TVA EMPLOYEE CONCERNS
SPECIAL PROGRAM

REPORT NUMBER: 201.4(B)

REPORT TYPE: SEQUOYAH ELEMENT
NON-RESTART JUSTIFICATION SUMMARY

REVISION NUMBER: 0

TITLE: Standards and Guides
- o Policy and Practice on Utilization
- o Adequacy and Completeness

REASON FOR REVISION:

PREPARATION

PREPARED BY:

D. A. Zurinsky — SIGNATURE — 10/18/86 — DATE

REVIEWS

~~PEER:~~

[signature] — SIGNATURE — 10/21/86 — DATE

TAS

RRH [signature] — SIGNATURE — 12/15/86 — DATE

CONCURRENCES

D T Clift — 10/22/86

CEG-H: George R McNutt — 10-23-86

SRP: Jimmie L Joyce — SIGNATURE * — 12-17-86 — DATE

APPROVED BY:

M U Rubin — ECSP MANAGER — 12-18-86 — DATE

N/A — MANAGER OF NUCLEAR POWER CONCURRENCE (FINAL REPORT ONLY) — DATE

*SRP Secretary's signature dentoes SRP concurrences are in files.

SEQUOYAH NUCLEAR PLANT

ENGINEERING RELATED EMPLOYEE CONCERNS

SPECIAL PROGRAM

NON-RESTART JUSTIFICATION SUMMARY

SUBCATEGORY/ELEMENT 201.4(B)

The issues identified in this element refer to possible programmatic deficiencies in the engineering design process.

The issues address misuse, and lack of use of both industry and TVA engineering standards and guides.

Items in this element are considered to be addressing those non-mandatory industry standards, and non-mandatory TVA engineering standards and guides. Such standards and guides are included as applicable in design output documents.

Procedures place the responsibility for application of these engineering standards and guides on the engineer (i.e., they are used or not as applicable to the design, at the discretion of the engineer).

This type of situation, if found to be valid, would represent a programmatic deficiency that must be formally addressed as needed improvement in the design process.

However, full implementation of this improvement is not considered to be a requirement for plant restart, because the issues do not present a programmatic problem with specific safety-significance.

Items such as mandatory regulatory guides and mandatory industry standards will be addressed as restart items in element reports 204.4 and 201.3 where they are used in nuclear safety significant design criteria.

ATTACHMENT: List of Issues for Programmatic ELEMENT NO. 201.4(B)

Date: 10/05/86

SUBCATEGORY 201 - INCORPORATION OF REQUIREMENTS AND COMMITMENTS IN DESIGN

ELEMENT NUMBER 201.4 LIST OF PROGRAMMATIC ISSUES

SQN RESTART - NO DATE: 10/05/86

ELEMENT DESCRIPTION

Standards and Guides

- o Policy and Practice on Utilization
- o Adequacy and Completness

APPLICABLE EMPLOYEE CONCERNS

WI-85-100-019
WI-85-100-038
IN-86-259-X11
BNP-QCP-10.35-8-26-2

CONCERN NUMBER(S)		ISSUES	ELEMENT WHERE ADDRESSED	RESPONSIBLE
WI-85-100-038 Design/installation drawings do not always represent or include design requirements. Design guides/standards are utilized only when designers want to use them. Design guides/standards are inadequate in many areas, and there are misuses, such as applicable parts are not referenced or excerpted as requirements. CI has no further information. Anonymous concern via letter.	1.	Design/Installation Drawings do not always represent design requirements.	204.4	BW
	2.	Design/Installation Drawings do not always include design requirements.	204.4	BW
	3.	Design Guides and Standards are only used when desired by Designer.	201.4	DZ
	4.	Design Guides and Standards are inadequate in many areas.	201.4	DZ
	5.	Design Guides and Standards are misused.	201.4	DZ
	6.	Applicable parts of Guides/ Standards are not referenced or excerpted as requirements on drawings.	201.4	DZ
- - -		- - -	- - -	
BNP-QCP-10.35-8-26-2 Engineering can do a job within their standards, then they change those standards after the job is complete.	1.	Engineering changes TVA standards after the job is complete, perhaps because the completed job did not meet the original standards.	201.4	DZ

GENERAL APPROACH/METHODOLOGY FOR ELEMENT REPORT

Issues 3 through 6

1. Review engineering procedures and their references to guides and standards to determine which requirements are to be included on the drawings.
2. Establish examples of drawings from each discipline to be reviewed against design requirements.
3. Review drawings and evaluate.

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Issue 1

1. The word standard is interpreted to mean "criteria" or design basis, (i.e., a TVA Standard) since an industry standard cannot be changed by TVA.
2. Review appropriate "deviation" reports which describe cases where standards were violated.
3. Evaluate magnitude of review findings back as far as start of original construction.

SUBCATEGORY 201 - INCORPORATION OF REQUIREMENTS AND COMMITMENTS IN DESIGN

ELEMENT NUMBER 201.4 LIST OF PROGRAMMATIC ISSUES

SQN RESTART - NO DATE: 10/05/86

ELEMENT DESCRIPTION	APPLICABLE EMPLOYEE CONCERNS
Standards and Guides o Policy and Practice on Utilization o Adequacy and Completness	WI-85-100-019 WI-85-100-038 IN-86-259-X11 BNP-QCP-10.35-8-26-2

