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E-RIDS = ADM-03
Add = M. Harris (TEH)

United States Nuclear Regulatory Commission

A. Lester (ACL1)

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DEIS Comments for MOXFFF at SRS

May 14, 2003
from Peter James Atherton

FAX to: 301-415-5398

NRC,
NMSS,

Dear T. Harris:

Please accept these draft comments on the EIS for MOX. I only recently became re-involved with MOX & have had insufficient time to properly review the various ER's, CAR's, DSER's & DEIS to put forth a properly presented set of comments by the latest 5/14/03 deadline

1. Arbitrary deadlines appear to be the managing force behind the MOX safety review. I suggest that wherever possible, deadlines should take a back seat to safety, so that the public develops confidence that NRC is protecting them.

2. DEIS, ~~App. 1~~ chap 1; pg 1-18. The NRC commission order of 12/18/2002 (CLI-02-24) ruled that "NRC has no obligation under NEPA to consider intentional malevolent acts in conjunction with the licensing of the proposed MOX facility." I suggest that public health & welfare require NRC to be reasonable and consider malevolent external man-made events as a bounding security issue. The design of the MOXFFF should glean insights from terrorist

acts at the design phase so that important anti-terrorist design features are included in the construction of the facility. The environmental impact of a large fully fueled aircraft loaded with explosives crashing into MOXFFF is necessary so that the public knows about the danger. Plant design features could be a significant preventive / mitigative safety measure if included in facility design before construction begins. & suggest that NRC reconsider the environmental impact of facility destruction by a well planned terrorist act.

3. The terrorist act — The U.S.A. is at war. We have color codes (red, orange, yellow, etc) for various security levels of threatened terrorist acts. In any new construction involving potent radioactive materials, threatening terrorist acts require NRC consideration of the necessary preventive / mitigative features to protect public health & safety. It is suggested that NRC review the probabilities of happening of previous "incredible" events — Three mile Island #2 in 1979; Chernobyl in 1986, the N.Y. City twin towers in 1993 & again in 2001. The probability that these events would

happen in the manner in which they occurred (before they occurred) is very, very small - incredibly small. Yet, the incredible happened. NRC should awaken to the reality of today's environment & work to vigorously protect public health & safety. Worst case events from incredible happenings require NRC review & consideration in determining nuclear safety. Accordingly, it is suggested that the worst case scenario be evaluated for all possible events and accidents.

4. The MOXFFF appears to be an engineering experiment. Usually, prototype models of new designs precede a final design. The MOXFFF as it is proposed has no known predecessor in this country. While there are similar fuel fabrication designs in this country & experience with recycling in other countries, the proposed MOXFFF in this country is a trial with the local population placed at risk. While I am not suggesting that our engineers cannot safely design & operate such a facility, the NRC it is suggested should proceed with caution and not rapid abandon. Caution requires consideration of every measure needed

to protect public health & safety. Safety should take precedence over arbitrary deadlines.

5. The NRC is licensing MOX and is not licensing WSB or PDCF. MOX is generating chemical & radioactive waste, which is then transferred to unlicensed facilities for disposal. I suggest that the polluting history of SRS requires that an independent NRC get involved with the proper disposal of the wastes generated by MOX. Incineration, burial and transport of chemical and radioactive wastes ~~that~~ require NRC to become involved through the EIS in a proper outcome. NRC should reconsider the bounds of its EIS.

6. NRC should alternatively consider a self-sufficient MOXFFF with a WSB & PDCF totally separate & independent of the remainder of SRS. The necessary design changes should be included and reviewed at this time with a revised EIS.

7. Natural phenomenon - the earthquake. It is not obvious that the worst case earthquake would not devastate the current MOX design. If PSSC's survive the earthquake, non-PSSC equipment & structures might not

survive and their destruction could have an adverse impact on the PSSC's, assuming the PSSC's themselves survive. So the worst case earthquake could also cause explosions, spills, criticality accidents, fires and leaks of radioactive material. NRC should review this worst case scenario and its environmental impact.

8. Why are not accidents also viewed simultaneously with a hurricane, when the winds are fierced.

9. Transportation - Did NRC consider both fatal & non-fatal truck accidents? Why are "neutral weather" conditions and not the "worst case" weather conditions considered in an xport accident? What are the transportation risks on site at SRS?

10. Nuclear accountability - How are mox pellets accounted for? How many pellets are produced? What is the probability of theft? How are waste streams accounted for?

11. If there is an emergency response plan at SRS, where is the offsite emergency planning for the public. How is the public made

aware of an incident at SRS? Is emergency evacuation planned & practiced?

12. Pipes between facilities — what is the chance of a criticality event in a pipe? Does NRC have complete jurisdiction to review the scenario to ensure that enriched U & Pu are at safe levels in the pipes?

13. Why not ensure public protection from fire & smoke by using both sand & HEPA filters? Series or parallel connections could be considered.

14. DCS plans to use both preventive and mitigative measures in accident evaluations. A more conservative approach is to allow for the accident and mitigate the consequences while simultaneously designing to prevent the accident. Why is not this philosophy applied & the EIS consequences considered?

15. For airborn releases of radiation, in an accident the MEI is at the north SRS boundary. Yet the 1 year maximum dose is at the S-SW boundary. Why? For most of the year there are no prevailing winds at SRS. It appears there is no real "safe" direction

to evacuate to in the event of an accident. Emergency planning (EP) takes on a new meaning.

16. Is high alpha particle waste currently planned to be treated as HLW, LLW, mixed or what?

17. I was informed that the ECRR has published a 2003 set of recommendations on health effects of ionizing radiation exposure at low doses for radiation protection purposes. Regulator's Edition: Brussels, Jan. 2003. How does this information compare with what NRC uses? Which is valid?

18. It would probably help if some standard is used to quantify the terms "unlikely", "highly unlikely" & "incredible". Is NRC planning to associate quantitative criteria with these terms that meets some standard?

19. I have questions concerning the environmental impact that the worst case H_2 explosion could cause. What is its impact?

20. Are offsite radiation monitors planned to monitor radiation continually? ~~planned~~ What about on site? Please identify the capability to actually measure α, β, γ & (n) radiation

continually in & around SRS. What types of detectors are used; how frequently are they calibrated? Is the system automatic or manual? Where is this info maintained?

Mr. Harris, these 20 comments are all I have time for by this date. I hope that this helps "make your day!" Seriously though, there are issues that need NRC attention.

Thanks,

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planned copy: UCS, NIRS, GANE, BREDL, Sierra Club of Ga., Greenpeace, Public Citizen