DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 17, 1997

MEMORANDUM FOR: G. W. Cunningham, Technical Director

FROM: J. Kent Fortenberry / Joe Sanders

SUBJECT: SRS Activity Report for Week Ending January 17, 1997

Ray Daniels and Dan Burnfield were on site Monday, Tuesday and Wednesday reviewing site Deactivation and Decommissioning activities.

Operational Readiness Reviews at SRS - WSRC and DOE-SR seem to be working to avoid ORRs. Two examples where a Readiness Assessment is being pursued rather than an ORR are the H-Canyon Phase I restart and the initial start-up of the newly constructed Replacement High Level Waste Evaporator (RHLWE).

In order to restart H-Canyon (Phase I), WSRC must complete the implementation of a new BIO, a new Double Contingency Analysis (DCA), and revised TSRs. Implementation includes extensive updates to pre-op checklist and maintenance and operations procedures. In addition, WSRC must complete operator qualifications for this activity. However, WSRC maintains that H-Canyon is currently in an operational status and not in an extended shutdown. WSRC also maintains that there are no significant facility modifications which require revision to the Authorization Basis. WSRC is recommending that a Readiness Assessment be conducted instead of an ORR. DOE-SR has not formally approved, but has expressed general agreement.

Initial startup of the newly constructed Replacement High Level Waste Evaporator (RHLWE) facility is expected to occur late in 1998. For this start-up, WSRC has recommended that no ORR is required because the new evaporator can be considered a facility modification to the H- Tank Farm instead of a new facility.

In both of these cases, WSRC is stretching the intent of the DOE Order 425.1 (formerly 5480.31) to avoid the additional cost and schedule of an Operational Readiness Review compared to a Readiness Assessment.

Multiple Losses of the ITP Tank 48 Nitrogen Purge Ventilation System (NPVS) - The NPVS tripped off-line twice and had to be manually shutdown once over the last week. In all three cases, the appropriate LCO was entered. On Friday, January 10, the NPVS tripped following a momentary power loss during a diesel generator load test. The post-event critique determined that the procedure utilized for the load test had not been used recently and was not sufficiently reviewed prior to its performance for impacts on system operability.

On Sunday, January 12, instrument air lines became plugged with ice causing the tank vacuum control damper to open fully. The NPVS was manually shutdown to prevent it from tripping off-

line due to excessive tank vacuum. The facility has tried unsuccessfully in the past to resolve this problem of water in the instrument air lines. Current plans are to replace instrument air with nitrogen.

After the instrument air system was restored and the NPVS was returned to operation, an operator inadvertently keyed in 5% open rather than 45% open on the DCS for the nitrogen feed flow control valve. The resulting low nitrogen flow initiated a trip of the exhaust fan. As a result of this last event, manual inputs to the DCS currently require verification by a second operator.

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