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Joan Claybrook, President

July 10, 2003

Chief, Rules and Directives Branch
Division of Administrative Services
Office of Administration
Mailstop T-6 D 59
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

RE: DRAFT comments regarding June 3, 2003 Federal Register notice, page 33209: "Notice of Intent to Prepare an Environmental Impact Statement for the License Renewal of Nuclear Power Plants and to Conduct Scoping Process"

To Whom It May Concern:

Public Citizen continues to be extremely concerned about the license renewal process, and the prospect that the NRC should grant further approvals to any license renewal applications for any of the country's 104 commercial nuclear power plants. Simply put, Public Citizen is strongly opposed to the relicensing of any nuclear power plant.

Our general concerns regarding the inherent dangers and problems with nuclear technology not only remain, but since the tragic events of September 11, 2001, have greatly increased. We know that terrorists have considered targeting nuclear power plants as a form of attack. We also know, as the NRC has conceded, that U.S. nuclear reactors were not designed to withstand terrorist attacks of the scale and type as those committed on 9/11/01 and therefore it is questionable, at best, that a reactor would be able to endure a similar type of attack and not suffer significant damage that could result in a radiological disaster. The NRC should thoroughly evaluate the environmental impacts of a potential attack both in an update to the Generic Environmental Impact Statement and in the site-specific reviews of particular applications for license extension. For the NRC to continue to dismiss security-related contentions as a statistically incalculable probability and outside the agency's mandate would be irresponsible in the extreme. NRC environmental impact assessments should consider the security vulnerabilities of particular design and location features, on account of which extended operations at certain reactors pose unacceptable hazards.

The NRC should also reassess the vulnerability of nuclear power plants to more conventional attacks and internal sabotage, and the associated potential environmental impacts, in light of the reality that the facilities have had such a dismal performance record in advance-noticed "force-on-force" OSRE testing. (According to the Union of Concerned Scientists, nearly half the reactors tested between 1991 and 2001 failed to protect equipment necessary to prevent a meltdown against small groups of mock intruders, even under relatively lax test conditions.)

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Further, NRC's "findings" in Table B-1 of Appendix B to Subpart A of 10 CFR 51, regarding postulated accidents, should be clearly presented as "probability weighted" rather than the current misleading presentation. Also, the NRC should reassess the probability factors assigned to certain issues, in consideration of the fact that "improbable" disasters – such as the 9/11 attacks, the rusted hole in the lid of the Davis-Besse reactor, the Columbia space shuttle failure – appear in fact to be occurring with alarming frequency.

More importantly, NRC regulatory action should not be so singularly focused on probability-weighted risk assessments. Table B-1 purports that the consequences from severe accidents would be "small," which, according to NRC's definition therein, may be translated to mean "negligible." Based on this table, it appears that because the Commission continues to insist that an accident is so unlikely, then the consequences of such must necessarily be trivial. This is illogical, and the additional, unnecessary risks that the public face from the license renewal of nuclear plants should not be downplayed as though it were a game of Russian roulette with very good odds of survival.

Parallel to these assessments, serious attention must be given to the issue of emergency preparedness and evacuation plans for local communities surrounding nuclear reactors, in the event that a catastrophic accident or terrorist attack should occur. The recent brush with disaster at Davis-Besse and the clearly inadequate emergency and evacuation plans at the Indian Point reactor indicate that there are currently very real problems with reactors, reactor technology, licensees, emergency preparedness and NRC's ability to effectively regulate the nuclear industry. Yet, the NRC displays unchecked hubris in assuming that reactor structures and security are so very "robust," and the possibility of a catastrophic occurrence is so infinitesimally small, that the agency sees no need to impose any further "regulatory burden" upon licensees. We insist that if the NRC is to meet its primary mission to safeguard public health, more "regulatory burden" upon reactor licensees is essential. It is recklessly irresponsible for the NRC to even consider renewing the license for any reactor if these critical issues are not directly and substantively addressed.

Pertinent to the issue of whether or not the country's fleet of 104 nuclear reactors should have their licenses renewed for another 20 years - and their actual and potential environmental impacts - is the question of how safely they have operated thus far. How much does NRC know about their rates of deterioration, and what are the risks when particular components do deteriorate? Considering the close call at Davis-Besse, the answer is not nearly enough. This is particularly relevant to NRC's GALL (Generic Aging Lessons Learned) program to evaluate age-related degradation at reactors. It appears that new issues surprise the NRC (such as those at Davis-Besse, and South Texas 1) at a rate faster than old issues are closed (such as steam generator tubes). Nonetheless, the NRC is all too accommodating to the industry as reactor licensees put in applications many years in advance. Davis-Besse is a relatively young reactor, which began operating in 1978. It has recently been listed as a planned 2004 applicant for license renewal, despite the fact that its original 40-year license does not expire until 2017. Is it not ill-advised to consider license renewals on reactors that have not even been able to demonstrate an ability to function safely for their original license term?