CONCERN NUMBER(S)	ISSUES	ELEMENT WHERE ADDRESSED	RESPONSIBLE
WI-85-100-019 Electrical Standards and Guides are treated as guides, and are not incorporated in design criteria requirements. Electrical design criteria, where it exists, is not complete, is vague, and in general is inadequate. CI has no further information. Anonymous concern via letter.	1. Electrical and other Engineering Standards are treated as guides only.	201.4	DZ
	2. Electrical and other Engineering Standards are treated as guides only.	201.4	DZ
	3. Electrical and other Engineering Standards are not incorporated in Design Criteria.	201.4	DZ
	4. Electrical and other Engineering Guides are not incorporated in Design Criteria.	201.4	DZ
	5. Electrical and other Engineering Design Criteria do not always exist.	201.3	DZ
	6. Existing Electrical and other Engineering Design Criteria are not always complete.	201.3	DZ
	7. Existing Electrial and other Engineering Design Criteria are vague.	201.3	DZ
	8. Existing Electrical and other Engineering Design Criteria are inadequate.	201.3	DZ

GENERAL APPROACH/METHODOLOGY FOR ELEMENT REPORT

Issues 1 through 4

1. Review Engineering procedures to determine how standards and guides are to applied.
2. Has this issue been identified in prior evaluations (audits, INPO report.)?
3. Evaluate if option for use is given to designer.

Issues 5 through 8

See element report 201.3

SUBCATEGORY 201 - INCORPORATION OF REQUIREMENTS AND COMMITMENTS IN DESIGN

ELEMENT NUMBER 201.4 LIST OF PROGRAMMATIC ISSUES

SQN RESTART - NO DATE: 10/05/86

ELEMENT DESCRIPTION	APPLICABLE EMPLOYEE CONCERNS
Standards and Guides o Policy and Practice on Utilization o Adequacy and Completness	WI-85-100-019 WI-85-100-038 IN-86-259-X11 BNP-QCP-10.35-8-26-2

CONCERN NUMBER(S)	ISSUES	ELEMENT WHERE ADDRESSED	RESPONSIBLE
IN-86-259-X11 If TVA electrical procedures do not include IEEE standards requirements or their equivalent, numerous problems can result. Construction Dept. concern. CI has no further information. No follow-up required.	1. TVA electrical procedures do not include IEEE standard requirements or their equivalent, therefore, numerous problems can result.	201.4	DZ
	2. CI refers to IEEE requirements in particular.	213.4	ELEC.
	3. Other TVA Engineering procedures do not include industry standards requirements.	201.4	DZ

GENERAL APPROACH/METHODOLOGY FOR ELEMENT REPORT

Issue 1 through 3

1. Implications is that concern is related only to electrical procedures, however, we will examine broader scope.
2. Determine if these issues have been identified in any other prior review (i.e., QA Audit, INPO findings, etc.).
3. Review Design Baseline and Verification Program for Sequoyah Plant to see if program will adequately address this issue.
4. Do current procedures cover this issue to prevent recurrence of problem?
5. Coordinate response with Electrical group, element report 213.4.

CATEGORY: EN DES PROCESS & OUTPUT SUBCATEGORY: 20104 STANDARDS AND GUIDES

CONCERN NUMBER	CAT	SUB CAT	S H R D	PLT LOC	GENERIC APPL B F	B L	S Q	W B	QTC/NSRS INVESTIGATION REPORT	P S R	CONCERN DESCRIPTION	KEYWORD A / KEYWORD B / KEYWORD C / KEYWORD D
IN -86-259-X11	EN	20104	S	WBN	Y	Y	Y	Y	1-85-545-WBN	SR	IF TVA ELECTRICAL PROCEDURES DO NOT INCLUDE IEEE STD. REQUIREMENTS OR THEIR EQUIVALENT, NUMEROUS PROBLEMS CAN RESULT. CONSTRUCTION DEPT. CONCERN. CI HAS NO ADDITIONAL INFORMATION. NO FOLLOW-UP REQUIRED.	PROCEDURES / STANDARDS / ELECTRICAL / GENERAL
T50149	EN	21304			K-FORM							
QCP10.35-8-262	EN	20104	N	BLN	Y	Y	Y	Y		SR	ENGINEERING CAN DO A JOB WITHIN THEIR STANDARDS, THEN THEY CHANGE THOSE STANDARDS AFTER THE JOB IS COMPLETE.	
					REPORT							
WI -85-100-019	EN	20103	S	WBN	Y	Y	Y	Y		SR	ELECTRICAL STANDARDS AND GUIDES ARE TREATED AS GUIDES, AND ARE NOT INCORPORATED IN DESIGN CRITERIA REQUIREMENTS. ELECTRICAL DESIGN CRITERIA, WHERE IT EXISTS, IS NOT COMPLETE, IS VAGUE, AND IN GENERAL IS INADEQUATE. CI HAS NO FURTHER INFORMATION. ANONYMOUS CONCERN VIA LETTER.	STANDARDS / DESIGN RELATED / ELECTRICAL / GENERAL
T50212	EN	20104			REPORT							
	EN	21303										
WI -85-100-038	EN	20104	S	WBN	Y	Y	Y	Y		SR	DESIGN/INSTALLATION DRAWINGS DO NOT ALWAYS REPRESENT OR INCLUDE DESIGN REQUIREMENTS. DESIGN GUIDES/STANDARDS ARE UTILIZED ONLY WHEN DESIGNERS WANT TO SUE THEM. DESIGN GUIDES/STANDARDS ARE INADEQUATE IN MANY AREAS, AND THERE ARE MISUSES, SUCH AS APPLICABLE PARTS ARE NOT REFERENCED OR EXCERPTED AS REQUIREMENTS. CI HAS NO FURTHER INFORMATION. ANONYMOUS CONCERN VIA LETTER.	DRAWINGS / NONCONFORMANCE / ENGINEERING / GENERAL
T50213	EN	20106			REPORT							
	EN	20404										

4 CONCERNS FOR CATEGORY EN SUBCATEGORY 20104