TUGCO NUCLEAR ENGINEERING CPSES	PROCEDURE	REVISION	ISSUE DATE	PAGE
INFORMATION ONLY	TNE-DC-12	3	5-29-84	1 OF 7
PREPARATION OF ENGINEERING CHANGE NOTICES (ECN'S)	PREPARED BY Shahid R Qazi APPROVED BY R D Calder			

1.0 GENERAL

1.1 PURPOSE

The purpose of this procedure is to define the process for preparation and approval of engineering change notices (ECN's).

1.2 SCOPE

This procedure shall apply to CPSES design changes, modifications, or engineering clarifications for which TUGCO Operations will perform or supervise the modification work. The provisions of this procedure are not applicable to design changes, modifications, or engineering clarifications effected via the issuance of new or revised drawings.

1.3 RESPONSIBILITIES

The TNE Manager has the overall responsibility for the issuance, control, review, and approval of ECN's generated by TNE. The Supervising Engineers have been delegated the responsibility for ensuring that activities defined herein are carried out in an orderly and controlled manner.

1.4 DEFINITIONS

1.4.1 Engineering Change Notice (ECN)

A design document which is used to communicate design changes, modifications, and engineering clarifications to operations, maintenance, and construction personnel.

2.0 PROCEDURE

2.1 PREPARATION

ECN's shall consist of a cover sheet (form TNE-DC-12.1, Figure 1-Part B), Interdiscipline Review Data Sheets (form TNE-DC-12.2, Figure 2-Part B) (when required), and any other attachments such as marked up drawings, sketches, specification sheets, etc., required to adequately describe the change. Each sheet of the ECN shall be identified by the ECN serial number and numbered "Sheet ___ of (the total number of sheets)." An ECN should apply to only one plant system.

The ECN originator shall obtain an ECN serial number from TNE FILES, coordinate the interdiscipline review and if a CLASS I or CLASS II system, structure, or component is affected, ensure that the required design verification is completed.

2.2 APPROVAL

ECN's generated in accordance with this procedure shall be approved by one of the following:

A) TNE Manager
B) TNE Supervising Engineer
C) TNE Lead Engineers

Prior to signing the ECN approval block, the approving engineer shall ensure that interdiscipline review and design verification was completed as applicable.

2.3 RETENTION

Upon approval, the ECN and design verification documentation (if applicable) shall be forwarded (via form TNE-DC-12.3, Figure 3) to TNE FILES for processing per TNE-AD-4.

2.4 REVISION

Any revision to an approved ECN shall be reviewed, approved, and processed as an original and voids and supercedes the previous revision.

FIGURE 1 - PART A
ECN COVER SHEET - FORM COMPLETION

1. ECN NUMBER - Assigned by TNE FILES

2. DESIGN MODIFICATION NUMBER - Assigned by TUGCO Operations Support

3. SYSTEM DESIGNATION - Enter the appropriate plant designation number as assigned by TUGCO Operations Support.

4. UNIT - Enter the applicable plant unit as follows: "1" - Unit 1; "2" - Unit 2; "X" - common plant system; "B" - applies to Units 1 & 2.

5. Indicate whether the system is CLASS I, CLASS II, or Non-Safety (see TNE-DC-1).

6. REASON FOR CHANGE - Brief description including references to supporting correspondence and plant interface documents.

7. DESCRIPTION:
   A. List drawings, specifications, sketches, or other engineering documents affected as identified by the originating discipline.
   B. Provide information on the change using adequate descriptions or references to other document(s) which clearly illustrate the implementation requirements.

8. INTERDISCIPLINE REVIEW - Check the appropriate block. If "YES" is checked, the originator shall also indicate the reviewing disciplines by placing a check in the space provided as applicable. ECN Interdiscipline Review Data Sheets (Figure 2) shall be completed by each reviewing discipline prior to issuance of the ECN. If ASME B&PV Code stamped piping is affected, CPPE-Technical Services (CPPE-TS) and CPPE-Pipe Support Engineering (CPPE-PSE) review is required.

