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December 28, 2001

Secretary
U.S. Nuclear Regulatory Commission
Attn: Rulemakings and Adjudications Staff
Washington, DC 20555-0001

Subject: Comments Concerning Draft Supplement 1 to NUREG-0586, "Final Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities" (66FR56712, dated November 9, 2001)

Dear Sir or Madam:

This letter is being submitted in response to the NRC's request for comments concerning Draft Supplement 1 to NUREG-0586, "Final Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities" which was published in the Federal Register (i.e., 66FR56712, dated November 9, 2001). The NRC is proposing that this Supplement updates information in the existing 1988 GEIS relating to pressurized water reactors, boiling water reactors, and multiple reactor stations. Additionally, this Supplement goes beyond the 1988 GEIS by considering high-temperature gas-cooled reactors and fast breeder reactors. The NRC's intent is that this Supplement be used to consider, in a comprehensive and generic manner to the extent practicable, the environmental impacts of radiological decommissioning of nuclear reactor facilities by incorporating updated information, regulations, and analyses.

Exelon Generation Company, LLC (Exelon) appreciates the opportunity to comment. Generic and specific comments follow in Attachments 1 and 2, respectively. If you have any questions, please do not hesitate to contact us.

Very truly yours,

for

Michael P. Gallagher
Director, Licensing and Regulatory Affairs
Mid-Atlantic Regional Operating Group

Attachments

Template = ADM-013

E-RIDS = ADM-03
Add = M. Masnik (MTM2)

ATTACHMENT 1
Generic Comments on NUREG-0586 Draft Supplement 1

1. Exelon believes the proposed Draft Supplement correctly concludes that most of the environmental issues assessed result in impacts that are generic and SMALL for all plants. We reach this conclusion based upon our experience decommissioning one BWR (Dresden 1), two PWR's (Zion Station), one HTGR (Peach Bottom 1), and our observation of other industry decommissioning projects. We have not seen to date – and currently do not expect to find – environmental impacts different from those addressed and bounded by this Supplement to the GEIS.

2. Exelon continues to maintain that providing guidance, which addresses environmental issues generically, provides the highest standard the public at large can use effectively to challenge industry to return power plant sites to beneficial use upon facility retirement.

3. The Supplement properly addresses the ENTOMB decommissioning option. Issues related to the ENTOMB option after the facility has terminated its NRC license and entered the entombment period are outside the scope of this GEIS. Power reactor entombment is not construction of a LLW disposal facility – it is properly classified as a decommissioning scenario, which creates an assured storage facility for radioactive material to decay in place, until it no longer represents a hazard considering future public use of the site. The clear distinction between entombment as a decommissioning scenario and a LLW disposal facility may be found in the ability to reuse the site in the future for other purposes. Regulation governing LLW disposal facilities does not contemplate future use of the site, restricted or unrestricted. Future use of an entombed site will be dictated by the dose-based performance criteria found in 10 CFR Part 20, Subpart E.

4. The Supplement improperly addresses rubblization by stating it will require a site-specific analysis at the time the license termination plan is submitted. Rubblization should be addressed generically as a part of the decommissioning process. The NRC should continue to maintain that to the extent that 10 CFR Part 20, Subpart E dose performance criteria are met – and that decommissioning has been performed using the ALARA principal, rubblization has a SMALL environmental impact.

5. The Supplement incorrectly addresses the impact on the SAFSTOR scenario due to the time gap between cessation of operations and decommissioning activities. The Supplement expects the time gap will result in a shortage of personnel familiar with the facility when decommissioning activities commence. Our own experiences have shown us that both DECON and SAFSTOR decommissioning scenarios can be conducted in a safe and efficient manner. Regarding the familiarity of the facility at the end of licensed life, whether the plant begins decommissioning immediately or waits for some defined period – the most difficult aspect is retrieving records from the earliest days of operation. Recently retired facilities have taken the appropriate step of preparing a site historical assessment – documenting the operating years of the facility. This historical assessment will guide the decommissioning process whether it begins immediately upon retirement or 50 years later.

ATTACHMENT 2
Specific Comments on NUREG-0586 Draft Supplement 1

1. On Pg 3-17 there is a discussion of the advantages of the DECON alternative for decommissioning. One advantage of DECON is not discussed and should be. Generally speaking the shorted lived nuclides are easier to detect because of their beta/gamma emissions, versus the alpha emissions of longer lived nuclides. The difficulty of detecting the alpha emitters will increase analysis costs and increase the difficulty of performing surveys. Ultimately the cost of providing RP coverage and of performing the Site Characterization and Final Status Survey will also be increased.

