Change Request No. 86-29
Sheet 1 of 1

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1 1KC-31 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ____ Minor Change X

Submitted by: ED Lynch Date: 11 JUNE 86

DESCRIPTION OF CHANGE:

1. ADD NEW STEP 6.33.4A TO READ: "OPEN VALVE 270 AND CLOSE HV 27053. OPEN TEMPORARY HOSE STATION VALVE AT A-272 AND FLUSH LINE 233-4" UNTIL EFFLUENT MEETS REQUIREMENTS. CLOSE TEMPORARY VALVE AND OPEN HV 27053" /
2. IN STEP 6.33.5, DELETE THE WORDS "LINE 233-4" AND "FROM".
3. DELETE STEP 6.33.5A
4. ADD TO STEP 6.33.6: "RESTORE THE SPRINKLER SYSTEM"
5. DELETE STEP 6.33.7.
6. DELETE STEP 6.10.1 AND SECTION 6.12 OF ATTACHMENT 10.2
7. ADD TO STEP 6.6 HYDRANTS, 928, 930, 932, 933, AND 936

REASON FOR CHANGE: 1 TO EFFICIENTLY FLUSH LINE 233-4".
2 SEE 1
3. SEE 1
4. TO PROVIDE FOR SPRINKLER SYSTEM RESTORATION.
5. LINE 233-6" IS FLUSHED IN STEP 6.33.4A
6. FLUSH ELEMENTS DELETED FROM SYSTEM DESIGN. 7. FLUSH KC-92 HYDRANTS

QC Review (if applicable) N/A /

APPROVAL:

TEST SUPV.	11 June 86 DATE
LEAD TEST SUPV.	Howard Vanadore / 6-11-86 DATE
SUPERINTENDENT OF ENGINEERING LIAISON	N/A / DATE

FIGURE 2 (1 of 2)

Change Request No. 86-28
Sheet 1 of 2

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ——— Minor Change X

Submitted by: ED WASIL Date: 9 JUNE 86

DESCRIPTION OF CHANGE:

1. ON PAGE 41 of 47, ATTACHMENT 10.3, ITEM 1 UNDER SECTION 6-32, CHANGE VALVE A-2301-074 TO 2-2301-074.
2. ON ATTACHMENT 10.2, SECTION 6-32, DELETE FS-27928
3. IN STEP 6.32.8, DELETE THE SENTENCE "NO MORE THAN TWO STATIONS SIMULTANEOUSLY."
4. IN STEP 6.32.9, DELETE THE SENTENCE "FLUSH IN ONE ROOM AT A TIME."
5. IN STEP 6.32.12, DELETE THE WORD "SIMULTANEOUSLY".

REASON FOR CHANGE:

1. TO MAKE ATTACHMENT 10.3 COINCIDE WITH BODY OF PROCEDURE.
2. FLOW INSTRUMENT DELETED FROM SYSTEM DESIGN.
3. NO REASON FOR IMPOSING LIMITATION.
4. NO REASON FOR IMPOSING LIMITATION.
5. NO REASON FOR IMPOSING LIMITATION

QC Review (if applicable) N/A

APPROVAL:

E A Wasil / 9 June 86
TEST SUPV. DATE

Howard Varnaken / 6-9-86
LEAD TEST SUPV. DATE

N/A /
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-28
Sheet 2 of 2

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

DESCRIPTION OF CHANGE (CONT'D)

6. IN STEP 6.32.13, DELETE THE SENTENCE "FLUSH IN ONE ROOM AT A TIME."
7. IN STEP 6.32.14, DELETE THE WORD "SIMULTANEOUSLY".
8. IN STEP 6.32.6, ADD THE SENTENCE "VERIFY THAT PUMP P4,003, P4-002, P4-005 OR TEMP FLUSHING PUMP IS IN SERVICE"
9. DELETE SECTIONS, 6.7, 6.8, 6.9

REASON FOR CHANGE (CONT'D)

6. NO REASON FOR IMPOSING LIMITATION.
7. NO REASON FOR IMPOSING LIMITATION.
8. TO PROVIDE POSITIVE SOURCE FOR FLUSHING WATER.
9. CONSTRUCTION OF THESE VALVE HOUSES HAS BEEN POSTPONED UNTIL AFTER UNIT 1 OPERATION.