9. DESIGN VERIFICATION COMPLETE - Signature and date of the design verifier or "N/A" as appropriate. If performed by the vendor, for changes to vendor equipment, provide the name of the firm and documentation references (or attach copies if available).

10. ORIGINATOR - Signature of the originator and date of preparation.

11. APPROVED BY - Signature of the approving engineer per paragraph 2.3 and date of approval.

FIGURE 1 - PART B
(TYPICAL)
COMANCHE PEAK STEAM ELECTRIC STATION
ENGINEERING CHANGE NOTICE
COVER SHEET

Sht 1 of __

1. ECN NO. _____ REV. ___ 2. DESIGN MODIFICATION NO. _____

3. SYSTEM DESIGNATION _____ 4. UNIT _____

5. SYSTEM: CLASS I _____ CLASS II _____ NON-SAFETY _____

6. REASON FOR CHANGE _____

7. DESCRIPTION:
   A. Affected Document(s); _____
   B. Details: _____

8. INTERDISCIPLINE REVIEW REQUIRED: YES___ NO___

___ Mechanical	___ Nuclear
___ Electrical	___ Systems
___ Instrumentation	___ Stress Analysis(CPPE-TS)
___ Civil Structural	___ Pipe Support Eng.(CPPE-PSE)

9. DESIGN VERIFICATION COMPLETED BY:

_____ (Name) _____ (Date)

10. ORIGINATOR _____ (Name) _____ (Date)

11. APPROVED BY _____ (Name) _____ (Date)

FORM: TNE-DC-12.1
January 1984

FIGURE 2 - PART A

ECN INTERDISCIPLINE REVIEW DATA SHEET - FORM COMPLETION

Figure 2, Part B shall be completed as follows:

1. ECN NUMBER & REV - Enter the same number and revision as the ECN cover sheet.

2. DESIGN MODIFICATION NUMBER - Enter the number assigned by TUGCO Operations Support.

3. REVIEWING DISCIPLINE - Name of the reviewing engineering discipline.

4. DOCUMENTS AFFECTED - Each line to be completed as follows:

   A. List all discipline engineering documents which require change or clarification to physically implement the ECN. Revisions implemented by other means prior to ECN issuance shall not be listed unless further change or clarification is required.

   B. Enter the current revision of the listed document.

   C. Enter brief remarks as necessary to clarify the required change.

   D. Enter the number of the ECN (or other document) to be issued to accomplish the change to the listed document. ECN numbers shall be preassigned by TNE FILES. (CPPE-TS or CPPE-PSE enter N/A.)

   When no document changes or clarifications are identified during the performance of this review, the word "None" shall be entered.
   If review indicates that revision of the current ECN is warranted, so indicate and attach comments as necessary for dispositioning as appropriate by the originator.

5. SIGNATURE OF THE REVIEWING ENGINEER AND DATE OF REVIEW COMPLETION.

FIGURE 2 - PART B
(TYPICAL)
COMANCHE PEAK STEAM ELECTRIC STATION
ENGINEERING CHANGE NOTICE
INTERDISCIPLINE REVIEW DATA SHEET

1. ECN NO._____ REV____

2. DESIGN MODIFICATION NUMBER_____

3. REVIEWING DISCIPLINE_____

4. DOCUMENTS AFFECTED BY THIS CHANGE:

A. DOCUMENT NUMBER	B. REV.	C. REMARKS	D. IMPLEMENTING ECN

5. REVIEWING ENGINEER_____ DATE_____

FORM: TNE-DC-12.2
January 1984

FIGURE 3
(TYPICAL)
TRANSMITTAL

ECN NO. - _____ REV. ____

DM NO. _____

To: TNE FILES

The following documents are hereby transmitted for processing per TNE-AD-4:

ECN NO. _____ REV. ___ ___ CLASS I
___ CLASS II
___ NON-SAFETY

DVR YES ___ NO ___

OTHER (specify) _____

_____

_____

Please acknowledge receipt of the listed documents by signing and dating. this transmittal and returning it to _____

NAME _____ DATE _____
TNE FILES

Form: TNE-DC-12.3
May 1984

QTN-911

TEXAS UTILITIES GENERATING COMPANY

OFFICE MEMORANDUM

To J.T. Merritt Date April 18, 1984

Subject COMANCHE PEAK STEAM ELECTRIC STATION
TUGCO QA AUDIT REPORT
ENGINEERING: TNE
QA AUDIT FILE: TCP-102
TCP-86
TCP-73

Attached is TUGCo QA Audit Report TCP-102 which describes the results of our audit of Engineering: TNE, performed April 9-12, 1984. The audit team was composed of H.R. Napper (Team Leader), and D.W. Schmidt.

