



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
631 PARK AVENUE  
KING OF PRUSSIA, PENNSYLVANIA 19406

OCT 14 1976

Pennsylvania Power & Light Company  
Attention: Mr. Norman W. Curtis  
Vice President  
Engineering and Construction  
2 North Ninth Street  
Allentown, Pennsylvania 18101

License No. CPPR-102  
Inspection No. 76-08  
Docket No. 50-388-173

Gentlemen:

This refers to the inspection conducted by Mr. J. Mattia of this office on September 28-30, 1976 of activities authorized by NRC License No. CPPR-102 and to the discussions of our findings held by Mr. Mattia with Mr. Green and other members of your staff at the conclusion of the inspection.

Areas examined during this inspection are described in the Office of Inspection and Enforcement Inspection Report which is enclosed with this letter. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector.

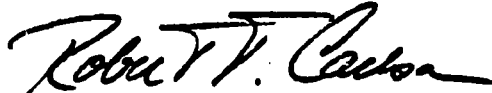
Within the scope of this inspection, no items of noncompliance were observed.

In accordance with Section 2.790 of the NRC's "Rules of Practice", Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room. If this report contains any information that you (or your contractor) believe to be proprietary, it is necessary that you make a written application within 20 days to this office to withhold such information from public disclosure. Any such application must be accompanied by an affidavit executed by the owner of the information, which identifies the document or part sought to be withheld, and which contains a statement of reasons which addresses with specificity the items which will be considered by the Commission as listed in subparagraph (b)(4) of Section 2.790. The information sought to be withheld shall be incorporated as far as possible into a separate part of the affidavit. If we do not hear from you in this regard within the specified period, the report will be placed in the Public Document Room.

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No reply to this letter is required; however, should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,



Robert T. Carlson, Chief  
Reactor Construction and Engineering  
Support Branch

Enclosure:  
IE Inspection Report No. 50-388/76-08

cc: A. R. Sabol, Manager, Nuclear Quality Assurance  
W. E. Barberich, Licensing Engineer

U. S. NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT  
REGION I

IE Inspection Report No:	<u>50-388/76-08</u>	Docket No:	<u>50-388</u>
Licensee:	<u>Pennsylvania Power and Light</u>	License No:	<u>CPPR-102</u>
	<u>901 Hamilton Street</u>	Priority:	<u>--</u>
	<u>Allentown, Pennsylvania 18101</u>	Category:	<u>A</u>
		Safeguards Group:	<u>--</u>
Location:	<u>Salem Township (Susquehanna 2)</u>		
Type of Licensee:	<u>BWR MWe 1050 (GE)</u>		
Type of Inspection:	<u>Routine, Unannounced</u>		
Dates of Inspection:	<u>September 28-30, 1976</u>		
Dates of Previous Inspection:	<u>August 23-26, 1976</u>		
Reporting Inspector:	<u>J. C. Mattia</u> J. C. Mattia, Reactor Inspector	<u>10/13/76</u> DATE	
Accompanying Inspectors:	<u>A. A. Varela</u> A. A. Varela, Reactor Inspector	<u>10-12-76</u> DATE	
		DATE	
		DATE	
Other Accompanying Personnel:		DATE	
Reviewed By:	<u>R. F. Heishman</u> R. F. Heishman, Chief, Construction Projects Section Reactor Construction and Engineering Support Branch	<u>10/14/76</u> DATE	

## SUMMARY OF FINDINGS

### Enforcement Action

None.

### Licensee Action on Previously Identified Enforcement Action

Not inspected.

### Design Changes

None identified.

### Unusual Occurrences

None reported.

### Other Significant Findings

#### A. Current Findings

##### 1. Acceptable Area

The Observation of Work Activities Associated With Cadwelding of Containment Rebar. (Details, Paragraph 3.b)

##### 2. Unresolved Items

None identified.

#### B. Status of Previously Reported Unresolved Items

Not inspected.

#### C. Deviations

None identified.

### Management Interview

At the conclusion of the inspection a meeting was held at the site with representatives of the licensee and contractor organizations. Attendees at this meeting consisted of personnel whose names are highlighted (i.e., \*) in paragraph 1 of the Details section of this report.

