



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MAY 28 1985

Docket No. 50-458

MEMORANDUM FOR: Dennis Crutchfield, Assistant Director
for Safety Assessment
Division of Licensing
Office of Nuclear Reactor Regulation

FROM: Brian K. Grimes, Director
Division of Quality Assurance, Vendor,
and Technical Training Center Programs
Office of Inspection and Enforcement

SUBJECT: QA REVIEW OF RIVER BEND UNIT 1 FINAL DRAFT TECHNICAL
SPECIFICATIONS

Your memorandum dated April 19, 1985, enclosed the final draft of River Bend Unit 1 Technical Specifications for review and comment. We have reviewed Sections 6.2.1, 6.5.1, 6.5.3, 6.8, and 6.10 as they relate to QA and find them acceptable as is.

Any questions you might have concerning this review should be directed to John Gilray at x27242.

Brian K. Grimes
 Brian K. Grimes, Director
 Division of Quality Assurance, Vendor,
 and Technical Training Center Programs
 Office of Inspection and Enforcement

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UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76011

MAY 30 1985

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Denise

MEMORANDUM FOR: Dennis M. Crutchfield, Assistant Director for Safety
Assessment, Division of Licensing
Thomas M. Novak, Assistant Director for Licensing,
Division of Licensing
FROM: Richard P. Denise, Director, Division of Reactor Safety
and Projects, Region IV
SUBJECT: FINAL DRAFT OF THE RIVER BEND UNIT 1 TECHNICAL SPECIFICATIONS

This provides additional information to that forwarded in our letter on the same subject dated May 13, 1985.

Additional review of the findings of the Region IV inspection team identified an additional five items which appear to be under NRR cognizance. These are documented in the attached inspection report forms. All findings will also be documented in Inspection Report 50-458/85-35.

For

E.H. Johnson

Richard P. Denise, Director
Division of Reactor Safety
and Projects

Attachments:
As stated

~~8509060227~~

13pp

B/18

TECHNICAL SPECIFICATION REVIEW DATA SHEET

TS PARA: Table 3.3.3-2

PAGE NO.: 34 3-36 THRU 40

TS REQUIREMENT: ECCS: * Actuation Instrumentation Setpoints

LIC. PROCEDURE NO.: _____ ISSUE DATE: _____ REV.: _____

TITLE: _____

	<u>YES</u>	<u>NO</u>
Is there any difference between FSAR/SER and TS?	<u>NA</u>	_____
Is installed system consistent with TS?	<u>NA</u>	_____
Are there any problems with the TS (factual or editorial)?	<u>✓</u>	_____
Does procedure carry out TS requirement?	<u>NA</u>	_____
Does the procedure walkdown indicate that it should work as written?	<u>NA</u>	_____
Has licensee completed procedure walkdown?	<u>NA</u>	_____

REMARKS ① "Trip Setpoints" and the "Allowable Valve" of the Table are stated unclearly or Incorrectly in numerous cases (see attached list).

STATUS OF ITEM OPEN CLOSED

FOR "OPENS", WHO MUST DO WHAT BY WHEN?

057 Technical specification corrections required, as specified. (N/A)

INSPECTOR(S): W.C. Banister

FOLLOWUP ACTION: INSPECTION REPORT 50-458/ _____

	<u>YES</u>	<u>NO</u>
Were problems corrected?	_____	_____
Were any other problems identified?	_____	_____

STATUS OF ITEM OPEN CLOSED

REMARKS: _____

INSPECTOR(S): _____

INSPECTION REPORT 50-458/ 85-35

PAGE NO.: A-50

TECHNICAL SPECIFICATION DATA CONTINUATION SHEET

TS PARA: Table 33.3-2

PAGE NO.: 3/4 3-36 THRU 40

TRIP functions not correctly stated:

A.1.c - Values do not properly overlap

A.1.f - Two different ranges

A.1.h - Values do not properly overlap

B.1.d - Two different ranges; STP uses allowable value and not Trip Setpoint Value

B.1.f - Values do not properly overlap

D.1.a (a+b) - Need Trip tolerance; Is Allowable Value correct

D.1.b (a+b) - Values do not properly overlap; Trip Tolerance

D.2. a (a,b, +c) - a "≥ 3045 ±" Trip; (b) Values do not overlap

TECHNICAL SPECIFICATION REVIEW DATA SHEET

TS PARA: 4.6.1.9.3

PAGE NO.: 3/4 6-15

REQUIREMENT: Leak Rate Test Purge:
Values in Containment every 92 days

LIC. PROCEDURE NO.: 403-330 ISSUE DATE: 2-19-85 REV.: 0

TITLE: Containment Purge Isolating Valve Leakage Test

Is there any difference between FSAR/SER and TS? YES NO

Is installed system consistent with TS? YES NO

Are there any problems with the TS (factual or editorial)? YES NO

Does procedure carry out TS requirement? YES NO

Does the procedure walkdown indicate that it should work as written? YES NO

Has licensee completed procedure walkdown? YES NO

REMARKS: 1) Pa in procedure is wrong 2) T.S. #5 wrong
T.S. applies to 36" valves, procedure
applies to 24" & 36" valves - OK -

STATUS OF ITEM

OPEN

CLOSED

FOR "OPENS", WHO MUST DO WHAT BY WHEN?