Attachment A contains an audit summary including attendees of the pre-audit and post-audit meetings, and persons contacted during the audit.

No deficiencies were identified; therefore, a response is not required.

Should you have any questions, please contact H.R. Napper at 214/979-8885.

D.N. Chapman
Manager, Quality Assurance

DNC/brd

Attachment

cc: B.R. Clements
A. Vega
M.R. McBay
G.R. Purdy
B. Grier

FOIA-85-151
A/63

ATTACHMENT A

AUDIT SUMMARY

TCP-102

Attendance - Pre Audit Meeting
QA Audit No. TCP-102 (TNE-Follow-up)
Date APRIL 9, 1984

Name	Title	Name	Title
Helen R. Hopper	Team Leader		
Shahid R. Ali	TNE		
Dennis W. Schmidt	TUGCO QA		
R P Baker	Tugco E&C		
R D Calder	TNE		

Attendance - Post Audit Meeting
Date APRIL 13, 1984
TCP-102

Name	Title	Name	Title
Helen R. Hopper	Team Leader		
R D Calder	TNE		
Dennis W. Schmidt	TUGCO QA		
Shahid R. Ali	TNE		
M T Staggs	TNE		
R P Baker	Tugco E&C		

TCP-102

Audit Summary

Audit Team:

H.R. Napper - Team Leader
D.W. Schmidt

Personnel Contacted:

S. Ali
N. Smith
V. Massingale
C. Boyd
D. Bleeker
J. Bernier
A. Meinershagen
R. Calder
F. O'Neill
B. Vaugh
J. Tate
K. Jones
C. Manning
M. Strange
P. Saterfield
J. Berttain
R. Baker
S. Donald
H. Cheatum

Audit Scope:

This audit was performed to verify implementation of corrective action commitments for TCP-73, Deficiency Nos. 1-10 and Concern Nos. 1-8; and TCP-86, Deficiency Nos. 1-4 and Concern Nos. 1-11.

The following list contains the codes, standards and CPSES procedures/ instructions utilized during this audit:

10CFR50 Appendix B	Quality Assurance Criteria for Nuclear Power Plants. Specific Criteria: I, II, III, V, VI, and XVII.
ANSI N45.2-1971	Quality Assurance Program Requirements for Nuclear Power Plants. Specific Sections: 2, 3, 4, 6, 7 and 18.
U.S. Reg. Guide 1.64-1976	Quality Assurance Requirements for the Design of Nuclear Power Plants
ANSI N45.2.11-1974	Quality Assurance Requirements for the Design of Nuclear Power Plants
TNE-AD-1, Rev. 2	Organization
TNE-AD-3, Rev. 3	Preparation of Procedures and Instructions
TNE-AD-4, Rev. 1	Control of Engineering Documents
TNE-AD-4-1, Rev. 2	Instructions for Retention of Engineering Documents

Audit Summary

TNE-DC-1, Rev. 2	Design Control General Requirements
TNE-DC-3, Rev. 2	Preparation and Review of Calculations
TNE-DC-4, Rev. 6	Preparation and Review of Specifications
TNE-DC-5, Rev. 2	Vendor Document Review
TNE-DC-5-1, Rev. 1	Closeout of Vendor Document Review
TNE-DC-7, Rev. 4	Preparation and Review of Design Drawings
TNE-DC-7-2, Rev. 2	Drafting Standardization Instruction
TNE-DC-8, Rev. 4	Design Verification of Engineering Documents
TNE- DC-8-1, Rev. 3	Instruction for Design Verification of Field Design Changes Applicable to Vendor Drawings
TNE-DC-12, Rev. 2	Preparation of Engineering Change Notices (ECN's)
TNE-PR-2, Rev. 0	Release of Vendor Equipment
TNE-PR-3, Rev. 2	Classification of Safety-Related Replacement Parts

