

PALISADES PLANT TECHNICAL SPECIFICATIONS
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Applicability

Applies to the operating status of the safety-related piping shock suppressors (snubbers). The only snubbers excluded from this requirement are those installed on non-safety-related systems and then only if their failure or failure of the system on which they are installed would have no adverse effect on any safety-related system.

Objective

To minimize the possibility of unrestrained pipe motion as might occur during an earthquake or severe transient.

Specification

- 3.20.1 When systems associated with snubbers in Specification 3.20 are required to be OPERABLE, the snubbers in those systems shall be OPERABLE except as noted below:
- a. With one or more snubbers inoperable, within 72 hours replace or restore the inoperable snubbers to OPERABLE status and perform an engineering evaluation per Specification 4.16.1.c. on the supported component or declare the system inoperable.

Basis

Snubbers are required to be OPERABLE to ensure that the structural integrity of the reactor coolant system and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads.

3.21 Deleted

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Amendment No. 23, 69, 107, 162,

ATTACHMENT 2

**CONSUMERS POWER COMPANY
PALISADES PLANT
DOCKET 50-255**

TECHNICAL SPECIFICATION CHANGE REQUEST

CRANE OPERATION AND MOVEMENT OF HEAVY LOADS

Existing Pages Correlating Existing And Proposed Requirements

SHOCK SUPPRESSORS (Snubbers)Applicability

Applies to the operating status of the safety-related piping shock suppressors (snubbers). The only snubbers excluded from this requirement are those installed on non-safety-related systems and then only if their failure or failure of the system on which they are installed would have no adverse effect on any safety-related system.

Objective

To minimize the possibility of unrestrained pipe motion as might occur during an earthquake or severe transient.

Specification

- 3.20.1 When systems associated with snubbers in Specification 3.20 are required to be OPERABLE, the snubbers in those systems shall be OPERABLE except as noted below:
- a. With one or more snubbers inoperable, within 72 hours replace or restore the inoperable snubbers to OPERABLE status and perform an engineering evaluation per Specification 4.16.1.c. on the supported component or declare the system inoperable.

Basis

Snubbers are required to be OPERABLE to ensure that the structural integrity of the reactor coolant system and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads.

3.21 Deleted

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Amendment No. 23, 69, 107, 162

~~3.21 CRANE OPERATION AND MOVEMENT OF HEAVY LOADS~~

Applicability

~~Applies to limitations in crane operation and the movement of heavy loads over the 649' level of the auxiliary building and inside containment. A heavy load is a load, other than a fuel assembly, which weighs more than 1300 lbs.~~

Objective

~~To minimize the probability of and the consequences of a heavy load drop.~~

Specification

~~3.21.1 Inside Containment~~

- ~~a. Heavy loads shall not be moved over the primary coolant system if the temperature of the coolant or the steam in the pressurizer exceeds 225°F.~~
- ~~b. Heavy loads shall not be moved unless the potential for a load drop is extremely small as defined by Generic Letter 85-11 or an evaluation in compliance with section 5.1 of NUREG 0612 has been completed.~~

~~3.21.2 Over the 649' Level of the Auxiliary Building~~

~~The surface of the floor adjacent to the spent fuel pool is at the 649' level of the auxiliary building. The spent fuel pool is made up of two (2) zones. They are the main pool zone and the north tilt pit zone.~~

- ~~a. Heavy loads shall not be moved over fuel stored in the main pool zone.~~
- ~~b. Heavy loads shall not be moved over areas of the main pool zone which do not contain fuel unless the fuel stored in the main pool zone has decayed a minimum of 30 days when the charcoal filter is operating, or the fuel stored in the main pool zone has decayed a minimum of 90 days when the charcoal filter is not operating.~~
- ~~c. Heavy loads shall not be moved over the north tilt pit zone unless the fuel stored in the north tilt pit zone has decayed a minimum of 22 days when the charcoal filter is operating; or, the fuel in the north tilt pit zone has decayed a minimum of 77 days when the charcoal filter is not operating.~~
- ~~d. Heavy loads shall not be moved over the 649' level of the auxiliary building unless:
 - ~~(1) The fuel storage building crane interlocks are OPERABLE or they are bypassed and the crane is under administrative control of a supervisor, and~~
 - ~~(2) No fuel handling operations are in progress.~~~~