177 1) Licensee resolve TS/procedure conflict

178 2) Licensee correct procedure

179 3) NRC determine if 24" valves need to be included in TS

INSPECTOR(S): Farral

FOLLOWUP ACTION: INSPECTION REPORT 50-458/_____

Were problems corrected? YES NO

Were any other problems identified? YES NO

STATUS OF ITEM

OPEN

CLOSED

REMARKS: _____

INSPECTOR(S): _____

INSPECTION REPORT 50-458/ 85-35

PAGE NO.: A-209

TECHNICAL SPECIFICATION REVIEW DATA SHEET

TS PARA: 4.6.6.3.B

PAGE NO.: 3/4657

REQUIREMENT: Visual Inspection at cold shutdown of normally inaccessible hydrogen igniters

LIC. PROCEDURE NO.: 254-0304 ISSUE DATE: _____ REV.: _____

TITLE: No procedure yet

	YES	NO
Is there any difference between FSAR/SER and TS?	_____	_____
Is installed system consistent with TS?	_____	_____
Are there any problems with the TS (factual or editorial)?	_____	_____
Does procedure carry out TS requirement?	_____	_____
Does the procedure walkdown indicate that it should work as written?	_____	_____
Has licensee completed procedure walkdown?	_____	_____

REMARKS: Some of these igniters are in high radiation areas

STATUS OF ITEM OPEN CLOSED

FOR "OPENS", WHO MUST DO WHAT BY WHEN?
~~254~~ NRC must determine necessity for inspection taking into account ALARA considerations

INSPECTOR(S): Farwell
 FOLLOWUP ACTION: INSPECTION REPORT 50-458/ _____

	YES	NO
Were problems corrected?	_____	_____
Were any other problems identified?	_____	_____

STATUS OF ITEM OPEN CLOSED
 REMARKS: _____

INSPECTOR(S): _____

INSPECTION REPORT 50-458/ 75-35 PAGE NO.: A-274

TECHNICAL SPECIFICATION REVIEW DATA SHEET

TS PARA: 4.6.63.C

PAGE NO.: 3/4 6-67

TS REQUIREMENT: Hydrogen reactor visual exam and temperature check

LIC. PROCEDURE NO.: 254-1600 ISSUE DATE: 4/20/85 REV.: 1

TITLE: _____

	<u>YES</u>	<u>NO</u>
Is there any difference between FSAR/SER and TS?	_____	_____✓
Is installed system consistent with TS?	_____✓	_____
Are there any problems with the TS (factual or editorial)?	_____✓	_____
Does procedure carry out TS requirement?	_____✓	_____
Does the procedure walkdown indicate that it should work as written?	_____	_____N/A
Has licensee completed procedure walkdown?	_____✓	_____

REMARKS: TS requirement will require many man-rem exposure.

STATUS OF ITEM OPEN CLOSED

FOR "OPENS", WHO MUST DO WHAT BY WHEN?

253 NRC must determine necessity for inspection taking into account ALARA considerations

INSPECTOR(S): Farrell

FOLLOWUP ACTION: INSPECTION REPORT 50-458/_____

	<u>YES</u>	<u>NO</u>
Were problems corrected?	_____	_____
Were any other problems identified?	_____	_____

STATUS OF ITEM OPEN CLOSED

REMARKS: _____

INSPECTOR(S): _____

INSPECTION REPORT 50-458/ 85-35

PAGE NO.: A-285

TECHNICAL SPECIFICATION REVIEW DATA SHEET

TS PARA: 3/4.8.1.1

PAGE NO.: 3/4 8-6

TS REQUIREMENT: 4.8.1.1.2.f.7 Each of the above required DG's shall be demonstrated OPERABLE: At least once per 18 months, during shutdown, by: (see attached page)

LIC. PROCEDURE NO.: _____ ISSUE DATE: _____ REV.: _____

TITLE: (see attached page)

	<u>YES</u>	<u>NO</u>
Is there any difference between FSAR/SER and TS?	<u>POSSIBLE</u>	<u>_____</u>
Is installed system consistent with TS?	<u>✓</u>	<u>_____</u>
Are there any problems with the TS (factual or editorial)?	<u>✓</u>	<u>_____</u>
Does procedure carry out TS requirement?	<u>_____</u>	<u>✓</u>
Does the procedure walkdown indicate that it should work as written?	<u>_____</u>	<u>N/A</u>
Has licensee completed procedure walkdown?	<u>_____</u>	<u>✓</u>

REMARKS: (a) STP-309-610 & 611

① The Procedures ^{do not} appear to meet the intent of the TS for Div 1 and Div 2 Diesel Generators.