Audit Summary:

The audit team's investigation included verification of TNE's corrective action commitments for TCP-73, Deficiency Nos. 1-10, and Concern Nos. 1-8; and TCP-86, Deficiency Nos. 1-4 and Concern Nos. 1-11. Additionally, the audit team reviewed approximately 10 each of the following types of documents to verify the effectiveness and adequacy of the corrective action taken:

1. Drawings (Vendor and TNE)
2. ECN's (Vendor and TNE)
3. TNE training seminars and workshops
4. TNE procedures and instructions
5. TNE - Specifications
6. TNE - Calculations
7. G&H Calculations and Specifications
8. TNE Document Control Logs
9. Component Parts Safety Classification Evaluation Forms
10. TNE Organization Charts (pages 1-6)
11. DCA's
12. Vendor Document Indexes
13. Vendor Document Checklists

TCP-102

Audit Summary

Based on the objective evidence reviewed during the investigative phase of this audit, the corrective action commitments for TCP-73, Deficiency Nos. 1-10, Concern Nos. 1-8; and TCP-86, Deficiency Nos. 1-4, Concern Nos. 1-11 were found to be satisfactorially implemented. Therefore, the deficiencies and concerns for TCP-73 and TCP-86 can be considered closed.

Helen R. Napper

H.R. Napper
Team Leader

Project Procedures Manual

Table of Contents

SECTION	PROCEDURE NUMBER	TITLE	DATE OF PROCEDURE	REVISION
		PROJECT CONTROL (CONT'D)		
2.	PC-7	TELEPHONE COMMUNICATION PROCEDURE	5-83	4
TGH 19	PC-8	CHANGE ORDER PROCEDURE - ENGINEERING AND DESIGN	5-83	5
TGH 19	PC-9	DESIGN/ENGINEERING CHANGE/ DEVIATION REQUEST PROCEDURE	5-83	8
3.		DESIGN CONTROL		
TPC-73	DC-1	CODES AND STANDARDS APPLICATION PROCEDURE	3-72	1
	DC-2	DESIGN DESCRIPTION PROCEDURE	9-81	5
TCP 73	DC-3	DRAWING PREPARATION, CHECKING AND APPROVAL PROCEDURE	4-83	6
TCP-72 TCP 72	DC-4	DESIGN DRAWING CHECKING AND APPROVAL PROCEDURE	8-82	5 (Deleted)
TGH 22	DC-5	PREPARATION OF PROCURE - MENT SPECIFICATION PROCEDURE	3-82	6
	DC-6	PROPOSAL EVALUATION PROCEDURE	4-78	3
TGH-22 TCP 73	DC-7	TECHNICAL CALCULATIONS PROCEDURE	5-83	9
TCP 73	DC-8	DESIGN REVIEW PROCEDURE - CALCULATIONS, DRAWINGS, SPECIFICATIONS	3-83	6
TCP 73	DC-9	DESIGN REVIEW PROCEDURE SPECIFICATIONS	5-79	4 (Deleted)
	DC-10	DESIGN REVIEW PROCEDURE CALCULATIONS	5-79	4 (Deleted)
TCP 73	DC-11	Q-LIST CONTROL PROCEDURE FOR NUCLEAR PROJECTS	5-83	2