FIGURE 2 (2 of 2)

Change Request No. 86-27
Sheet 1 of 1

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KL-01 Revision: 0
Procedure Title: Fire Protection Water Flush

Major Change ____ Minor Change ✓

Submitted by: Elmer L. Pickett Date: 6-8-86

DESCRIPTION OF CHANGE:

1. Step 6.10,4 - Delete the words, "3 at a time to waste until effluent requirements are met" and replace with, "to waste until visually clean."

REASON FOR CHANGE:

1. This change makes flushing the hydrants in section consistant with the other hydrant flushes in this procedure.

QC Review (if applicable) N/A /

APPROVAL:

Elmer L. Pickett / 6-8-86
TEST SUPV. DATE

Wallace / 6-8-86
LEAD TEST SUPV. DATE

N/A /
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-26
Sheet 1 of 2

FLUSH PROCEDURE
CHANGE REQUEST

Procedure Number: 1-IKC-01 Revision: 0
Procedure Title: Fire Protection Water Flush

Major Change ——— Minor Change ✓

Submitted by: E.L. Pickett Date: ~~6-4-86~~ ELP 6-5-86

DESCRIPTION OF CHANGE:
1. step 6.11.5 - Delete the sentence "open valve 759".
2. Attachment 10.1 sheet 16 - Delete valve 759
3. Attachment 10.3 sheet 3 (Piping modifications) - Delete valves 754, 755, 756, 757.

REASON FOR CHANGE:
1. It is not possible to get enough flow through the 4" line for effective flushing
2. Valve 759 will not be part of the flow path 6.11.6
3. Valves are not to be removed since there is no piping downstream of them.

QC Review (if applicable) N/A /

APPROVAL:

ELP 6-5-86
~~E.L. Pickett~~ / ~~6-4-86~~
TEST SUPV. DATE

J.H. Ellis / 6-5-86
LEAD TEST SUPV. DATE

N/A /
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-26
Sheet 2 of 2

FLUSH PROCEDURE
CHANGE REQUEST

(Continuation Sheet)

DESCRIPTION OF CHANGE:

4. Add the following new steps:

6.11.4a Disconnect flange at strainer F4-602 and remove line 672-4" /

6.11.9 Restore line 672-4". Open valve 759 and flush line 672-4" to visual clarity and close valve 759. /

5. step 6.11.8. - modify this step to read as follows:
" Restore removed internals to filter (F4-602). Open valve 758."

6. Attachment 10.3 Piping Modifications sheet 8 - Add the following new item:

	Removed	Restored
3. Remove/Restore line 672-4"	/	/

REASON FOR CHANGE

5. Line 672-4" is going to be restored and valve 759 closed in step 6.11.9.

6. Line 672-4" is to be removed for step 6.11.6. Continuation of Reason number 3. This change should have been completed in CR 86-25.

FIGURE 2 (2 of 2)

Change Request No. 86-25
Sheet 1 of 2

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ——— Minor Change X

Submitted by: G. VAN GELDER Date: 6-2-86

DESCRIPTION OF CHANGE: 1. 6.6.5 DELETE THE OPENING OF "VALVE 751."
2. 6.6.7 - DELETE VALVES A-2301-754, A-2301-755, A-2301-756
3. 6.6.7A ADD "FLUSH THE FOLLOWING TEMPORARY ISOLATION VALVES TO WASTE UNTIL VISUALLY CLEAN."

REASON FOR CHANGE: #1. THIS VALVE (4") 751 WOULD NOT PROVIDE SUFFICIENT FLOW TO PROPERLY FLUSH LINE.
2. VISUAL INSPECTION OF THE THREE VALVES IS ALL THAT IS NEEDED AS THERE IS NO FIRE PROTECTION VALVE MOUNTED ON THESE VALVES.

QC Review (if applicable) NA

APPROVAL:

G. Van Gelder / 6-2-86
TEST SUPV. DATE

H. Vanadel GV 6-2-86 / 6-2-86
LEAD TEST SUPV. DATE

NA / 6-2-86
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. E6-25
Sheet 2 of 2

FLUSH PROCEDURE
CHANGE REQUEST

DESCRIPTION OF CHANGE (Continuation Sheet)

6.6.7.a
FLUSH THE FOLLOWING TEMPORARY ISOLATION VALVES TO WASTE UNTIL VISUALLY CLEAN.