Amendment No. 35, 111, 162

- e. ~~Loads weighing more than 25 tons shall not be moved over the main pool zone unless an evaluation in compliance with Section 5.1 of NUREG 0612 has been completed.~~
- f. ~~Heavy loads shall not be moved unless the potential for a load drop is extremely small as defined by Generic Letter 85-11 or an evaluation in compliance with section 5.1 of NUREG 0612 has been completed.~~
- g. ~~The Fuel Pool Building Crane shall not be used to move material past the fuel storage pool when its interlocks are inoperable.~~

Basis

~~Reference (7) defines a heavy load as a load which weighs more than a fuel assembly and its handling tool. The lightest Palisades fuel assemblies weigh approximately 1298 lbs and the heaviest weigh approximately 1375 lbs. The handling tool weighs 60-70 lbs. For conservatism, loads weighing more than 1300 lbs, except for fuel assemblies, are classified as heavy loads.~~

~~Heavy loads are not allowed over the pressurized primary coolant system to preclude dropping objects which could rupture the boundary of the primary coolant system allowing loss of coolant and overheating of the core.~~

~~Prohibiting movement of heavy loads over fuel stored in the main pool zone minimizes the criticality and radiological effects of a load drop.~~

~~Heavy loads are allowed over the fuel stored in the north tilt pit zone because the maximum number of fuel bundles which can be stored in that zone is relatively small and the north tilt pit lies under the only possible safe load path for moving heavy loads into and out of containment without passing over the main pool zone.~~

~~Requiring that the spent fuel pool crane interlocks are OPERABLE ensures that heavy loads or the unloaded crane will not drift over or be inadvertently moved over fuel stored in the main pool area.~~

~~Specific decay times with and without the charcoal filters operating are necessary to ensure that heavy loads are moved within analyzed conditions.~~

~~The charcoal filter is operating when at least one Fuel Handling Area exhaust fan is drawing suction through the charcoal filter and the Fuel Handling Area ventilation system is in the refueling mode.~~

~~Assuring that no fuel handling operations are in progress while heavy loads are being moved allows operator attention to be focused on the heavy load movement.~~

~~Basis (Continued)~~

~~The objectives of the Guidelines of Section 5.1 of NUREG 0612 are to assure that (1) the potential for a load drop is extremely small, or (2) for each area addressed, the following evaluation criteria are satisfied:~~

- ~~(1) Releases of radioactive material that may result from damage to spent fuel based on calculations involving accidental dropping of a postulated heavy load produce doses that are well within 10 CFR Part 100 limits of 300 rem thyroid and 25 rem whole body;~~
- ~~(2) Damage to fuel and fuel storage racks based on calculations involving accidental dropping of a postulated heavy load does not result in a configuration of the fuel such that k_{eff} is larger than 0.95;~~
- ~~(3) Damage to the reactor vessel or the spent fuel pool based on calculations of damage following accidental dropping of a postulated heavy load is limited so as not to result in water leakage that could uncover the fuel, (makeup water provided to overcome leakage shall be from a borated source of adequate concentration); and~~
- ~~(4) Damage to equipment in redundant or dual safe shutdown paths, based on calculations assuming the accidental dropping of a postulated heavy load, will be limited so as not to result in loss of required safe shutdown functions.~~

~~Generic Letter 85 11 defines the potential for a heavy load drop as extremely small when a heavy load is moved in compliance with the Guidelines of section 5.1.1 of NUREG 0612.~~

~~References~~

- ~~(1) Palisades Plant Evaluation of Postulated Cask Drop Accidents by Bechtel Associates Professional Corporation, August 1974.~~
- ~~(2) Palisades Plant Final Safety Analysis Report Appendix J Evaluation of Postulated Cask Drop Accidents, submitted to the NRC on August 9, 1974. (Structural Analysis only)~~
- ~~(3) Letter dated January 16, 1978 from D P Hoffman, CPC to Director NRR, entitled "Palisades Plant Movement of Shielded Shipping Cask."~~
- ~~(4) Letter dated November 1, 1976 from D A Bixel, CPC, to Director NRR entitled "Spent Fuel Pool Modifications."~~
- ~~(5) SER supporting License Amendment No. 35 dated February 8, 1978.~~
- ~~(6) SER supporting License Amendment No. 81 dated May 22, 1981.~~
- ~~(7) NUREG 0612 Control of Heavy Loads in Nuclear Power Plants.~~
- ~~(8) Safety Analysis Report (Rev. 1) dated October 16, 1986 attached to letter dated October 16, 1986 from K W Berry, CPC, to NRC.~~
- ~~(9) Generic Letter 85 11 dated June 28, 1985.~~