SECTION	PROCEDURE NUMBER	TITLE	DATE OF PROCEDURE	REVISION	
3.	DESIGN CONTROL (CONT'D)				
TCH-26	DC-12	SAFETY ANALYSIS REPORTS PREPARATION & REVIEW PROCEDURE	7-83	3	
	DC-13	PROCEDURE FOR IDENTIFICATION AND CONTROL OF DESIGN INTERFACES BOTH EXTERNAL AND INTERNAL	5-79	2	
4.	PROCUREMEMT				
	PMT-1	PURCHASING DEPARTMENT MANUAL	8-82	3	(Deleted)
5.	QUALITY ASSURANCE				
TCH-21	QA-1	INTERNAL SURVEILLANCE PROCEDURE	7-83	7	
	QA-2	VENDOR AUDIT AND SURVEILLANCE PROCEDURE	8-82	7	(Deleted)
	QA-3	SITE SURVEILLANCE PROCEDURE	12-74	0	(Deleted)
TCH-21	QA-4	CPSES-INTERNAL AUDIT PROCEDURE	8-81	8	
TCH-21	QA-5	PROCEDURE FOR INDOCTRINATION AND TRAINING	9-83	5	
	QA-6	PROCEDURE FOR CONTROL AND IMPLEMENTATION OF NRC DOCUMENTS	3-80	4	
TCH-21	QA-7	ISSUANCE, MODIFICATION AND CONTROL OF PROJECT PROCEDURES MANUAL	7-82	7	
	QA-8	PROCUREMENT QUALITY ASSURANCE REQUIREMENTS	3-80	3	
TCH-21	QA-9	QUALITY ASSURANCE RECORDS RETENTION	4-83	5	

QTQ-695

TEXAS UTILITIES GENERATING COMPANY

OFFICE MEMORANDUM

To R.G. Spangler Date May 15, 1984

Subject PROPOSED AUDIT SCHEDULE
INTERNAL & PRIME SUBCONTRACTOR
REVISION NO. 1 TO PROPOSED AUDIT SCHEDULE OF JANUARY 26, 1984

Attached is the proposed Internal/Prime Subcontractor Audit Plan/Schedule for 2nd, 3rd, and 4th quarter 1984. This revision to the original Audit Plan for 1984 has been developed to more adequately accomplish audit goals during the completion of Unit 1 construction and startup testing and to assure proper audit activity of Unit 2 construction during this period. Also, the Operations audit plans have been revised based on an anticipated September fuel load date. This revision incorporates the changes we discussed on May 7, 1984.

Please review the proposed audit plan/schedule for any changes, additions or deletions you may wish to implement.

D.L. Anderson
D.L. Anderson
Supervisor, Quality Assurance Audits

DLA/sam

Attachment

To: D.L. Anderson

Comments:

Approved by: R.G. Spangler
R.G. Spangler

5/16/84
Date

FOIA-85-151
A/65

1984 1st Quarter Audit Plan/Schedule

CONSTRUCTION PHASE (Engineering/Construction/QA/QC)

Procurement - TCP-93 (1/23-27/84)
Civil Structural - TCP-98 (3/19-23/84)
Electrical: Thermolag/Fire Barrier - TCP-94 (2/6-10/84)
~~Mechanical: Valve Disassembly/Reassembly~~ (1)
ASME N5 Program - TCP-97 (3/5-9/84)
IEEE Qualification - TCP-96 (2/20-24/84)
~~Design Control~~ (1)
Receiving/Storage/Maintenance - TCP-92 (1/9-13/84)
Area Turnover - TCP-95 (2/20 - 3/2/84)
Pre-Service Inspection - TCP-91 (1/23-27/84)
Document Control - TCP-99 (3/26-30/84)

STARTUP PHASE

None scheduled

OPERATIONS PHASE

Training - TUG-46 (1/9-13/84)
Records - TUG-48 (1/23-27/84)
Special Processes - TUG-47 (1/17-20/84)
Design Control TUG-49 - (2/6-10/84)
Chemistry - TUG-50 (2/27 - 3/2/84)
Corrective Actions - TUG-51 (3/5-9/84)
~~Turnover/Custody-Acceptance~~ (2)
~~Maintenance~~ (3)
Spare/Replacement Parts Procurement - TUG-52 (3/13-16/84)

SUBCONTRACTOR/PRIME CONTRACTOR

~~Gibbs & Hill, NY~~ (1)
Bahnson - TBS-7 (3/26-30/84)
~~Grinnell~~ (4)
W - Fuel - ASEA - ATOM PAS (3/26-30/84)

