


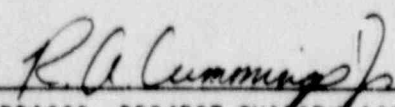
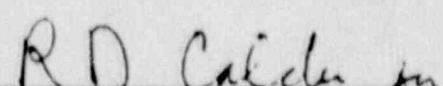
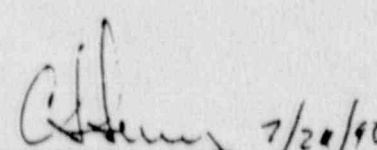

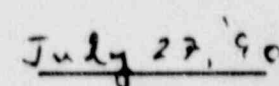
# COMANCHE PEAK STEAM ELECTRIC STATION

## UNIT 2

**EBASCO**

**CODE CONTROL PROGRAM  
ASME III DIVISION 1**



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PREPARED BY: C. T. Anderson		SUPERSEDES: REVISION: 1
		DATE: 08/13/90
APPROVAL:   EBASCO, DIRECTOR QUALITY ASSURANCE   EBASCO, PROJECT QUALITY ASSURANCE PROGRAM MANAGER		CONCURRENCE:   TU ELECTRIC, CHIEF ENGINEER   7/20/90 TU ELECTRIC, DIRECTOR QUALITY ASSURANCE
THIS SECTION ACCEPTED BY EBASCO AUTHORIZED INSPECTION AGENCY:  <div style="display: flex; justify-content: space-between;"> <div>                       AUTHORIZED SIGNATURE                 </div> <div>                       DATE                 </div> </div>		

# COMANCHE PEAK STEAM ELECTRIC STATION

## UNIT 2

# EBASCO

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### ASME III DIVISION 1



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#### 1.0 INTRODUCTION

This Section defines the Code Control Group's (CCG) overview and coordination of engineering and design activities, including the interfaces among the various design organizations, required to establish an additional level of assurance of compliance with Project Code commitments. This overview shall include reviews of activities that have been and are currently being performed. The reviews will identify and take credit for those activities which meet the needs of this Program. The reviews will also identify any activities requiring increased emphasis to assure compliance with Project Code commitments. These reviews shall be documented in accordance with methods described in this Section.

#### 2.0 CCG VERIFICATION OF ENGINEERING AND DESIGN ACTIVITIES

##### 2.1 GENERAL

The Project Quality Assurance Program Manager (PQAPM) shall overview the engineering and design activities of the various design organizations by performing the following:

- 2.1.1 Overseeing the organization's Quality Assurance (QA) Program including applicable procedures.
- 2.1.2 Performing surveillance of the QA Program for each organization performing engineering and design activities.
- 2.1.3 Performing selected reviews of engineering and design-related documents/records.

##### 2.2 Overview of Design Organization's QA Program

- 2.2.1 The PQAPM shall verify that the QA Programs/Procedures of the various design organizations have been reviewed and accepted as required.
- 2.2.2 Additionally the PQAPM shall overview the QA Program and applicable procedures of organizations performing Code-related engineering and design activities. The purpose of this overview is to provide an additional level of assurance that adequate controls are provided to assure compliance with Project Code commitments applicable to the organization's scope of work.

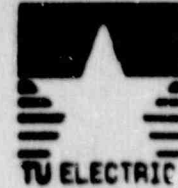
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### 2.3 Surveillance Activities

The PQAPM shall perform surveillances and document/record reviews and, as necessary, arrange for audits in accordance with Section 10 of this Manual to establish confidence that all Comanche Peak Steam Electric Station (CPSES) organizations performing Code-related engineering and design activities are doing so in accordance with their accepted QA Programs/Procedures.

### 2.4 Review of Engineering Documentation/Records

2.4.1 OOG may review any document/record deemed necessary to establish confidence that Code-related engineering and design activities are in compliance with Project Code commitments and the Design Specifications. OOG shall perform the following key overviews in accordance with implementing procedures:

- Overview current and future issues of ASME Section III Design Specifications for Compliance with Project Code commitments.
- Overview change documentation to ASME Section III Design Specifications for compliance with Project Code commitments. (See Section 9 of this Manual for OOG reviews of design change dispositions for reported nonconformances.)

2.4.2 OOG shall verify completion of the following activities to establish confidence that reviews are being adequately performed in accordance with Project Code commitments:

- Stress reconciliation for Code Class 1, 2, and 3 piping systems including their supports.
- Overpressure Protection Analysis for certain Class 2 systems.
- Overpressure Protection Report for Class 1 systems.



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- Qualification of Code Class 1, 2, and 3 components to the design conditions defined in the Design Specifications including: a.) Completion of equipment requalification calculations for piping-induced loads not enveloped by vendor qualifications and b.) Completion of Code component validation to Code system design requirements including equipment requalification calculations and seismic/stress reports.
- Completion of the Owner's review for all Code-related Stress Reports.

### 2.5 Documentation of OOG Activities

2.5.1 OOG reviews (comments and recommendations) of ASME Section III Design Specifications and changes thereto shall be documented on a review form and retained in accordance with Section 7 of this Manual.

