

U.S. NUCLEAR REGULATORY COMMISSION

Report No. 50-312/82-32
Docket No. 50-312 Licensee No. DPR-54 Safeguards Group _____
Licensee: Sacramento Municipal Utility District
P. O. Box 15830
Sacramento, California 95813

Facility Name: Rancho Seco

Inspection at: Herald, California (Rancho Seco site)

Inspection Conducted: August 16-20, 1982

Inspectors: *Talbert Young Jr.* 8-30-82
G. Hernandez, Reactor Inspector Date Signed

Date Signed

Date Signed

Approved by: *Talbert Young Jr.* 8-30-82
T. Young, Chief Date Signed
Reactor Projects Section No. 2

Summary:

Inspection on August 16-20, 1982 (Report No. 50-312/82-32)

Areas Inspected: A routine unannounced inspection by a regional based inspector of licensee activities related to plant modifications associated with the Nuclear Service Electrical Building and the Auxiliary Feedwater Header System. The examination included a review of construction and implementing procedures, observation of work activities, handling and storage of electrical equipment, and a review of procurement documents.

The inspection involved 36 inspection-hours by one NRC inspector.

Results: Of the three areas examined one item of noncompliance was identified, (procurement documents did not specify that the provisions of 10 CFR 21.31 were applicable, this item is identified in paragraph 3b).

DETAILS

1. Persons Contacted

a. Sacramento Municipal Utility District (SMUD)

- *R. J. Rodriguez, Manager Nuclear Operations
- *R. Oubre, Plant Superintendent
- *L. G. Schwieger, Quality Assurance Director
- *T. E. Perry, Quality Assurance Site Supervisor
- *W. J. Jurkovich, Generation Engineering
- *J. McColligan, Principal Project Engineer
- *G. A. Coward, Maintenance Supervisor
- *J. Edwards, Engineering Technician
- *S. W. Rutter, Quality Assurance Inspector
- *P. Hansen, Engineer, Generation Engineering
- *J. M. Meyer, Quality Assurance Inspector

b. Bechtel Power Corporation (Bechtel)

- C. Letellier, Quality Control Electrical Inspector
- H. Davis, Quality Control Civil Inspector
- E. Conely, Quality Control Mechanical Inspector

*Denotes those attending the management interview on August 20, 1982.
Also, in attendance was Mr. Jack O'Brien, the NRC resident inspector.

2. Site Tour

Upon arrival at the site, the inspector toured the facility modifications to observe in-process and completed work activities to ascertain general compliance with regulatory requirements, codes, standards and site procedures.

No items of noncompliance or deviations were identified.

3. Procurement

The inspector reviewed procurement documents for the purchase of components, materials, and supplies for the following two systems to assure compliance with the licensee's approved quality assurance program, implementing procedures, and regulatory requirements.

- #### a. Auxiliary Feedwater Header System: The following procurement documents were reviewed:

<u>Purchase Order No.</u>	<u>Description</u>	<u>Vendor</u>
RS-33939	ASME SA-193 B-16 (Stud Bolts)	Cardinal Industries Products Corp.
RS-31499	ASME SA-194 2H (Heavy Hex Nuts)	Cardinal Industries Products Corp.
RS-31434	ASME SA-105 (MS-10) Flange 3" Long weld neck 600# Raised face, 12" long	G&W Lenape Forage
RS-31435	ASME SA-106 Gr.B Sch. 80, Piping Components for Aux. Feed. System	Guyon Alloys
RS-31446	ASTM A-105 (MS-10) Flange, reducing 4" to 3" weld neck, 900#	Guyon Alloys
RS-31451	ASTM A-234 Elbow 3", 90° Long tangent and cap 6"	Guyon Alloys
RS-31456	E-7018 Welding Electrodes 3/32"	Weldstar
RS-31460	ANSI B16.5, B18.2.2 ASME SA-193, SA-194 1-1/8" diameter studs	Coast Industrial Supply Co.
RS-31475	ASME SFA-5.14 ER-Ni CrMo-3 Weld rod	Johnston Stainless Weld rod
RS-31476	ASME SA-106 Gr. B 4" Seamless carbon steel pipe	Guyon Alloys
RS-31497	ASME SA-105 (MS-10) Flange, 6" weld neck 600# Raised face 5.60"	Guyon Alloys
RS-32700	ASME SB-167 Pipe 6", Sch. 80 Inconel 600	Huntington Alloys
RS-32711	ASME SA-516 Gr. 70 Plate 1/2" x 24" x 96"	Earle M. Jorgenson Co.
RS-32753	ASME SA-193 Gr. B16 Stud, Special 1-1/8", 8N-2B x 1" UNC-2B x 4-3/4" long	Cardinal Industries Products Corp.
RS-32758	ASTM B-166, OTSG Stabilizer rods	Babcock & Wilcox
RS-32786	ASME SFA-5.14 ER-Ni Cr Mo-3 Weld rod (Inconel 625)	Johnston Stainless Welding Rods
RS-33933	ASTM A-36 and A-6 Structural steel shapes and plates	Ryerson

The inspector noted that of the 18 purchase orders reviewed above, 16 of the orders did not make reference to the provisions of 10 CFR 21. 10 CFR 21.31, "Procurement documents", states that, "Each individual corporation partnership or other entity subject to the regulations in this part shall assure that each procurement document for a facility, or a basic component issued by him, her or it after January 6, 1978 specifies, when applicable, that the provisions of 10 CFR Part 21 apply." Discussions with cognizant engineers indicated that the licensee believed that all material procured for the Auxiliary Feedwater Header system modifications came under the category of commercial grade spare parts, not basic components, and as such the purchase orders were not required to identify that the provisions of 10 CFR 21 were applicable.