The intent appears to require that the Diesel be given an ECCS actuation signal and then have the specified trips

STATUS OF ITEM: OPEN CLOS(continued)

FOR "OPENS", WHO MUST DO WHAT BY WHEN?

- 331 ① Licensee must determine adequacy of procedure for performing TS
- 332 ② NRC must correct TS to perform tests
- 333 ③ Licensee must correct procedure ④ Licensee must issue procedure

INSPECTOR(S): C. C. Starbuck

FOLLOWUP ACTION: INSPECTION REPORT 50-458/ _____

	<u>YES</u>	<u>NO</u>
Were problems corrected?	<u>_____</u>	<u>_____</u>
Were any other problems identified?	<u>_____</u>	<u>_____</u>

STATUS OF ITEM: OPEN CLOS(continued)

REMARKS: _____

INSPECTOR(S): _____

INSPECTION REPORT 50-458/ 85-35

PAGE NO.: A-374

TECHNICAL SPECIFICATION DATA CONTINUATION SHEET

TS PARA: 4.8.1.1
4.8.1.1.2.f.7

PAGE NO.: 3/4 8-6

(a) continued

- (1) • TS should also require that this same test be done to verify that the designated automatic trips are bypassed after the Div 1 and Div 2 diesels are started on
- Emergency bus UV
 - Emergency manual start

(3) • Wrong TS referenced

(b) STP-309-0612

- (1) • The Procedure does not appear to meet the intent of the TS for the Div III diesel generator. The intent appears to require that the diesel be given an ECCS actuation signal and then have the designated trips inserted to verify that the DG stays running. Instead, the procedure inserts all the trips by isolating the starting air receiver. Then an ECCS actuation signal is inserted. The trip bypass is verified by measuring across the relay coil for the ECCS actuation trip bypass relay with a multimeter. The associated contacts which opens is not, however, observed.

- (2) • The Procedure indicates that the diesel gen auto starts on bus undervoltage. If SC, then the TS should require this test. If not then there may be a problem with the Div 3 diesel logic, (There is; licensee has issued a 10CFR Part 50.5560 report on it, ref. DR-302)

(4) • Procedures STP-204-0601 and STP-205-0601, if applicable for performing this TS, should be issued.



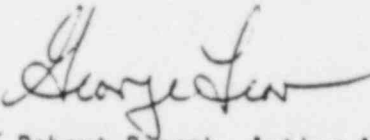
UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MEMORANDUM FOR: Dennis Crutchfield, Assistant Director
for Licensing
Division of Licensing

FROM: Robert Bosnak, Acting Assistant Director
for Components and Structures Engineering
Division of Engineering

SUBJECT: TECHNICAL (SPECIFICATIONS) CHANGE REQUESTS RIVER BEND UNIT 1

As verbally requested by R. Houston, LPM on above subject, we have reviewed the proposed Technical Specification change 3/4.7.10 on Structural Settlement (enclosed). We find the Technical Specification, as annotated is acceptable.

for 

Robert Bosnak, Acting Assistant Director
for Components and Structures Engineering
Division of Engineering

Enclosure: As stated

cc: J. Knight
G. Lear
L. Heller
H. Polk
R. Houston
J. Chen

River Bend proposed Tech Spec
changes is your job

Doc Houston
28933

John Chen
Please call Houston
if he doesn't have
our memo.
JYC

TECHNICAL CHANGE REQUESTS

DESCRIPTION OF CHANGE/JUSTIFICATION:

28) TS 3.7.6.2 - Deleted Railroad Bay.

No sprinkler systems are identified for the railroad bay as there is no safety related equipment located in this area.

29) TS 4.7.6.3.a - Delete.

There are no valves in the flow path of any PGCC subsystem.

30) TS 3/4.7.6.~~4~~⁵, Table 3.7.6.~~4~~⁵-1 - Added footnote *. Not in 3.7.6.4

Reflects River Bend design.

31) TS Table 3.7.8-1 - Add items and revise temperatures.

Additional items have been identified for inclusion and corrections to temperatures from review of Environmental Design Criteria.

E → *32)*

32) TS 3/4.7.10 - Added Table 3.7.10-2, revised the Technical Specification accordingly and also revised Table 3.7.10-1.

These changes make the Technical Specification consistent with FSAR Section 2.5.

33) TS 3/4.7.11 - Add new Specification.

This Specification is provided to address SER requirement in 9.1.3 page 9-6.