Regarding nuclear waste issues, we question NRC's "findings" on the risks and dangers posed by nuclear waste that is produced at reactor facilities. For low-level waste storage and disposal, mixed waste storage and disposal, radiation doses, and offsite radiological impacts, the anticipated consequences are all listed as "small." Considering that substantial quantities of low-level waste are produced each year at nuclear

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power plants, and that the NRC is currently conducting a rulemaking which could allow massive quantities of radioactively-contaminated waste materials to be released without restriction and “recycled” (above and beyond the current “case-by-case” releases that NRC allows) into everyday consumer products, these assessments of “small” consequences are irresponsible. The NRC acknowledges that there are human health risks for any radiation exposures, and even NRC Commissioner Jeffrey Merrifield has stated that in these release practices “there is a potential that the radioactive component may be concentrated in the recycling process or that the material will be recycled in a form resulting in more actual contact with the general public.” Additionally, little is known regarding the synergistic impacts resulting from radiation exposures in combination with exposures to other toxics. The Commission nonetheless supports such a program, despite these risks and massive public outcry. The consequences from 20 additional years of operation and waste generation at 104 nuclear plants in conjunction with massive dispersal of wastes into the unregulated environment would certainly be quite significant.

Clearly any update to the GEIS must revisit the undesirable environmental impacts of expanding the stockpile of irradiated fuel at reactors across the country. Well before the end of their initial license periods, most if not all operating reactors have already inadvisably “reracked” spent fuel pools to cram in more irradiated fuel assemblies. The NRC acknowledged, in NUREG-1738 the potential for a self-igniting fire in densely-racked fuel pools if an accident or attack caused the water to partially drain. A recent independent report published in Princeton’s *Science and Global Security* journal (the “Alvarez study”) concluded that a terrorist attack on a high-density fuel pool could result in consequences “significantly worse than those from Chernobyl.” Meanwhile, allegations of quality control violations affecting a lead manufacturer of dry storage systems (Holtec) cast doubt on the ability of nuclear waste storage casks to perform according to their design specifications. In sum, the NRC’s assertion in the GEIS that, in effect, there are no environmental or other limits to the amount of waste that can be safely stored on site at reactors is indefensible.

The NRC’s assessment of offsite radiological impacts of spent fuel and high-level waste disposal, which assumes that the proposed Yucca Mountain repository will open, must also be revised. There continue to be problematic uncertainties in surmising the environmental impacts of this project over its lifetime. These uncertainties can be expected to be magnified if additional waste from 20-year relicensed reactors were somehow crammed into the proposed facility (a scenario that is illegal under current law), particularly since this was not anticipated by the Department of Energy (DOE) in the Yucca Mountain Environmental Impact Statement. Faced with such uncertainties, for the purposes of the GEIS, the NRC should apply the precautionary principle and conservatively assess risks both of dumping this waste in a repository and of indefinitely storing it onsite at reactors.

The related issue of transporting nuclear waste generated as a result of 20-year license extensions to a proposed repository or other off-site storage facility similarly deserves more detailed attention. The NRC should insist that the DOE provide detailed routing scenarios for transporting this waste, then evaluate the specific health, safety, security, and environmental justice consequences involved.

Finally, Public Citizen is extremely concerned that the license renewal process has thus far been primarily a rubber-stamping process, wherein NRC is not only accommodating to industry demands, but actually promotes the industry at every turn, and at nearly any cost, including public health and safety. Thus far, the NRC has approved license renewals for 8 nuclear facilities comprising 16 reactors, and it appears that NRC’s approval process is a rather perfunctory evaluation and little more than a bureaucratic formality that a licensee must tolerate to arrive at a predetermined conclusion, which is, invariably, approval. It is

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patently ridiculous that for the purposes of license renewals and the GEIS, the NRC has dispensed with the NEPA requirement to meaningfully demonstrate a need for the proposed action. Fundamentally, the various risks associated with extending operations at U.S. nuclear power plants are unnecessary and therefore unjustified. It is nothing short of farcical that the NRC has deemed these considerations outside the scope of its NEPA obligations.

Public Citizen calls on the NRC to reassess its generic findings for license renewal at nuclear power plants; to seriously consider the issues raised here, in addition to those raised by concerned reactor communities; and to fully regulate the industry, with maximum protection of public health and safety as the primary mission.

Respectfully,

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