



Washington Public Power Supply System
A JOINT OPERATING AGENCY

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Docket 50-460/513

November 13, 1980
G01-80-355

Mr. R. H. Engelken, Director
Nuclear Regulatory Commission
Region V
Suite 202 Walnut Creek Plaza
1990 N. California Boulevard
Walnut Creek, California 94596

Dear Mr. Engelken:

Subject: WPPSS Nuclear Projects Nos. 1/4
IE Bulletin 79-02, Revision 2,
"Pipe Support Base Plate Designs Using Concrete
Expansion Anchor Bolts" and Related Reportable
Condition 10 CFR 50.55(e) Pipe Support Design

References: 1) G01-80-50, January 24, 1980
2) G01-80-278, September 25, 1980
3) G01-79-380, July 10, 1979

In response to IE Bulletin 79-02 the Supply System has responded to the NRC per References 1, 2 and 3. Reference 1 also contained information on a reportable design deficiency per the requirements of 10 CFR 50.55(e).

On November 5, 1980 Mr. Howard Wong of the Technical Programs Branch in Washington, D.C. verbally requested supplemental information describing the design criteria for pipe supports before and after issuance of the 79-02 Bulletin.



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The requested supplemental information is attached. If you have any questions or require further information relating to WPPSS Projects 1 and 4, please advise.

Very truly yours,

D. W. Mazur
Program Director, WNP-1/4

LCC:DWM:oe

Attachment

cc: CR Bryant, Bonneville Power Administration
JR Lewis, Bonneville Power Administration
V Stello, Director, NRC Office of Inspection & Enforcement
H Wong, Office of Inspection and Enforcement
Eng. Files-1/4 (290)

WPPSS UNITS 1 & 4

SUMMARY OF CHANGES IN DESIGN CRITERIA FOR PIPE SUPPORTS

<u>Item</u>	<u>Before NRC IE Bulletin 79-02</u>	<u>After NRC IE Bulletin 79-02</u>
1. Concrete Expansion Anchors	A. Baseplate flexibility not considered B. Shear/tension interaction not considered C. Safety factor of four D. Installation torques based on manufacturer's recommendations. See min. installation torque. Ref 1 page 3 item 3.	A. Baseplate flexibility considered. Prying action incorporated. B. Shear/tension interaction considered. C. Safety factor of 5.33 (1) D. Installation torques in Ref. 1 page 3, item 4.
2. Frictional Loads	A. Designer's judgement with periodic (2) spot checks B. Coefficient of friction =0.25	A. Considered in all cases (1) B. Coefficient of friction =0.35 (1)
3. Weld designs	A. ASME III requirements	A. ASME III requirements B. Stress calculation required for (1) all cases.
4. Allowable stress limits (Support member designs)	A. ASME requirements	A. ASME requirements B. Stress calculation required for (1) all cases
5. Embedment plates	A. AISC/ACI	A. AISC/ACI B. Stress calculation required for (1) all cases

Note: 1 The timing of the changes in UE&C's design criteria was coincidental to the issuance of the NRC IE Bulletin 79-02. These changes were prompted by a refinement of UE&C's design requirements for pipe supports of WPPSS Units 1 & 4.

Note: 2 Designer's judgement based on experience with similar designs, design parameters, magnitude of load on support, etc.

Reference 1: G01-80-50 Response to IE Bulletin 79-02, Revision 2 dated January 24, 1980