A-2301-754	1
A-2301-755	1
A-2301-756	1

FIGURE 2 (2 of 2)

Change Request No. 86-24
Sheet 1 of 2

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: Fire Protection Water Flush

Major Change ____ Minor Change X

Submitted by: J. Derryberry Date: 5-31-86

DESCRIPTION OF CHANGE: 1. Add new section to 10.1 valve line up between 6.7 and 6.8 labeled 6.7.a see continuation sheet. ☐1 insert copy of continuation sheet in section 10.1 after page 13 of 49
☐2 Add new section to body of procedure between 6.7 and 6.8 labeled:
6.7.a "Flush lines 700-12" and 667-12" to waste until effluent meets requirements. ____/____
6.7.b Open valves 779, 774, 660, 799, 650 ____/____

REASON FOR CHANGE: To enable flushing of (2) two sections of yard loop that were not identified.

QC Review (if applicable) NA ____/____

APPROVAL:

TEST SUPV. 5-31-86 DATE

Stephen M Hall 5-31-86
LEAD TEST SUPV. DATE

____/____
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-24
Sheet 2 of 2

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

Valve Number CX4DB173-2 CX4DB173-6	Valve Description Section 6.7.a High Voltage Switch yard and Line 667-12"		Required Position
779	Line 656-12" PIV	CL	1
774	Line 656-12" PIV	CL	1
660	Line 515-12" PIV	CL	1
799	Line 515-12" PIV	CL	1
650	Line 515-12" PIV	CL	1
825	Line 700-12" PIV	O	1
860	Line 700-12" PIV	O	1
868	Line 700-12" PIV	O	1
826	Line 700-12" PIV	O	1
791	Line 667-12" PIV	O	1
789	Line 667-12" PIV	O	1
787	Line 667-12" PIV	O	1
786	Line 667-12" PIV	O	1
804	Line 667-12" PIV	O	1
793	Line 667-12" PIV	O	1

FIGURE 2 (2 of 2)

Change Request No. 86-23
Sheet 1 of 2

FLUSH PROCEDURE
CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ——— Minor Change ✓

Submitted by: J. CHAWLA Date: 5-27-86

DESCRIPTION OF CHANGE: 1. Step 6.23.7 - Add the following line for flushing hose station R4-069
054 - 2½"

2. Delete the following Vent/Drain Valves
a. step 6.25.15 X-402, X-403
b step 6.23.8 X-096, X-124, X-140
c. step 6.27.15 X-348, X-349

REASON FOR CHANGE: 1. This hose station was inadvertently missed out.
2. Valves X-402, 403, 096, 124 do not exist while X-140 is a vent valve on U-2 piping. Valves X-348 and X-349 will be flushed under step 6.33.5B (See item 4 of this CR)

QC Review (if applicable) NA /

APPROVAL:

J. Chawla / 5-27-86
TEST SUPV. DATE

Howard Varnadoe / 5-27-86
LEAD TEST SUPV. DATE

NA /
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-23
Sheet 2 of 2

FLUSH PROCEDURE
CHANGE REQUEST

(Continuation Sheet)

DESCRIPTION OF CHANGE

3. step 6.27.8 Delete line 263-2½"

4. Add new steps 6.33.5A and 6.33.5B

a) Step 6.33.5A Open, or verify open, valve 255. close 060. Flush line 263-2½" to waste until the effluent meets requirements. Open 060

263-2½" ∴ /

b) step 6.33.5B Open the following vent and drain valves and flush to waste until visually clean.

/

X-348 /

X-349 /

close all valves

REASON FOR CHANGE

3. Line 263-2½" is in the Equipment Building and hence will be flushed under section 6.33

4. a) see # 3 under 'reason for change'

b) see # 2 under 'Reason for change'

FIGURE 2 (2 of 2)

Change Request No. 86-22
Sheet 1 of 2

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ——— Minor Change ✓

Submitted by: K Y Manji Date: 5/25/86

DESCRIPTION OF CHANGE:

1. Step 6.23.7 : Delete FHS line 371-2½"
2. Attachment 10.1 : Need to add Sprinkler SYS Iso valve 168 for SYS 062 in closed pos
3. Change attachment 10.1 for valves 278 & 277 & 279 ~~to~~ read Closed
4. delete valve 188 from attachment 10.1
5. Delete X-400 from valve line up attachment 10.1 because not part of flow path 6.23.5

