Director
Div. of Site Safety & Environmental Analysis
USNRC
Washington D. C. 20555

6-12-82

Dear Sir:

Attached are 7 comments on NUREG-0894, Skagit/Hanford DES.

John F. Doherty

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GCEDF Inc.

C002

GCEDF

COMMENTS ON THE DRAFT ENVIRONMENTAL STATEMENT (NUREG-0894)
FOR THE SKAGIT/HANFOR NUCLEAR PROJECT, DOCKET NO. STN 50-522 & 523

The Gulf Coast Environmental Defense Foundation Inc., of 4327 Alconbury Lane, Houston, Texas 77021, incorporated under the laws of the State of Texas, comment as follows on the DES:

GCEDF COMMENT 1

Site suitability for the several candidate sites in Section 3.2 of the DRAFT may be influenced by further activity of Mt. St. Helans volcano through ash deposition on cooling water sources and cooling towers. The DES should consider this factor by considering sites where past activity have had no influence and comparing them with those that have been previously effected by such ash.

GCEDF COMMENT 2

The DES is inadequate because it does not deal with an item on P. I-20 of the subject document, which is part of a DOE document on the Land Sale of Hanford Reservation property to Puget Sound Power and Light. There, it states, "Based on evaluations made for the WPPSS reactors, it is unlikely that plant construction or operation at the reference site would affect buried radioactive wastes on the Hanford site." (Emphasis supplied) Section 4.2.3.1 of the DES does not mention any effect on buried waste at Hanford through hydrology, but all the Appendix I DOE Report gives for guidance is that it is "unlikely", which could mean a broad range of things in probability terms. The FES should discuss this DOE brought up possibility, and give more precise probability terms or explain why it can be no more precise than the DOE report.

GCEDF Comment 3

In Appendix C, the following statement (p. C-6) occurs: "To illustrate: A single model 1000-MWe LWR operating at an 80% capacity factor for 30 years would be predicted to induce between 3.3 and 5.7 cancer fatalities in 100 years, 5.7 and 17 in 500 years, and 36 and 60 in 1000 years as a result of releases of radon-222. To this fuel cycle impact description, the following other impacts should be determined and added:

A) The range of number of fatal birth defects induced by fuel cycle radon-222, for each Skagit/Hanford unit at its projected capacity factor and for the licensing period under consideration when construction is completed (i.e. 40 years) for 100, 500, and 1,000 years.

B) The range of number of non-fatal birth defects induced by fuel cycle radon-222, for each Skagit/Hanford unit at its projected capacity factor and for the licensing period under consideration when construction is completed (i.e., 40 years) for 100, 500 and 1,000 years.

C) The range of number of non-fatal cancers induced by fuel cycle radon-222, for each Skagit/Hanford unit at its projected capacity factor and for the licensing period under considerstion when construction is completed (i.e., 40 years) for 100, 500 and 1,000 years.

GCEDF COMMENT 4

IN Appendix E of the DRAFT, the Staff points out (p. E-1) that the use of of the MARCH and CORRAL code produced lower estimates of predicted iodine for many of the dominant accident sequences. The DES is inadequate with regard to this use of MARCH because it does not say there are great reservations on the use of MARCH code. In the minutes of the ACRS Class 9 Accidents Subcommittee Meeting of May 21-22, 1981 (NRC Accession Number 8108280372) several members pointed out these deficiencies.

GCEDF Comment 4 (Contin.)

One member of the subcommittee indicated MARCH misuses classical heat transfer equations. A Brookhaven Scientist pointed out the code does not have predictive capability for core melt behavior, another pointed out 100 limitations of MARCH have been identified in a code evaluation program to be compiled by Sandia Laboratory.

GCEDF Comment 5

With regard to the use of the CORRAL code mentioned on page E-1 of the DRAFT, the DRAFT needs to indicate which CORRAL code was used. According to Dr. Kerr of the Advisory Committee on Reactor Safeguards, this code had not been validated one year ago, although it was published. (See: Minutes of the ACRS Class 9 Accidents Subcommittee Meeting of May 21-22, 1981, NRC Accession Number 8108280372 where this is stated.)

GCEDF Comment 6

The DES has (on p. 4-199) not given a complete picture of the releases of radioactivity from the March 28, 1979 accident at Three Mile Island. The environmental consultants for Metropolitan Edison Company, Pickard, Lowe, and Garrick estimated 10 million curies of noble gases were released in the first three days of the TMI accident, in a study titled: "Assessment ofOffsite Radiation Doses from the Three Mile Island Unit 2 Accident, TDR-TMI-116", and dated July 31, 1979. This is considerably more than "a few million" as in NUREG/CR-1250, Vol. 1. The Pickard, Lowe and Garrick measurments may also be more accurate because they used calculations based on measurements made in the auxillary building and fuel handling buildings and used a proportion to determine the releases from the plant stack. Other determinations did not do this and had no measurements because stack monitors went off-scale. Therefore, the discussion on previous accident releases should be modified to include the range of estimates of releases.

GCEDF Comment 7

The Staff Conclusions in Sec. 3.2.2.1, "Adequacy of Reconaissance Level Information", are inadequate because they are based on its"general knowledge of the Region of Interest."The NRC is required to make a full, good faith consideration and balancing of environmental factors in reaching a siting decision. (Environmental Defense Fund, Inc. v. Corps of Engineers,470 F.2d 1029,1042, 8th Cir. 1972) Here it appears the staff's knowledge is set down too little, (even for the shallow, reconnaisance level requirements at this stage) to reach the conclusion o site is environmentally preferable to the proposed (Hanford) site. Thus, the deficiencies in information noted should be remedied before a conclusion by Staff.

Thank you for the opportunity to comment.

Sincerely,

John F. Doherty

John F. Doherty
(for GCEDF Inc.)