Change Doc to D/G
Local modification

34) TS 3/4.8.1, 3.8.1.1 Action c, 4.8.1.1.2.f.4.b.2, 4.8.1.1.2.f.6.b.2, 3.8.1.2 Action b, 3.8.2.1 Action b, 3.8.2.2 Action b, and 3.8.3.1 Action b.2. - Addition of C SW Pump.

Revisions reflect the powering of standby service water pump 1SWP*P2C and it's auxiliaries from the RPCS diesel (Div III).

35) TS 3.8.3.1.b.1 and 3.8.3.2.b.2 - Added panel 1ENB*PNL04A.

Added in conjunction of outstanding SER open item 13, Safe/Alternate Shutdown Design Modification.

PLANT SYSTEMS3/4 7.10 STRUCTURAL SETTLEMENT**FINAL DRAFT**LIMITING CONDITION FOR OPERATION

3.7.10 Structural settlement of the following structures shall be within the predicted values as shown in Table 3.7.10-1^a and calculated differential settlements shall be within the allowable ranges shown in Table 3.7.10-2.

- a. Reactor Building
- b. Auxiliary Building
- c. Fuel Building
- d. Control Building
- e. Diesel Generator Building
- f. Standby Cooling Tower, Basin and Pump House

APPLICABILITY: At all times.

ACTION:

With the measured ^{limits of Tables 3.7.10-1 and 3.7.10-2} structural settlement of any of the above required structures outside of the ~~predicted settlement~~, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days providing a record of the settlement measurements and the predicted settlement, an analysis to demonstrate the continued structural integrity of the affected structure(s) and plans to monitor the settlement of the affected structure(s) in the future.

SURVEILLANCE REQUIREMENTS

4.7.10 The structural settlement of the above required structures shall be demonstrated to be within the ~~predicted settlement values~~ ^{limits of Tables 3.7.10-1 and 3.7.10-2:}

- a. At least once per 92 days, using at least three markers per structure, until there is essentially no movement during those 92 days.
- b. At least once per 24 months, using at least one marker per structure for at least 10 years.
- c. Following any seismic event equal to or greater than an Operational Basis Earthquake (OBE), using at least three markers per structure.

TABLE 3.7.10-2

ALLOWABLE DIFFERENTIAL SETTLEMENTS OF MAJOR
STRUCTURAL INTERFACE POINTS

<u>Building Interface</u>	<u>Marker No.</u>		<u>Allowable Differential Settlement (in)</u>
	<u>A</u>	<u>B</u>	
Diesel Generator vs. Control	2	5	+0.35 to -0.39
BF Tunnel vs. Diesel Generator	4	7	+0.42 to -0.61
BF Tunnel vs. Fuel	9	3, 4*	+0.53 to -1.08
Fuel vs. Reactor	10	12	+0.56 to -1.34
	12	15	+0.26 to -0.61
Reactor vs. Auxiliary	14	17	+0.30 to -0.60
	16	18	+0.32 to -0.08
	17	20	+0.33 to -0.13
Auxiliary vs. Main Steam	19, 20*	22	+0.44 to -0.69
Fuel vs. G Tunnel	13	33	+0.59 to -0.32
Fuel vs. E Tunnel	14	28	+0.42 to -0.39
E Tunnel vs. Auxiliary	29	21	+0.73 to -0.43
Control vs. Auxiliary	7	18	+0.46 to -0.66
	8	19	+0.50 to -0.50

NOTE: Positive differential settlement indicates settlement of Marker A with respect to Marker B. Negative sign indicates settlement of Marker B with respect to Marker A.

* Settlements for these two markers should be averaged when determining differential settlement.

FINAL DRAFT

TABLE 3.7.10-1

TOTAL PREDICTED SETTLEMENTS OF MAJOR STRUCTURES

<u>STRUCTURE</u>	<u>SETTLEMENT MARKER NO.</u>	<u>PREDICTED SETTLEMENT (IN.)</u>
Reactor Building	15	4.6 4.0
	16	4.5 4.0
	17	4.9 4.0
Auxiliary Building	18	4.2 3.8
	19	4.1 3.6
	20	4.9 3.9
	21	4.7 3.7
Fuel Building	11	4.1 3.7
	12	4.5 4.0
	13	4.4 3.5
	14	4.7 3.8
Control Building	5	3.8 3.7
	6	3.4 3.3
	7	4.0 3.7
	8	4.0 3.7
Diesel Generator Building	1	3.5 3.4
	2	3.8 3.7
	3	3.8 3.6
	4	4.0 3.8
Standby Cooling Tower, Basin and Pump House	30	3.8 2.7
	31	4.4 3.2
	32	4.3 2.4
BF Tunnel	9	2.1
	10	2.5
Main Steam Tunnel	22	3.8
	23	3.8
E Tunnel	28	3.8
	29	2.8
G Tunnel	33	2.6
	34	0.4