REASON FOR CHANGE:

1. Does not Exist
2. The line is part of the flush path 6.23.5
3. For Flush path 6.23.5, Need these valves to be closed
4. Valve U4-188 is not an Iso valve. It is a line valve for Level A, Control Bldg

QC Review (if applicable) N/A /

APPROVAL:

Kam Y Manji / 5/25/86
TEST SUPV. DATE

Howard Yamakawa / 5-25-86
LEAD TEST SUPV. DATE

N/A /
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-22
Sheet 2 of 2

FLUSH PROCEDURE
CHANGE REQUEST

(Continuation Sheet)

Description of change:

Reason for change:

5. X-400 will not be a valve line-up for flow path 6235

FIGURE 2 (2 of 2)

Change Request No. 86-21
Sheet 1 of ~~2~~ 4 JRL 5/22/86

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ____ Minor Change ✓

Submitted by: J. CHAWLA Date: 5-20-86

DESCRIPTION OF CHANGE: 1. DELETE STEPS 6.27.10, 6.27.11 AND 6.27.12
2. ADD TO STEP 6.27.9 SPRINKLER SYSTEMS "ROOM R-183 AND R-177 THRU 193.
3 ON ATTACHMENT 10.3, SHEET 36, DELETE ITEM 2 OF 6.25
4. IN STEP 6.25.13, DELETE VALVE ~~A-1331-X4-002~~ A-2301-X-002 AND SUBSTITUTE A-2301-X-002.
5. DELETE STEPS 6.23.11, 6.23.12, AND 6.23.13
6 ADD TO STEP 6.23.10 SPRINKLER SYSTEMS R-B54, R-B56, RB49 AND R-B44
7 IN STEP 6.26.3, CHANGE VALVE FROM "103" TO "A-103"
8 ON ATTACHMENT 10.3, SHEET 33, DELETE ITEM 2 OF 6.23
9 ADD NEW STEP 6.27.7A TO READ "OPEN VALVE 167 CLOSE VALVE 359. FLUSH LINE 335-4" TO WASTE FROM VALVE 060 UNTIL FLUSH IS COMPLETE REQUIRE SAMPLES. CLOSE TEMPORARY ISOLATION AT VALVE 060 AND OPEN VALVE 359.
10. DELETE STEPS 6.31.9 AND 6.31.10

REASON FOR CHANGE:
1. THESE SPRINKLER SYSTEMS WILL BE FLUSHED IN ACCORDANCE WITH STEP 4.16.
2. TO PROVIDE FOR SPRINKLER SYSTEM FLUSHING
3. SEE 1.
4. VALVE DOES NOT EXIST
5. SEE 1
6. SEE 2
7. TYPO
8. SEE 1
9. TO FLUSH LINE 335-4" FROM ALTERNATE SUPPLY PRIOR TO IKC II TURNOVER.
10. SEE 1

QC Review (if applicable) NA 1

APPROVAL:

TEST SUPV. DATE 5/22/86

LEAD TEST SUPV. DATE 5-22-86

SUPERINTENDENT OF ENGINEERING LIAISON DATE NA 1

FIGURE 2 (1 of 2)

Change Request No. 86-21
Sheet 2 of ~~3~~ 4 fhe 5/22/86

FLUSH PROCEDURE
CHANGE REQUEST

(Continuation Sheet)

DESCRIPTION OF CHANGE

11. In steps listed below, delete statements imposing limitations on flushing hose stations and sprinkler systems.

STEP #	statement to be deleted
6.23.7	No more than 2 stations simultaneously
6.23.16	flush no more than two hose stations simultaneously
6.25.12	Not more than two houses simultaneously
6.23.10,	Flush in one room as a time
6.27.9	Flush in one room at a time
6.28.7	— Do — —
6.29.8	— Do — —

12. Delete flush P&ID ~~sheet 14~~ fhe 5/22/86 FS1-1KC-01 Rev 0 and add FS1-1KC-01 Rev 1 as sheet 14 (copy attached)
13. step 6.24.10 — Delete this step
14. In step 6.29.7 delete line 056-2½"

FIGURE 2 (2 of 2)

