

SAFETY EVALUATION
BY THE OFFICE OF NUCLEAR REACTOR REGULATION
ON THE PROCESS CONTROL PROGRAM FOR
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT 2
DOCKET NO. 50-261

1. INTRODUCTION

By letter dated January 22, 1986 Carolina Power and Light Company submitted a process control program (PCP) for the processing and solidification of wet radioactive wastes at the Robinson nuclear power plant. The PCP is intended to meet the requirements of technical specification 6.15.1. Action on the PCP does not require any change in the technical specifications.

2. EVALUATION

The Robinson PCP only addresses the processing and solidification of wet radwastes by qualified waste processing service vendors. There is no provision for processing wet wastes by the plant staff or for using plant equipment. This is acceptable provided the vendor is operating in accordance with an NRC approved topical report.

The general acceptance criteria are that the PCP contain the following:

- o A commitment that all liquid wet wastes shall be solidified prior to shipment offsite.
- o A commitment that containers, shipping casks, and methods of packaging for liquid wet wastes meet applicable Federal regulations, e.g., 10 CFR Part 71.
- o A commitment that radioactive wastes will be shipped to a licensed burial site in accordance with applicable Commission, Department of Transportation, and State regulations, including the burial site regulation requirements.
- o A general description of the laboratory mixing of a sample of waste to arrive at process parameters prior to commencing the solidification process.
- o A general description of the solidification process including type of solidification agent, process control parameters, parameter boundary conditions, proper waste form properties, and assurance that the solidification systems are operated within the established process parameters.
- o A general description of sampling of at least one representative sample from every tenth batch to ensure solidification and the action to be taken if the sample fails to verify solidification.

- o The provisions to verify the absence of free liquid.
- o The provisions to reprocess containers in which free liquids are detected.
- o If the solidification process is exothermic, what process control parameters must be met prior to capping the container?
- o Appropriate statements similar to those for liquid waste should be included for other wet wastes which could include filter sludge, spent powdered resins, spent bead resins, and spent cartridge filter elements.
- o A general description of the dewatering technique and control parameters for other wet wastes.
- o Provisions to reprocess the other wet wastes through the dewatering system if excess free water is observed should be included.
- o A general description for treatment of oily wastes which are to be transported offsite for burial should be included.
- o Sketches of the above systems.
- o A statement that ALARA considerations were addressed in all phases of the solidification process.

Where the processing is done by a vendor, however, not all these items need be included in the licensee's PCP. The information may be included in the vendor's topical report and PCP.

The Robinson PCP appropriately addresses the processing of all wet wastes, compliance with regulations and burial ground requirements, maintaining control over vendor operations on-site and QA/QC.

The Robinson PCP does not identify specific process vendors and does not provide descriptions of the processes. Thus it is the licensee's responsibility to ensure that each vendor is operating in accordance with an NRC-approved topical report and a PCP that contains the aforementioned information.

The Robinson PCP addresses the 10 CFR Part 61 requirements on waste form by committing to use only those vendors with waste form tests in progress or with results submitted to the NRC for review. This is acceptable until the NRC evaluations of the waste form data are complete.

The Robinson PCP does not address the 10 CFR Part 61 requirements for waste classification. The staff recommends that the classification program be included in the next revision of the PCP because otherwise the licensee has no approved way of meeting these requirements (that are imposed by §20.311). Even without this addition, the PCP is acceptable under current acceptance criteria.

3. CONCLUSION

Based on the above discussion we find that the licensee's Process Control Program meets the intent of Technical Specifications 6.15.1. Therefore, we conclude that it is acceptable for use where the processing is done in accordance with an NRC approved topical report.