energy and Environmental Research, filed a formal declaration with the NRC on December 20, 2013 [<http://www.cleanenergy.org/wp-content/uploads/MakhijaniDeclaration.pdf>], in which he stated:

(p. 6/70)

“Disposal impacts are relevant because they are part of the waste confidence finding that a mined geologic repository is feasible. By definition of such feasibility, such a repository must meet reasonable health and safety standards. Moreover, we note that Table S-3 at 10 CFR 51.51 is invalid for estimating high-level waste disposal impacts. Among other things, its underlying assumption of disposal in a bedded salt repository

for spent fuel disposal was repudiated by the NRC itself in 2008. {citation: U.S. Nuclear Regulatory Commission. 10 CFR Part 51: [Docket ID–2008–0482]: “Waste Confidence Decision Update,” Federal Register, v. 73, no. 197 (October 9, 2008): pp. 59555. On the Web at <http://www.gpo.gov/fdsys/pkg/FR-2008-10-09/pdf/E8-23381.pdf>. “FR DOC # E8-23381” “Proposed Rules”}

(p. 9/70)

3.5. Proposed Table B-1 is inconsistent with another regulation that also makes a finding on the same subject: Table S-3 in 10 CFR 51.51.^[1] Table S-3 summarizes the NRC’s conclusion that the impacts of spent fuel disposal will be zero, based on the assumption that spent fuel will be disposed of in a bedded salt repository. Proposed Table B-1 contradicts Table S-3 by concluding that long-term doses could be as high as 100 millirem per year. But the NRC does not attempt to reconcile proposed Table B-1 and Table S-3; nor does it address the fact that in the 2008 Draft Waste Confidence Update, it repudiated bedded salt as a geologic medium for a repository.^[2] Nothing in the NRC’s response to public comments on this point negated this repudiation of the unsuitability of bedded salt for spent fuel disposal.^[3]

Dr. Makhijani’s conclusion is that “[t]he NRC’s understanding today is that radiation doses to the public could be well above the zero exposure assumed in Table S-3.” (Statement p. 41/70).

I understand that there is an ongoing rulemaking proceeding over waste confidence, but the point to be made here, in the context of the Callaway atomic reactor proposed 20-year license extension case EIS, is that there is serious recent new information that calls into question the Table S-3 assumptions that allowed Callaway to be licensed in the first place, much less granted a 20-year extension and allowed to generate hundreds of additional metric tons of forever deadly, highly radioactive irradiated nuclear fuel. The NEPA document for the 20-year license extension application cannot be considered thorough and fully-disclosing without scientific reconsideration of the assumption that the dangerous garbage from nuclear fissioning will not pose horrific hazards to less-informed and more vulnerable populations in the poorer (which are likely to be found in the overpopulated) world of the future.

The NRC itself has repudiated the science of WIPP, at least in regards to the disposal of commercial irradiated nuclear fuel, containing concentrated thermal heat loads which can deform and “fail” (collapse) engineered bedded salt chambers. Yet, NRC still nonetheless relies on that now-discredited and obsolete science for one of the fundamental driving rationales for commercial nuclear power. The time of reckoning commenced February 4. Even more significant nails were driven into the coffin lid of NRC’s false Table S-3 assumptions on February 14. NRC must heed these lessons and reject Callaway’s 20-year license extension. In fact, NRC shut force Callaway’s immediate shutdown, for lack of a foreseeable solution to the forever deadly high-level radioactive wastes it generates, its curse on all future generations.

^[1][Footnote 26 of Makhijani’s statement reproduced here:] The Draft GEIS acknowledges that “[t]he environmental impacts of portions of the uranium fuel cycle that occur before new fuel is delivered to the plant and after spent fuel is sent to a disposal site have been evaluated and are codified” in 10 CFR 51.51 and Table S-3. [U.S. Nuclear Regulatory Commission. Waste Confidence Generic Environmental Impact Statement: Draft Report for Comment. (NUREG-2157) Washington, DC: Waste Confidence Directorate, Office of Nuclear Material Safety and Safeguards, NRC, September 2013. On the Web at <http://pbadupws.nrc.gov/docs/ML1322/ML13224A106.pdf>. Page 1-22)]

^[2][Footnote 27 from Makhijani statement reproduced here] U.S. Nuclear Regulatory Commission. 10 CFR Part 51: [Docket ID–2008–0482]: “Waste Confidence Decision Update,” Federal Register, v. 73, no. 197 (October 9, 2008): pp.

59555. On the Web at <http://www.gpo.gov/fdsys/pkg/FR-2008-10-09/pdf/E8-23381.pdf>. “FR DOC # E8-23381” “Proposed Rules”).

^[3] [Footnote 28 from Makhijani reproduced here] U.S. Nuclear Regulatory Commission. “10 CFR Part 51: [NRC–2008–0482]: Waste Confidence Decision Update,” Federal Register, v. 75, no. 246 (December 23, 2010): pp. 81043 and 81044. On the Web at <http://www.gpo.gov/fdsys/pkg/FR-2010-12-23/pdf/2010-31637.pdf>. “FR DOC # 2010-31637” “Update and final revision of Waste Confidence Decision.”]

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Beyond Nuclear aims to educate and activate the public about the connections between nuclear power and nuclear weapons and the need to abandon both to safeguard our future. Beyond Nuclear advocates for an energy future that is sustainable, benign and democratic.