

July 25, 2001

MEMORANDUM TO: File

FROM: Jack Cushing, Project Manager, Section 2
Project Directorate IV
Division of Licensing Project Management
Office Of Nuclear Reactor Regulation

/RA/

SUBJECT: FACSIMILE TRANSMISSION TO ENERGY NORTHWEST -
QUESTIONS ON THE LICENSEE'S AMENDMENT REQUEST
REGARDING SPENT FUEL STORAGE AND SPENT FUEL CASK
HANDLING FOR THE COLUMBIA GENERATING STATION
(TAC NO. MB0573)

The attached questions were transmitted by fax to Mr. Robert Sherman of Energy Northwest to prepare him for an upcoming telephone call. This memorandum and the attachment do not convey a formal request for information or represent an NRC staff position.

Docket No. 50-397

Attachment: Request for Additional Information

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REQUEST FOR ADDITIONAL INFORMATION

REGARDING, SPENT FUEL STORAGE AND HANDLING

In response to NRC Bulletin 96-02, the licensee, in a June 30, 1997, letter presented the results of a detailed review of the crane qualifications against NUREG-0554. The results indicated that the reactor building crane satisfied NUREG-0554 with a few exceptions. Specifically, the licensee cited the following exceptions to the reactor building crane design:

- (1) the main hoist controls do not prevent jogging as required in NUREG-0554, Section 6.4;
- (2) a 15 percent margin was not added to the loadings for wear susceptible parts as required in NUREG-0554, Section 2.2;
- (3) the maximum load (static and dynamic) exceeds 10 percent of the manufacturer's published breaking strength of each wire rope in the dual reeving system, contrary to what is required in NUREG-0554, Section 4.1;
- (4) the hoist design speed is 5.5 ft./min., 10 percent faster than the CMAA #70 recommended "slow" speed as required in NUREG-0554, Section 4.4;
- (5) safe load paths and administrative controls will be used instead of interlocks as recommended in NUREG-0554, Section 6.2;
- (6) the equalizer bar was designed to absorb the energy of a load shift should failure of one wire rope or one of the dual reeving systems occur, however, it was not designed to maintain the hoisting movement during the failure as required in NUREG-0554, Section 4.7;
- (7) visual examination of the load block via plant procedures is performed annually instead of non-destructive examination as required in NUREG-0554, Section 7.2;
- (8) the bridge and trolley do not have variable speed controls or inching motor drives for incremental or fractional movements as recommended in NUREG-0554, Section 6.4;
- (9) lugs to prevent uplifting with adequate allowable stresses for an SSE were to be replaced by the licensee so as to allow the bridge and trolley to remain in place during an SSE in accordance with NUREG-0554, Section 2.5; and,
- (10) the main hoist, trolley, and bridge motor circuits have thermal overload heater/relays which provide protection against excessive electrical current and excessive motor temperature. However, they do not have additional control devices such as internal thermocouples to sense excessive temperatures as required in various sections in NUREG-0554.

Although NUREG-0612, Appendix C provides alternative means of satisfying the requirements of NUREG-0554 for assuring safe crane operation, the staff is concerned that based on the above exceptions to the qualifications, the crane may not satisfy NUREG-0612, Appendix C. In other words, the capability of the crane to preclude a cask drop that may result in rupture of the SFP is questionable due to the exceptions as identified by the licensee.

Provide a discussion of the updated status of any corrections to the exceptions/limitations, as cited above, to the crane design of redundancy sufficient to preclude a cask drop.