Change Request No. 86-21
Sheet 3 of ~~34~~ 54 JKE 5/22/86

FLUSH PROCEDURE
CHANGE REQUEST

(Continuation Sheet)

REASON FOR CHANGE

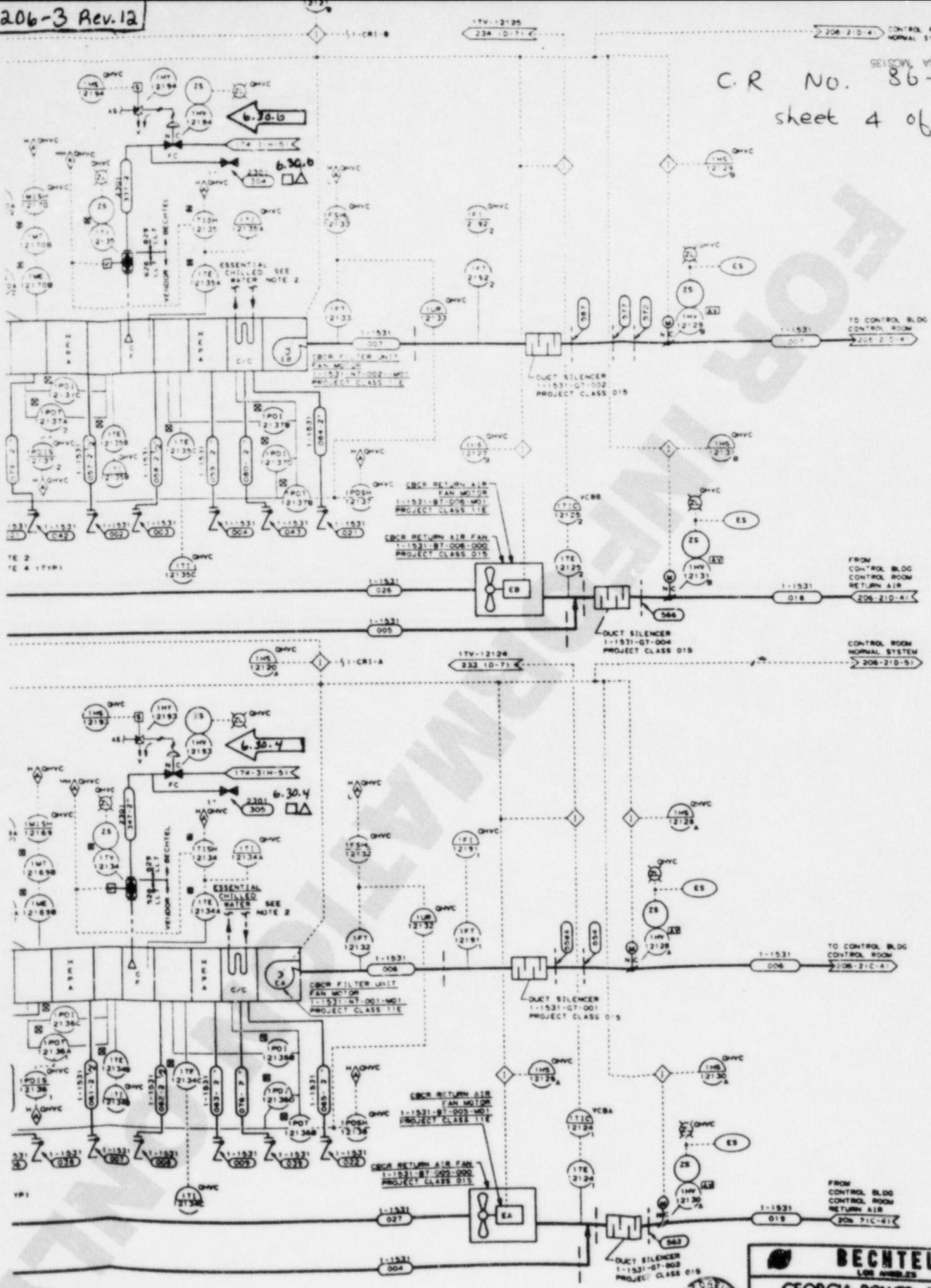
11. There is no reason for imposing these limitations
12. Flush drawing FSI - 1KC-01 Rev 0 is based on Unit 2 drawing AX4DB206-1 Rev 10, Flush drawing FSI - 1KC-01 Rev 1 is based on Unit 1 drawing AX4DB206-3 Rev 12 which should have been used in the first place.
13. ~~These~~ valves X-126 and X-127 do not exist JKE 5/22/86
14. This line, along with its associated hose station, does not exist