2. On Pg 3-19 the discussion of the SAFESTOR option assumes that there is a savings associated with less Solid RW disposal costs. However they do not consider that the current NRC guidance for release of material includes a no detectable criteria. In order for the reduction of Solid RW to be achieved, significant quantities of plant materials would need to be released from the site. The current regulations do not support this assumption.

3. On Pg 4-9 the NUREG concludes (Sec 4.3.2.4) that the environmental impact of water usage will be small. In the evaluation they consider the anticipated reduction in water usage for cooling in the condenser. This conclusion appears reasonable, however the analysis should also consider the environmental effects of the loss of heat provided by cooling water discharged to a closed lake or pond system that is a habitat for aquatic animals and vegetation. Many nuclear facilities are on natural or man-made bodies of water making this environmental effect generic in nature.

4. On Pg 4-16 the NUREG concludes (Sec 4.3.4.4) the environmental impact of air emissions will be small. In the evaluation they did not consider that many sites use extraction steam to provide plant heat in the winter months. The shutdown of the reactor means that Aux Boilers will be operated for longer periods to provide heating steam. This needs to be considered in the NUREG or many facilities will need to address this issue in their PSDAR.

5. On Pg 4 –29 the NUREG (section 4.3.8.3) concludes that it is not necessary to update estimates for collective dose due to decommissioning activities. This is an important conclusion that is supported by the current range in collective dose that decommissioning plants have experienced. Any change to this conclusion needs to be well supported by actual data and needs to be thoroughly studied to identify all potential impacts.

6. Table 4 –1 on page 4 –30 is misleading. The totals given include 100 rem of transportation dose that is not tracked by the facility undergoing decommissioning. It also does not include dose incurred during construction of a Spent Fuel Pool Island or in support of a dry cask storage campaign. A footnote should be added explaining these differences.
7. Table 4-3 lists the decommissioning cost of Peach Bottom Unit 1 to be 54 million dollars (in January 2001 dollars). In our letter submitted on March 30, 2001, in accordance with

10CFR50.75 the decommissioning cost estimate for Peach Bottom Unit 1 reported in beginning of year 2001 dollars is 65.4 million dollars. Table 4-3 should be changed to reflect the latest cost estimate.

8. Table 4-4 lists the decommissioning cost of the high-temperature gas-cooled reactor in SAFSTOR (Peach Bottom Unit 1) to be 54 million dollars (in January 2001 dollars). In our letter submitted on March 30, 2001, in accordance with 10CFR50.75 the decommissioning cost estimate for Peach Bottom, Unit 1 reported in beginning of year 2001 dollars is 65.4 million dollars. Table 4-4 should be changed to reflect the latest cost estimate.

9. Table F-1 lists the total site area for Peach Bottom Unit 1 to be 620 acres. 620 acres is the total site area reported in the Peach Bottom Unit 2 and 3 Updated Final Safety Analysis Report. However, Table F-2 reports the total site area for Peach Bottom Units 2 and 3 to be 618 acres. Table F-2 should be changed to reflect the total site area for Peach Bottom Units 2 and 3 to be 620 acres.

10. Table I-3 incorrectly lists site flooding as the only accident analyzed for Peach Bottom Unit 1 in the documents referenced in Appendix I for Peach Bottom Unit 1. The additional accidents analyzed for Peach Bottom Unit 1 that should be added to Table I-3 are:
    - Release of helium coolant under containment breach (open penetration to containment) for accidents involving radioactive materials (non-fuel–related) on page I-9.
    - Fire inside reactor vessel under fire for accidents involving radioactive materials (non-fuel –related) on page I-10.

11. On page L-6 of Appendix L, line 4 refers to criticality accident monitoring requirements described in 10CFR7.24. Criticality accident monitoring requirements are described in 10CFR70.24. This typographical error should be corrected.

12. On page L-6 of Appendix L, line 17 refers to 10CFR50.73 as requiring a licensee event report within 30 days. 10CFR50.73 was recently revised to require a licensee event report within 60 days. This change should be made to Appendix L.

13. While the Supplement addresses two entombment options stating they have prepared as extreme cases to envelop a wide range of potential options, there should be additional language early in Section 3.2.3 ENTOMB clarifying that utilities are likely to develop entombment scenarios based upon their site specific needs.

14. All spent fuel at Dresden Unit 1 will be moved to dry storage on site by the end of the first quarter of 2002. This change needs to be reflected in Table 3-2.

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