Docket File

SEP 24 1974

Docket Nos. 50-508/509

R. C. DeYoung, Assistant Director for LWR-1, L

RESPONSE TO STANDARD REVIEW ASSIGNMENT, WPPSS NUCLEAR PROJECT NOS. 3 & 5, REVIEW OF PSAR CHAPTERS 13.3 AND 13.7

Applicant: Washington Public Power Supply System
Licensing Stage: CP
Branch & LPM Requesting Assistance: LWR 1-3, P. D. O'Reilly
Review Branch Involved: L:IS&EP
Requested Completion Date: 9/27/74
Review Status: Q1 complete

The attached report contains information requests relative to our review of the subject SAR for transmittal to the applicant in accordance with the review schedule.

Original signed by
Donald J. Skovholt

Donald J. Skovholt
Assistant Director for Quality
Assurance and Operations
Directorate of Licensing

Enclosure:
Information Requests

cc:
S. Hanauer
A. Giambusso
W. McDonald
R. Houston
O. Parr
P. D. O'Reilly
R. F. Priebe

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DJSkovholt

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SURNAME ▶	RFPriebe:ld	RWHouston	DJSkovholt			
DATE ▶	9/23/74	9/ /74	9/ /74			

420.0 INDUSTRIAL SECURITY AND EMERGENCY PLANNING BRANCH

421.1 (13.7.1) It is not clear that your employee screening program conforms to the requirements set forth in ANSI N18.17-1973, Section 4.3. Please indicate that your program incorporates an investigation to disclose adverse character traits and an examination by a licensed psychiatrist or physician to determine emotional stability. If an alternate approach is used, indicate the screening methods utilized to obtain an equivalent effectiveness in achieving the aforementioned objectives.

421.2 (13.7) In order to evaluate the acceptability of the facility design with respect to protection against industrial sabotage, the following additional information is required to determine conformance with the design requirements set forth in Regulatory Guide 1.17 and ANSI N18.17-1973. Your response should be withheld from public disclosure pursuant to 10 CFR 2.790.

(1) Provide figures and/or drawings which identify the following:

(a) Owner-controlled area, including private property markers, parking lot(s), and roads to be used for surveillance.

(b) Protected area(s), including the associated isolation zone (clear area), physical barriers, access control points, lighting, intrusion monitoring and/or perimeter alarm systems, and roads or pathways to be used for surveillance.

(c) Vital area(s), including all access points.

(d) Alarm station locations.

(2) Provide sufficient information which shows that the physical barrier construction for the protected and vital areas satisfies the requirements set forth in ANSI N18.17-1973, Sections 3.3 and 3.4.

(3) Describe the design features to be used for protecting all potential access points into the vital area(s) against unauthorized intrusion. Such features should include locking devices and intrusion detection devices.

(4) Indicate that all intrusion alarms, emergency exit [illegible] systems, and line supervisory systems will meet the level of performance and reliability indicated by the interim Federal Specification W-A-00450B (GSA-FSS), dated February 16, 1973.

(5) Describe the physical security protection to be utilized in the design for the protection of security system service panels and wiring for protective devices, security communications systems, and door lock actuators.

(6) Describe measures taken, or to be taken, in the design or arrangement of equipment, other than measures for the control of access and detection of unauthorized entry, for protection of vital equipment against acts of sabotage.

(7) Designate the person or group with the responsibility to conceive and detail security provisions in the physical plant design. If this responsibility is outside of the owner organization, also specify the position within your organization responsible for the systematic review and control of the contracted activities.

422.1
(13.3)

10 CFR Part 50, Appendix E, requires that the Preliminary Safety Analysis Report contain sufficient information to assure the compatibility of proposed emergency plans with facility design features, site layout, and site location with respect to such considerations as access routes, surrounding population distributions, and land use. To this end, we request that you submit an analysis which includes information and findings which will be needed to assure adequacy of emergency planning with respect to the protective measure of evacuation of persons from the exclusion area and from any potentially affected sector of the environs, as follows:

(1) Plots showing projected dose levels for both whole body and thyroid, resulting from the most serious design basis accident analyzed in the Safety Analysis Report. These should be based upon the same isotopic realease rates to the atmosphere, the same dispersion model, and the same meteorology as are postulated for the most conservative case in Chapter 15 of the PSAR for purposes of showing conformance to the siting dose criteria of 10 CFR Part 100. Plume front transit times, radioactive decay in transit, and dose conversion calculations may be incorporated on a physically realistic basis or conservatively simplified basis.

Present the data in the following format:

(a) Use a log-log scale with time (hour) following onset of release as the ordinate, and distance (miles) from the release point as the abscissa.

(b) Provide curves for whole body doses of 1, 5, and 25 rem, and thyroid doses of 5, 25, and 300 rem. Each curve should represent the elapsed time to reach the specified dose level as a function of distance from the release point.

(c) Each curve should extend to a time of 8.0 hours, and from a distance equal to the exclusion radius or from 2.0 hours, whichever represents the lesser distance for each curve.

(2) The expected accident assessment time which includes the time required to identify and characterize the accident, the time required to predict the projected doses resulting from the accident, and the time required to determine the appropriate protective measures for the affected areas. Include sufficient information to support your estimate.

(3) An estimate of the time required to notify the population-at-risk and the means assumed for such estimate.

(4) An estimate of the evacuation times to remove persons from the exclusion area, and from each "sector", or increments thereof, of the environs out to a distance determined by the 8 hour terminus of the 5 rem whole body dose curve, the 25 rem thyroid curve, or the outer LPZ boundary, whichever is the greatest. From a practical viewpoint, the "sectors" chosen for analysis may be bounded by certain geographical or man-made features, but should cover an arc of at least 45. Population data should include both resident and transient persons, including those resulting from the facilities described in Chapter 2 of the PSAR, at levels projected as peak values during the expected life of the plant.

(5) The quantity and character of egress routes and the means assumed for effecting the physical evacuation.

422.2 (13.3) The information submitted in Section 13.3 of the PSAR is deficient with respect to the requirements of 10 CFR Appendix E, paragraph II. Provide the following:

(1) Identify the principal agency in the State of Washington which has been designated to have the overall responsibility for radiological emergency planning. Indicate the arrangements that have been made with this agency for the preparation of coordinated emergency response plans for the environs of the plant.

(2) Describe the features of the facility to be provided for onsite emergency first aid and decontamination.

(3) Describe what arrangements will be made to ensure emergency transportation of individuals to offsite treatment facilities.

(4) Identify at least two hospital facilities and provide evidence that preliminary contacts have established agreements and potential capability to receive and treat individuals affected by radiological emergencies.

(5) Describe the features of the facility to be provided to assure the capability for plant evacuation and the capability for facility reentry following evacuation in order to mitigate the consequences of an accident.

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