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A JOINT OPERATING AGENCY

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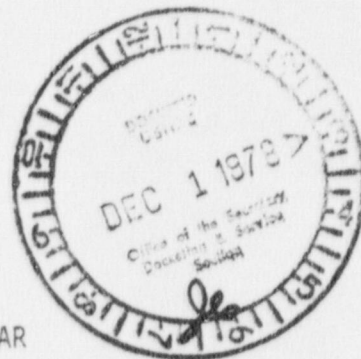
November 13, 1978

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*- Miss. Notice
Reg. Guide*

Mr. Samuel J. Chilk, Secretary
U. S. Nuclear Regulatory Commission
Washington D.C. 20555



Subject: COMMENTS ON NRC REGULATORY GUIDE 1.142
"SAFETY-RELATED CONCRETE STRUCTURES FOR NUCLEAR
POWER PLANTS" (OTHER THAN REACTOR VESSELS AND
CONTAINMENTS)

Dear Mr. Chilk:

The Washington Public Power Supply System has reviewed the "For Comment" issue of the subject Regulatory Guide and submits for your consideration the attached comments.

Should you have any questions with regard to the comments, please contact me.

Very truly yours,

D. L. Renberger

D. L. RENBERGER
Assistant Director - Technology

DLR:GCS:ct

Attachment

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Attachment

COMMENTS ON NRC REGULATORY GUIDE 1.142

1. Section 5.4.1 should remain as written in ACI 349-76. The judgement of the engineer is extremely important with regard to the amount of foreign material as well as the degree of hardening. There are instances when it is better to retemper the concrete that has partially set on a conveyor or in a bucket because of some holdup, rather than delay a mass placement that is undergoing initial set. Without the judgement of the engineer, literal interpretation of "contaminated by foreign material" and "partially hardened" can become extreme. For example, some inspector may interpret one cigarette butt as ruining the capabilities of an entire mass placement.
2. Section 1.3.1 should remain as written in ACI 349-76. Since the owner is responsible for inspection, he will ensure that the inspector is qualified and familiar with all applicable codes and standards.
3. Section 4.3.1 should remain as written in ACI 349-76. The NRC staff's comment that "The frequency of cylinder testing required by Section 4.3.1 ... is not consistent with generally accepted practice" has questionable validity. ACI standard 318 uses the same 150 cubic yard minimum frequency.

The frequency of sampling should be a function of the volume of concrete placed. In this case, mass concrete is common and the 150 cubic yard frequency should be used. Also, the sampling is being used to establish the trend of concrete strength and not so much the concrete strength of that particular sample. Therefore, in mass concrete placement, the frequency of 150 cubic yard is ample to establish uniformity over such large quantities.

The ANSI N45.2.5-1974, required minimum frequency of 100 cubic yard is too conservative for ACI 349-76, and would cause undue hardship during construction.

4. Section 9.3.1 should remain as written in ACI 349-76. The NRC has not given any supportive information for increasing the load factors. What is the justification for increasing the load factors?