FIGURE 2 (2 of 2)

FSAX40B206-3 Rev.12

C.R NO. 86-21

sheet 4 of 4



BECHTEL

GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT
Fire Protection
Water system flush

SCALE: NONE

DRAWING NO. FS1-1KC-01

Sheet 14 of 22

Change Request No. 86-20
Sheet 1 of 1

FLUSH PROCEDURE
CHANGE REQUEST

Procedure Number: 1-KC01 Revision: 0
Procedure Title: Fire Protection water Flush

Major Change ____ Minor Change V

Submitted by: J. Derryberry Date: 5-18-86

DESCRIPTION OF CHANGE: Step 6.28.10
Add Hose station on Line 333 as follows-
333 - 2½" 1

REASON FOR CHANGE: Hose station is unit 1 located at the boundry to unit 2. and was inadvertantly omitted during the preparation of the procedure.

QC Review (if applicable) NA 1

APPROVAL:

TEST SUPV. 5-18-86 DATE

LEAD TEST SUPV. 5-18-86 DATE

SUPERINTENDENT OF ENGINEERING LIAISON N/A 1 DATE

FIGURE 2 (1 of 2)

Change Request No. 86-19
Sheet 1 of 4

FLUSH PROCEDURE
CHANGE REQUEST

Procedure Number: 1-1KC01 Revision: 0
Procedure Title:

Major Change ——— Minor Change ✓

Submitted by: J. Chawla Date: 5-15-86

DESCRIPTION OF CHANGE: 1. Step 6.29.5 – Delete the sentence 'close valve 213'

2. Step 6.29.6 – Modify this step to read as follows 'Open temporary isolation valve at valve A-213 and flush line 340-6" to waste until effluent meets requirements. close temporary isolation valve

REASON FOR CHANGE: 1,2) The piping downstream of valve 213 belongs to construction at the present time. Hence the flush sample for line 340-6" has to be checked at valve A-213 instead of valve 2-210. The flush mod

QC Review (if applicable) /

APPROVAL:

SKChawla, 5-15-86
TEST SUPV. DATE

Howard Parnadee 5-15-86
LEAD TEST SUPV. DATE

/
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-19
Sheet 2 of 4

FLUSH PROCEDURE
CHANGE REQUEST

(Continuation Sheet)

DESCRIPTION OF CHANGE

3. Attachment 10-3 – Piping Modifications

In section 6.29 item 1, delete valve A-2301-U4-273 (added by CR # 86-17) and add valve 'A-2301-213' in its place.

4. Attachment 10.1

a) On sheet 40, change the line for valve A-2301-213 to read as follows.

Valve #	Valve Description	Required Position
A-2301-213	line 340-6" Iso. (Mod)	CL /

b) Delete the entire line for valve 2-2310-210

5. step 6.22.4 – change this step to read as follows

'Disconnect flanged connection at the Upstream side of valve TV-12654. Instal a blind flange on the valve and a flush mod on line 235-1½". Open valve HV-12985 and flush line 235-1½" to waste until effluent meets requirements.'

6. step 6.22.5 – change this step to read as follows

'close valve HV-12985. Remove blind flange and flush mod and, restore the flanged connection at valve TV-12654.'

FIGURE 2 (2 of 2)

Change Request No. 86-19
Sheet 3 of 4

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

DESCRIPTION OF CHANGE

7. Step 6.22.6 – change this step to read as follows

'Disconnect flanged connection at the upstream side of valve TV-12655, Instal a blind flange on the valve and a flush mod. on line 236-1½" Open valve HV-12987 and flush line 236-1½" to waste until effluent meets requirements.'

8. Step 6.22.7 – change this step to read as follows

'close valve HV-12987. Remove blind flange and flush mod and restore the flanged connection at valve TV-12655.'