2.5.2 The results of OOG surveillances/overviews conducted in accordance with this Section, including unsatisfactory conditions, shall be documented on a Surveillance Report, Exhibit 15.6 and controlled in accordance with OOG Project Procedures. Unsatisfactory conditions identified by OOG shall be assigned for resolution by the responsible organization in accordance with established CPSES Procedures. If at the time of Surveillance Report issuance an unsatisfactory condition is not resolved by the responsible organization in a manner acceptable to the OOG, the OOG shall initiate, as appropriate, a Surveillance Observation Form (SOF), Exhibit 15.6 and/or a TU Evaluation (TUE) Form in accordance with Section 9 of this Manual.

### 3.0 CODE REQUIRED ENGINEERING AND DESIGN RECORDS

The Code in effect at CPSES Unit 2 requires certain engineering and design-related records to be generated. These records and the Code requirements for these records are addressed in this Section.

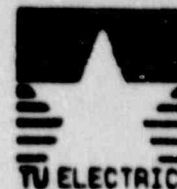
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### 3.1 ASME Section III Design Specifications

3.1.1 The Owner's Design Specification is a record specifying the requirements for components, appurtenances, and component supports in sufficient detail to provide a complete basis for construction in accordance with the Code. Construction, as used in the Code, is an all-inclusive term comprising materials, design, fabrication, examination, testing, inspection, and certification required in the manufacture and installation of the items.

3.1.2 The Component Design Specification required by the Code may consist of multiple specifications prepared to address discrete portions of the Code requirements for a component due to proprietary information or contractual reasons. These multiple specifications are required to satisfy the Code requirements for a Design Specification. Additionally, separate Design Specifications are not required for parts, piping, subassemblies, appurtenances or component supports when their requirements are included in the Design Specification of a component.

3.1.3 Design Specifications are required by the Code to include the following:

- Functions and boundaries of the items covered.
- Design requirements including all required overpressure protection requirements.
- Environmental conditions, including radiation.
- Code Classification of items covered.
- Material requirements, including impact test requirements.
- When operability is necessary, reference to other documents/records which specify operating requirements.
- Effective Code Edition, Addenda, and Code Cases and later Code Edition/Addenda, when authorized for use at CP&ES.

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- Other detailed requirements by applicable class which are specified by the Code to be included in the Design Specification.

3.1.4 Design Specifications are required by the ASME Code to be certified by a Registered Professional Engineer (RPE), competent in the applicable field of design and the related nuclear power plant requirements. Additionally, State regulations require that the RPE be registered in State of Texas. Certification activities of an RPE shall be in accordance with ANSI/ASME N626.3-1979 when provisions of the 1980 Code Edition through Summer 1980 Addenda or later are used.

### 3.2 Stress Analysis and Stress Reports/Load Capacity Data Sheets

3.2.1 Stress analysis calculations for components and component supports establish that the design shown by drawings used for construction complies with requirements of the Design Specification and the Project Code commitments.

3.2.2 When required by the Code, a Stress Report based on these calculations and drawings is prepared for each component and for each component support or group of component supports, unless a Load Capacity Data Sheet is provided for the support.

3.2.3 A Load Capacity Data Sheet may be provided for component supports designed by load rating. The Load Capacity Data Sheet is required to:

- Adequately identify the supports.
- State the load capacity.
- Identify the tests and calculations used to establish the load capacity.
- Specify the organization responsible for retaining the data substantiating the stated load capacity.

3.2.4 Stress Reports for the following items are required to be certified by one or more RPE's registered in the State of Texas who are competent in the applicable field of design, and who did not certify the corresponding ASME Section III Design Specification. Certification activities of a RPE



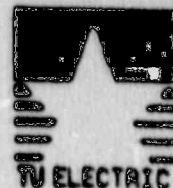
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shall be in accordance with ANSI/ASME N525.3-1979 when provisions of the 1980 Code Edition through Summer 1980 Addenda or later are used.

- Class 1 piping systems.
- Class 1 component supports.
- Class 2 vessels designed to NC-3200.
- Class 2 and 3 components designed to service loadings greater than design loadings.

3.2.5 Load Capacity Data Sheets for the following supports are required to be certified by EPE's registered in the State of Texas who did not certify the corresponding ASME Section III Design Specifications. Certification activities of an EPE shall be in accordance with ANSI/ASME N525.3-1979 when provisions of the 1980 Code Edition through Summer 1980 Addenda or later are used.

- Supports for Class 1 components.
- Supports for Class 2 vessels designed to NC-3200.

3.2.6 Certified Stress Reports/Load Capacity Data Sheets are required to have an Owner's review prior to component certification to determine that design and service loading stated in the Design Specification have been evaluated and that acceptance criteria, permitted by the Code and established in the Design Specification for the specified Design and Service conditions, have been considered.

### 3.3 Overpressure Protection Analysis and Report

3.3.1 An Overpressure Protection Analysis is required for certain Code Class 2 systems at CPSES.

3.3.2 An Overpressure Protection Report is required for Code Class 1 systems. Overpressure Protection Reports are required to be certified by one or more EPE's registered in the State of Texas who are competent in the applicable field of design of systems and their operating and safety controls.

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## 4.0 AVAILABILITY TO ANI

The PCAPH shall make ASME-related documents/records available to EBASCO's Authorized Nuclear Inspector.