Basic components as defined in 10 CFR 21.3(a)(2), states, "Basic component, when applied to other facilities and when applied to other activities licensed pursuant to Parts 30, 40, 50, 60, 70, 71, or 72 of this chapter, means a component, structure, system, or part thereof that is directly procured by the licensee of a facility or activity subject to the regulations in this part and in which a defect (see 21.3(d)) or failure to comply with any applicable regulation in this chapter, order, or license issued by the Commission could create a substantial safety hazard," and in 10 CFR 21.3(a)(3) that, "In all cases "basic component" includes design, inspection, testing, or consulting services important to safety that are associated with the component hardware, whether these services are performed by the component supplier or others."

Commercial grade spare parts as defined in 10 CFR 21.3(4)(a-1) states that, "Commercial grade item means an item that is: (1) Not subject to design or specification requirements that are unique to facilities or activities licensed pursuant to Parts 30, 40, 50, 60, 70, 71, or 72 of this chapter and (2) used in applications other than facilities or activities licensed pursuant to Parts 30, 40, 50, 60, 70, 71, or 72 of this chapter and (3) to be ordered from the manufacturer/supplier on the basis of specifications set forth in the manufacturer's published product description (for example a catalog).

These definitions and/or directions are substantially contained verbatim in the SMUD Quality Assurance Procedure No. 4, Revision 8, "Procurement Document Control", and in Attachment No. 1 to SMUD Quality Control Instruction No. 10, Revision 3, "10 CFR 21 Requirements".

In addition, the inspector noted that the latest NRC Resident Inspector's July 1982 report (I.E. Inspection Report No. 50-312/82-28) identifies an apparent item of noncompliance wherein the procurement order for a spare part failed to state that the item was a commercial grade spare part as so required in paragraph 7 of the general requirements of Quality Assurance Procedure No. 4, Revision 8, of the SMUD Quality Assurance Manual.

In this case, the inspector observed that because the 16 questionable purchase orders noted above did not identify the items as commercial grade parts as required by quality assurance procedures, the inspector could conclude that all 16 items procured were "basic components" and not commercial grade items as contended by the licensee.

Rather than belabor the commercial grade versus the basic component argument the inspector decided to examine procurement documents for equipment that fell within the "basic component" category of 10 CFR 21.3(2) and 10 CFR 21.3(3). This examination is given below in item "b".

- b. Electrical Components for the Nuclear Service Electrical Building:
The following contract specifications (procurement documents) were reviewed:

<u>Contract No.</u>	<u>Description</u>	<u>Vendor</u>	<u>Date Awarded</u>
. 8320	480 Volt AC Load center units	Brown Boveri Electrical Inc.	June 19, 1981
. 8257	25 KVA Class 1E Inverters	Elgar Corporation	May 8, 1981
. 8347	Metal Clad Switchgear and non-segregated phase bus	General Electric	June 2, 1981
. 8256	Battery Chargers	Power Conversion Products	May 8, 1981
. 8998	Air cooled radiators for diesel generators	Chicago Bridge and Iron	August 6, 1982

The inspector noted that none of the above five contract specifications (procurement documents) made reference to the provisions of 10 CFR 21, as required by 10 CFR 21.31, and Quality Assurance Procedure Number 4, Revision 8 of the SMUD Quality Assurance Manual, and Rancho Seco Quality Control Instruction No. 10, Revision 3.

The failure to assure that procurement documents comply with federal statutes and the requirements of the SMUD Quality Assurance Program is considered an apparent item of noncompliance with 10 CFR 21.31, "Procurement Documents". (Noncompliance 50-312/82-32/01)

4. Storage of Electrical Component

The inspector examined the receipt inspection, handling and storage activities relative to electrical components and systems for the Nuclear Service Electrical Building (NSEB) to assure that the activities were being accomplished in accordance with NRC requirements and licensee commitments.

On examining the storage area the inspector noted that the electrical components were not stored in accordance with the ANSI N45.2.2, Level "B" requirements, in that the warehouse was divided into two sections, with only one section having temperature controls, though Class I electrical components were stored in both sections. Discussion with cognizant engineers indicated that Nonconformance Report No. S-2771 had been written on August 3, 1982 to document this discrepancy. However, the licensee noted that by letter dated January 5, 1981 to NRC:NRR the licensee took exception to the four levels (A, B, C, and D) as required by ANSI N45.2.2, and stated that they would, when warranted specify special cleaning and preservation requirements as purchased equipment was received onsite.

A review of the Receiving Inspection and Data Reports (RIDR) for the equipment examined determined that the RIDR's did not indicate any special storage conditions/environment as would ordinarily be required by electrical components.

The inspector does not consider this an item of noncompliance, however, the licensee's program for receipt, handling and storage of material procured for the on-going modifications (Nuclear Service Electrical and Diesel Generator Buildings) will be examined further during a future NRC inspection. This is a followup item. (Followup Item: 50-312/82-32/02)

5. Management Interview

On August 20, 1982, the inspector met with licensee personnel denoted in paragraph 1. The scope of the inspection, the observations and findings of the inspector were discussed.