9. Step 6.22.9 Delete this step

REASON FOR CHANGE

2. (contd.)
at valve A-213 will be closed in the initial valve line up (see change # 4 of this CR)

3. valve A-2301-U4-273 was duplicated by CR # 86-17 valve A-2301-213 is a new mod. added in this CR

4. Mod at 2-2310-210 is not required. The valve line up for line 340-6" ends at the mod at valve A-213.

FIGURE 2 (2 of 2)

Change Request No. 86-19
Sheet 4 of 4

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

REASON FOR CHANGE

Items 5,6,7,8 – The discharge piping from drains 319 and 320 is welded to the floor drain system piping. Hence the sample points for steps 6.22.4 and 6.22.6 have been moved to ~~a~~ the system more convenient/practical locations

9. The containment building fire protection system needs to be left in service after the completion of flushes.

FIGURE 2 (2 of 2)

Change Request No. 86-18
Sheet 1 of 3

FLUSH PROCEDURE
CHANGE REQUEST

Procedure Number: 1-1KC-01 **Revision:** 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ____ **Minor Change** ✓

Submitted by: J. CHAWLA **Date:** 5-8-86

DESCRIPTION OF CHANGE: 1. Delete step 6.21.9

2. Add new step 6.21.6A. The new step should read as follows

'Open valve 157 and flush line 031-6" until effluent requirements are met. close valve 157'

3. step 6.21.8 - Delete valve X-365. Add valves X-322, X-490, X-491

REASON FOR CHANGE: 1. The containment building sprinkler systems have been deleted by spec. X4AX03-MSCN no. 62 dt 4/15/86

2. Lines 031- 3/4" (step 6.21.7) and 235-2" (step 6.22.4)

QC Review (if applicable) /

APPROVAL:

JKchawla, 5-8-86
TEST SUPV. DATE

Howard Ramaker, 5-8-86
LEAD TEST SUPV. DATE

/
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-18
Sheet 2 of 3

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

DESCRIPTION OF CHANGE

4. Step 6.21.6 – Add the following lines to be flushed

448 – 2½"
449 – 2½"
450 – 2½"
451 – 2½"

5. Attachment 10.3

a) In Piping Modifications section, add the following

" Section 6.21 Containment buildup

1 Remove/Restore the following valves. Install 1" flush adapter with temporary line to waste. Temporary line to have an in-line valve and a sampling connection

	Remove Valve	Restore Valve
PSV – 27926		
PSV – 28002		
PSV – 28003		
PSV – 27931		"

FIGURE 2 (2 of 2)

Change Request No. 86-18
Sheet 3 of 3

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

DESCRIPTION OF CHANGE

5 b. Delete item # 1 in Attachment 10.3 - Flushing modifications for Section 6.21

6. Step 6.36.25 — Delete valve 548

7. In step 6.21.6 delete the sentence 'No more than two stations simultaneously'

REASON FOR CHANGE

2 (contd.)
can be flushed after line 031-6" has been flushed.

3. Drain valve X-365 is on line 366-6" which will not be flushed. Valves X-322, X-490 and X-491 were inadvertently missed out

4. These lines were missed out.

5a Attachment 10.3 should correspond to procedure step 6.21.7

5b. The sprinkler systems have been deleted. See change no. 1

6. Valve 548 was not moded for flushing since Sys. 520 is a wet sprinkler system.

7. There is no reason for imposing this limitation.

FIGURE 2 (2 of 2)

Change Request No. 86-17
Sheet 1 of 2

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-KC-01 **Revision:** 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ____ **Minor Change** ✓

Submitted by: Steve M. Douglas **Date:** 4/20/86

DESCRIPTION OF CHANGE: (1). STEP 6.24.5: DELETE "269-2½" (DIESEL GEN BLDG.)"
(2). STEP 6.24.7: DELETE "276-2½"
(3). STEP 6.24.6: REVISE "FLUSH LINE 268-4" THROUGH.." TO READ "FLUSH LINE 270-6" THROUGH..".
(4). STEP 6.24.8: REVISE "FLUSH LINE 277-4" THROUGH..." TO READ "FLUSH LINE 274-6" THROUGH...

REASON FOR CHANGE: (1) AND (2) LINES (FHS) 269-2½" & 276-2½" ARE FLUSHED IN STEP 6.31.9 UNDER DIESEL GENERATOR BUILDING.
(3) & (4) TO ALLOW FLUSHING OF SPRINKLER SYS. 029 & 030 THROUGH DIESEL GEN. SIDE RATHER THAN CONTROL BLDG. WHICH IS NOT FLUSHED.

