

ARIZONA



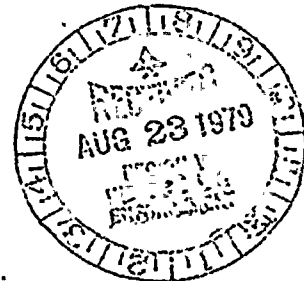
PUBLIC SERVICE COMPANY

P. O. BOX 21666 • PHOENIX, ARIZONA 85036

50-528

August 16, 1979  
ANPP-13675-JAR

U. S. Nuclear Regulatory Commission  
Region V  
Walnut Creek Plaza - Suite 202  
1990 North California Boulevard  
Walnut Creek, California 94596



Attention: Mr. G. S. Spencer, Chief  
Reactor Construction and  
Engineering Support Branch

Subject: NRC I&E Inspection of April 30-May 4, 1979  
File: 79-019-026

Dear Sir:

This letter refers to the Inspection conducted by Mr. L. Vorderbrueggen and members of your staff on April 30-May 4, 1979, as documented in your letter of July 10, 1979 of activities authorized by Nuclear Regulatory Commission (NRC) Construction Permit Nos. CPPR-141, 142 and 143.

During this Inspection, one (1) item of noncompliance was identified. Our response to this item of noncompliance (Infraction) is presented in the enclosed Attachment A.

Very truly yours,

E. E. Van Brunt, Jr.  
APS Vice President  
Nuclear Projects  
ANPP Project Director

EEVBjr/JAR:skc

Enclosure

cc: R. L. Robb  
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ATTACHMENT A

Docket Nos. 50-528, 50-529, 50-530

Construction Permit Nos. CPPR-141, 142, 143

Notice of Violation

Based on the results of the NRC Inspection conducted on April 30-May 4, 1979, it appears that certain of your activities were not conducted in full compliance with NRC requirements as indicated below:

10CFR50, Appendix B, Criterion V, Instructions, Procedures and Drawings, as implemented by PSAR Section 17.1A.5, requires that activities affecting quality be accomplished in accordance with instructions, procedures or drawings appropriate to the circumstances.

Bechtel Specification 13-CM-365 establishes the following requirements:

a. Paragraph 10.3, Clean-Up Preparation

Before depositing concrete, debris must be removed from spaces to receive concrete.

b. Paragraph 10.7.1, Segregation

Concrete must not be dropped through dense reinforcing steel which might cause segregation of the coarse aggregate and must not be dropped free through a height of more than six feet (6').

Bechtel Specification 13-CM-375, Placing of Reinforcing Steel, Paragraph 6.4, requires reinforcing steel bar to be securely tied with black annealed wire of sufficient gauge to prevent movement.

Bechtel Procedure WPP/QCI 52.0, Concrete Preplacement, Paragraph 5.6.1, requires the responsible Area Field Engineer (and Survey Engineer, if applicable) to initial and date in Entry Nos. 7.3 and 7.4 of Exhibit 52.0-1, Construction Inspection Planning for Concrete Preplacement, indicating that the work is complete and conforms to the governing documents.

Contrary to these requirements, on May 2, 1979 during Concrete Placements 2J00-3, -11, -12, -13 and -19 for Unit No. 2 Control Building, the following examples of nonconformance were observed:

1. In one location, concrete was observed being dropped through dense reinforcing steel.
2. In two locations, concrete was observed being dropped for a distance greater than six feet (6').



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3. In three locations, reinforcing steel was observed to be loose and not securely fastened.
4. Expanded metal formwork in two locations had not been completed prior to commencing the placement.
5. Paper drinking cups and one partial roll of tie-wire were observed in the forms during concrete placement.

This is an Infraction.

### Response

#### Corrective Action and Steps Taken to Avoid Further Violations

##### Items 1 and 2

Discussions were held with Bechtel Engineers, Concrete Supervisors and field personnel to follow procedures to prevent further violations and to minimize leakage when relocating the concrete boom from one tremie to the next and to assure that concrete is not dropped over six feet (6') or through congested rebar.

##### Item 3

The rebar in question was tied-off during the concrete placement. Later investigation by Bechtel Engineering and discussions with cognizant field personnel revealed that the rebar may have been moved temporarily for tremie insertion and to facilitate the concrete placement activities. Instructions have been given to concrete placement personnel to ensure a timely repositioning and retieing of any reinforcing steel that has been moved or untied before the placement proceeds.

##### Item 4

Investigations indicated that one (1) eight-foot (8') section of expanded metal bulkhead was not completed prior to signing-off the Construction Inspection Plan (CIP). The Field Engineer was remiss in not following procedures to note on the CIP that the work would continue after the CIP was signed-off.

Additionally, every ten feet (10') along the placement an expanded metal bulkhead was left out so that tremies could be put in the wall. This was noted on the CIP by the Field Engineer and was accepted by QC prior to concrete being placed against the bulkhead form.



Appropriate Civil Field Engineers have been instructed, by Civil Information Memo No. 89, that any work to be accomplished after CIP sign-off shall be so noted in the Remarks Section of the CIP.

Item 5

At the time of observation, the placement was stopped and the roll of wire was removed, however, the rebar congestion and the wall thickness prevented retrieval of the paper drinking cups before the head of the concrete rolled over the cups. An Engineering analysis of this condition clearly indicates that this isolated incident did not impair the safety or design of this wall section.

Bechtel Field Engineers and the concrete placement personnel have been instructed to remove loose articles from the surrounding area to assure that any items do not get into the concrete forms and that the forms remain free of any debris.

Arizona Public Service Company has again reminded Bechtel Management of the necessity to adhere to the fullest extent the Project Construction Procedures.

All of the corrective actions are complete as of August 10, 1979.