The inspector summarized the purpose and the scope of the inspection (Details, Paragraph 2), and the results of the inspection as listed in the "Summary of Findings."

## DETAILS

### 1. Persons Contacted

#### Pennsylvania Power and Light Company

\*Mr. J. D. Green, Resident Quality Assurance Engineer  
Mr. R. Matthews, Site Quality Assurance Engineer  
Mr. J. Buczynski, Site Quality Assurance Engineer  
\*Mr. H. L. Harris, Construction Project Supervisor  
\*Mr. J. W. Geiling, Manager Power Plant Engineering

#### Bechtel

\*Mr. E. E. Felton, Field Construction Manager  
\*Mr. J. H. Driggs, Lead Field Quality Assurance Engineer  
Mr. D. Levan, Quality Control Inspector  
Mr. C. Clayton, Quality Control Engineer  
\*Mr. G. Buecheler, Project Field Engineer  
Mr. D. Weidner, Quality Control Inspector  
Mr. R. Rother, Cadweld Operator  
Mr. V. Demianavich, Cadweld Operator  
Mr. J. Nealon, Cadweld Operator  
Mr. E. Kania, Cadweld Foreman  
Mr. G. Hmelak, Cadweld Receiving  
Mr. D. Montreuil, Quality Control Engineer  
Mr. P. Walker, Quality Control Engineer  
\*Mr. Z. G. Tucker, Project Field Quality Control Engineer  
\*Mr. H. Lilligh, Project Quality Assurance Engineer  
\*Mr. M. R. Muir, Project Manager  
Mr. J. Spezialetti, Quality Control Inspector

#### U. S. Testing

Mr. J. Garbacik, Cadweld - Forney Technician

### 2. General

A pre-inspection meeting was held onsite on September 28, 1976 with the senior licensee's representative to discuss the scope of this inspection. The scope of this inspection was to review the work activities associated with cadwelding of rebar for the containment building.

3. Containment Rebar Splicing

a. Status of Construction

- (1) Rebar installation is substantially completed for the drywell exterior walls, and mechanical splicing was being performed on the outside hoop bars in the upper half of the drywell.
- (2) Exterior wall concrete placement is complete to the first lift, 18' above the diaphragm slab.

b. Observation of Work Activities

- (1) The inspector observed work performance and evaluated work in progress to ascertain that site activities relative to mechanical rebar splicing by the cadweld process was being accomplished in accordance with NRC requirements and SAR commitments. Five production cadweld splices and one sister splice of #18 rebar were observed during this inspection.

- (2) The following documents were reviewed and used by the inspector to observe the performance and control of the work:

- Regulatory Guide 1.10; Revision 1, Dated 1/2/73, Mechanical (Cadweld) Splices in Reinforcing Bars of Category 1 Concrete Structures.
- Technical Specification C-20; Revision 6, Dated 2/18/76, Mechanical Splicing of Reinforcing Bars.
- Field Procedures FP-C-3; Rev. 5, Dated 2/12/76, for Cadwelding.
- QC Instruction, "Mechanical Splicing of Reinforcing Bars."
- ERICO Products Inc. literature, Cadweld Rebar Splicing, publication RB20M-173.
- ACI318-71; Section 7.5.

(3) The following activities were observed, noted, and discussed with the contractor's QC and licensee's QA personnel:

- Rebar Cleaning
- Heating and Marking
- Sleeve Installation
- Centering and Lifting
- Sleeve-end Asbestos Packing
- Installation of End Alignment Fitting
- Assembling of Pouring Basin and Crucible
- Powder Remixing
- Pouring
- Application of Starter Powder
- Equipment Check and Firing
- Review of Cadweld Operator's Qualification Records
- Review of Production Splice Inspection Reports
- Review of Test Splice Tensile Strength Records
- Observation of Sister Splice Fabrication and Laboratory Testing of This Splice
- Verification That Qualified QC Inspection Personnel Were Used For Cadweld Inspection Activities

No discrepancies were identified during this inspection.

**END**

**DATE FILMED**

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