Total Audit Activities: 18

(1) - Moved to 2nd quarter
(2) - No S/R areas accepted under new program
(3) - Postponed due to continuing work resolving TUG-40
(4) - Cancelled, no current activity; will be rescheduled when Unit 2 work is in progress

1984 2nd Quarter Audit Plan/Schedule

CONSTRUCTION PHASE

ASME Section XI Program
Mechanical: Valve Disassembly/Reassembly (1)
Electrical: NIS Cable
Unit 1:
Area Turnover - 2
General:
Containment
Auxiliary
Limited Scope: - 2
Electrical/Control: Conduit/CT Supports
Auxiliary: Field Design Change/Grouting/Hiltis
Unit 2:
Work Package Flow Control
Engineering
Design Control (1)
TNE
Damage Study

STARTUP PHASE

Testing

OPERATIONS PHASE

~~Emergency Plan~~ (4)
~~Security~~ (2)
Operations
RWMS
~~Procurement~~ (3)
Warehousing
Maintenance/QC
~~M&TE~~ (4)
~~ASME Section XI Program~~ (7)
Administration
~~Turnover/Custody-Acceptance~~ (2)
Fuel Storage/Accountability
Fire Protection (5)
Licensed Operator Training (6)

SUBCONTRACTOR/PRIME CONTRACTOR

Gibbs & Hill, NY - (1)
Bahnson
G&H - Site
BISCO

Total Audit Activities: 28

(1) - Moved from 1st quarter
(2) - Moved to 3rd quarter
(3) - Moved up to 1st quarter
(4) - Moved to 4th quarter
(5) - Moved from 3rd quarter
(6) - Added this Revision No. 1
(7) - Deleted this Revision No. 1

1984 3rd Quarter Audit Plan/Schedule

CONSTRUCTION PHASE

Unit 1:
- Area Turnover - 1
- General: Electrical Control
- Limited Scope - 2
  - Containment - Pipe Supports/PC
  - Safeguards - Raceway

Unit 2:
- ASME: Pipe Supports
- Electrical: Cable Tray/Hangers
- Construction/QC Administration

Engineering:
- Administration
- Design Control

STARTUP PHASE

Testing

OPERATIONS PHASE

Operations (5)
Initial Startup
Health Physics
~~Fire Protection~~ (1)
Security
I&C
~~Nuclear Operations Support~~ (2)
~~Environmental Qualifications~~ (2)
~~QA~~ (2)
Turnover/Custody Acceptance (3)
Document Control (4)
T.S. Surveillance Test (4)
Maintenance (5)

SUBCONTRACTOR/PRIME CONTRACTOR

Bahnson
Grinnell
W

Total Audit Activities: 22

(1) Moved to 2nd quarter
(2) Moved to 4th quarter
(3) Moved from 2nd quarter
(4) Moved from 4th quarter
(5) Added this Revision No. 1

1984 4th Quarter Audit Plan/Schedule

CONSTRUCTION PHASE

Unit 2:
- I&C
- Non-ASME Mechanical
- M&TE
- Nonconformances/Corrective Action
- Training/Qualifications

Engineering:
- Damage Study

STARTUP PHASE

- Testing
- Administration

OPERATIONS PHASE

- Environmental
- ~~Document Control~~ (1)
- Licensed Personnel Training
- ~~Surveillance Testing~~ (1)
- ~~Fuel Accountability~~ (2)
- Chemistry
- Corporate Support Organizations
- ~~Health Physics~~ (3)
- Operations (5)
- Nuclear Operations support (4)
- Environmental Qualifications (4)
- QA (4)
- Emergency Plan (6)
- Preventive Maintenance (5)
- M&TE (6)

SUBCONTRACTOR/PRIME CONTRACTOR

- W
- Bahnson
- BISCO

Total Audit Activities: 22

(1) Moved to 3rd quarter
(2) Moved to 2nd quarter
(3) Covered in 3rd quarter
(4) Moved from 3rd quarter
(5) Added this Revision No. 1
(6) Moved from 2nd quarter