



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76012

December 13, 1979

In Reply Refer To:
RIV
Docket No. 50-458/79-05

Gulf States Utilities Company
ATTN: Dr. J. G. Weigand, General Manager
Nuclear Projects
Post Office Box 2951
Beaumont, Texas 77704

Gentlemen:

This refers to the telephone conversation between you and Mr. K. V. Seyfrit of this office on December 12, 1979, concerning use of potentially reactive aggregate for Category I concrete at River Bend Nuclear Power Station. This letter is a supplement to our letter to you, dated November 6, 1979, that identified the steps you planned to take prior to the resumption of placement of safety-related concrete.

Subsequent to our November 6, 1979, letter, we have determined that the steps you identified have been accomplished. However, we now understand that you plan to impose the following additional conditions for the resumption of placement of safety-related concrete:

1. If aggregates are determined to be potentially reactive by any of the ASTM C295 or C289 tests, or in-service inspection of structures built previously with the same or similar materials, low alkali cement ($\text{Na}_2\text{O} + 0.658 \text{K}_2\text{O} < 0.6\%$) will be used. The ASTM C227 tests need not be completed prior to aggregate usage when using low alkali cement.
2. If it is desired to use the completed ASTM C227 test results in the future to justify using cement with an alkali content exceeding 0.6%, then the NRC will be informed prior to use of such cement.
3. Until the ASTM C227 test results using job cement at the six month time period are completed, submitted to the NRC, and reviewed, you will conduct user tests to verify that the alkali content is less than 0.6% at the equivalent of a frequency of one test for each 500 tons of cement or each shipment, whichever is less. As necessary, a change to your procedures and specifications will implement this requirement. Upon the NRC's determination that the job cement and aggregate produce acceptable ASTM C227 results, the user testing frequency may revert to that originally specified by applicable codes and standards.

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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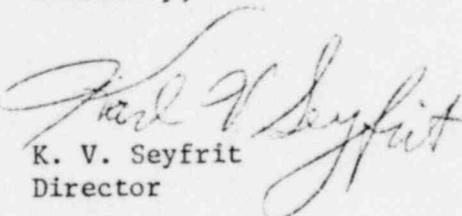
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4. You will immediately notify the NRC of all supplier (mill) or user tests that indicate alkali content in the cement greater than 0.6% and the shipment will be placed on hold until the matter is resolved.
5. You will notify RIV in writing of the results of the two month, three month, four month and six month ASTM C227 tests being performed as soon as the data are available.
6. The following Regulatory Guides and associated ANSI standards will be utilized during the construction period:
 - RG 1.94 Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel During Construction Phase of Nuclear Power Plants
(ANSI N45.2.5 - 1974)
 - RG 1.58 Qualification of Nuclear Power Plant Inspection, Examination and Testing Personnel
(ANSI N45.2.6 - 1973)
7. It is understood that you may now continue placing of safety-related concrete under the above conditions and with the stipulation that if the ASTM C227 test results for the mortar bar made from job cement indicate six month expansions exceeding 0.10%, all affected concrete placed under these conditions may have to be removed.

If your understanding of this matter is inconsistent with the above, please contact this office immediately.

Sincerely,


K. V. Seyfrit
Director

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