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To the Director of the Division of Licensing  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

QUESTIONS AND COMMENTS ON THE DRAFT ENVIRONMENTAL STATEMENT (DES)  
related to PRIMARY COOLING SYSTEM CHEMICAL DECONTAMINATION  
AT DRESDEN NUCLEAR POWER STATION UNIT NO. 1, COMMONWEALTH  
EDISON COMPANY, MAY 1980.

The chemical decontamination of Dresden 1 is viewed as a highly profitable venture by Commonwealth Edison, representing \$300 million dollars of power over the remaining 15 years that the Dresden license would be in effect. To the NRC it seems an excellent opportunity to prove that excessively "hot" reactors can be returned to service. As noted on page - - following Table 3, a project goal is to "Develop and prove techniques usable on other reactors."

DRESDEN DECONTAMINATION NOT AN EXPERIMENT?

The NRC, in their response to Question 3, page 4, Appendix A, asserts that "The Dresden decontamination is not an experiment, it represents the application of a proven method of decontamination that has been specifically developed and tested before being used on the Dresden Unit 1 primary cooling system." While the use of NS-1 may be a proven method of decontamination on a laboratory scale, the results of a full-scale flushing out of miles of primary cooling system may not be one and the same thing, and the results unknown until the flushing-out and post-cleaning surveillance program have been completed. In this sense it is an experiment. Particularly with Dresden 1 where some inservice inspection requirements were waived for a considerable period of time.

Can it be said with certainty that one flushing (of approximately 100 hours) will do the job?

Or how long occupational exposure levels may be reduced to "acceptable" levels?

Or that the integrity of the primary cooling system will not be affected?

The NRC, in their response to Question 6, page 15, Appendix A, says that "there is no anticipated acceleration in the buildup of crud" after the cleaning, but notes in the same response that "in the future it is quite possible that, following the strong decontamination solution the utility may elect to use a weaker but more frequent decontamination process on line that is currently being developed under EPRI sponsorship by Battelle Northwest." This statement is indicative of the uncertainties surrounding the Dresden 1 decontamination experiment.

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## THE CASE AGAINST CHELATES

Chelates have the capacity to form strong complexes with radionuclides and to reduce, markedly, the adsorption capacity of soil and rock for radionuclides; to accelerate aqueous transport of radionuclides in the ground; and are extremely persistent in the natural environment. The migration potential of chelated radionuclides may be decreased when placed in a solid waste matrix and disposed of in a semi-arid disposal site but the fact remains that it is a dangerous if not unacceptable practice to bury radioactive wastes bound to chelates that are not biodegradable.

## THE STABILITY OF BEATTY, NEVADA AND/OR HANFORD, WASHINGTON?

Has either Beatty, Nevada, or Hanford, Washington accepted responsibility for the disposal of the Dresden 1 decontamination wastes? Why was this not finalized before issuance of the DES?

It is essential to know the length of time that radioactive wastes associated with the Dresden decontamination must be isolated from the environment in terms of the stability of the waste disposal site. The DES states that about 95% of the radioactivity expected will be in the form of cobalt isotopes with Cobalt-60 with a half life of 5.3 years the isotope of greatest concern.

The question about the possibility of transuramics was answered on page 3, Appendix A, to the effect that Com Ed was committed to measurement of them if they are present. We have heard, however, that Nickel-63 with a half life of 92 years may be present in the oxide layer and this is not mentioned in the DES. Is it expected, and if so to what extent?

There is a question of geologic instability at both the Beatty and Hanford sites. Hanford is about 120 miles from Mt. St. Helens and considerable movement of the earth's crust, evidenced in earthquakes and volcanic eruptions. The Hanford site has also been subject to considerable disturbance from the practice of "water mounding" which added to the problem of the "escape" of large quantities of liquid radioactive wastes into the ground, particularly since Plutonium had been complexed with a wetting agent in some instances which promotes its movement through the soil.

Mr. Cleve Anderson, testifying before the House Subcommittee on Environment, Energy, and Natural Resources on nuclear waste disposal (1977) said that over 2000 wells had been drilled with more budgeted to determine where the radioactivity that had escaped to ground had migrated in the ground water. The drainage channels flow toward the Columbia River.

Dresden 1 wastes are to be solidified but they can be affected by moisture and it is not difficult to imagine scenarios where chelated wastes might be vulnerable to dissemination while still toxic.

Beatty, Nevada is near a seismically active area, and only 50 miles from the Nevada atomic bomb testing grounds. The Beatty, Nevada site has had numerous problems with Governor List supposedly fed up with the dangers of radioactive wastes, the burden of taking care of other people's problems, and the lack of adequate inspection by the Federal Government.

## IS DRESDEN 1 REALLY NEEDED?

Dresden 1 was not designed to limit  $^{137}\text{Cs}$  occupational exposure of workers to what is termed ALARA, ~~2.4~~ for required inservice inspections as radiation levels

rose and the plant aged. It is a poor candidate for a decontamination experiment with the many uncertainties surrounding its clean-up.

The DES does not address sufficiently alternatives to the decontamination which would enable Com Ed to shutdown and decommission Dresden 1 immediately. We ask that this be done in the Final EIS with a discussion of Com Ed facilities, both nuclear and others (coal, oil, natural gas etc) and how they can be used effectively to compensate for the decommissioning of Dresden 1. Natural gas seems to offer an exceptional low-risk alternative to nuclear power at this time and far into the future while soft energy alternatives are being developed.

Our Society would appreciate a copy of the Final EIS when issued.

Yours sincerely,  
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