QC Review (if applicable) N/A /

APPROVAL:

Steve M. Douglas 4/20/86
TEST SUPV. **DATE**

Howard Comadore 4-21-86
LEAD TEST SUPV. **DATE**

/
SUPERINTENDENT OF ENGINEERING LIAISON **DATE**

FIGURE 2 (1 of 2)

Change Request No. 86-17
Sheet 2 of 2

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

Step 6.23 CONTROL BUILDING LEVEL B.

Add steps to read as follows:

6.23.6A. Close valve 072 and open valve 277 to flush line 268-4" through valve 101 until effluent meets requirements. /

6.23.6B. Close valve 277 and open valve 278. Flush line 277-4" through valve 101 until effluent meets requirements. /

6.23.6C. Open valves ~~072~~ 072 VA 4/24/86 VA 4/24/86 and 277. /

REASON: TO FLUSH LINES 268-4" & 277-4".

Attachment 10.3 TEMPORARY MODIFICATION STATUS

Section 6.29 Control Bldg. Level 3

Add valve "A-2301-U4-273" under item 1 to perform flushing mod.

REASON: NEEDED TO FLUSH LINE 072-6" THROUGH THIS VALVE PER STEP 6.29.5 OF PROCEDURE.

FIGURE 2 (2 of 2)

Change Request No. 86-16
Sheet 1 of 3

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 **Revision:** 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ____ **Minor Change** ✓

Submitted by: Vishnu Sawdy **Date:** 4-16-86

DESCRIPTION OF CHANGE: (1) Step 6.36.19: Delete 'in place of' and add 'to' in its place. Delete 'valves' and add 'system' in its place.

(2) Step 6.36.20: Delete 'from the four hoses ..... and 523'. Add, 'through sprinkler system 511, 512, & 513'.

(3) Step 6.36.21: Delete 'Restore ..... and 514.' Add, 'Flush lines 680-4", 680-1" and 681-2" through mod. upstream valves TV-12892

REASON FOR CHANGE: (1) To flush the sprinkler lines inside battery room thru N sprinkler heads.
(2) To flush the sprinkler piping rather than through isolation valve only
(3) These isolation valves are not required to be modified.

QC Review (if applicable) N/A / ____

APPROVAL:

TEST SUPV. / 4-16-86 DATE

LEAD TEST SUPV. / 4-16-86 DATE

SUPERINTENDENT OF ENGINEERING LIAISON / ____ DATE

FIGURE 2 (1 of 2)

Change Request No. 86-16
Sheet 2 of 3

FLUSH PROCEDURE
CHANGE REQUEST

(Continuation Sheet)

and TV- 13204."

(4) Attachment 10.3. TEMPORARY MODIFICATION STATUS. Section 6.36.

(a) Items 2 and 3: Delete these items entirely.

(b) Item 4: Delete Flushing Mod. as written, entirely and add as follows:

Attach Flush-Mod. on lines upstream their respective isolation valve	Flus. Mod. Installed	Flush Mod Removed and lines restored
Line 680-1", valve TV-12892	/	/
Line 681-2", valve TV-13204	/	/

(DWG. 1X4DB 229-3)

(5) Step 6.24.5: Delete, 'Open valve 094 ..... valve 114'. Add, 'Verify Open valve 114 and close valve 277'.

(6) Step 6.24.7: Delete, 'Close valve 096. Open valve 278', and add, 'Verify valve 096 open and valve 278 close.'

(7) Step 6.24.~~8~~ 6 TM 4/16/86 Delete, 'Attach hoses .... remainder of line 268-4' and add, 'Flush line 268-4" through sprinklers---"

~~(8)~~ TM 4/16/86

FIGURE 2 (2 of 2)

703445

Change Request No. 86-16
Sheet 3 of 3

FLUSH PROCEDURE
CHANGE REQUEST

(Continuation Sheet)

(8) Step 6.24.8. Delete, "Attach hoses - - - - - remainder of line 277-4" " and add, "Flush lines 277-4" through Sprinklers - - - - - - "

(9) Step 6.24.9. Delete, ~~Open~~ V71 4/16/86 this step.

Reasons (Cont'd)

(4) To allow flushing lines upto Charcoal Filters

(5) & (6): To allow flushing of lines 268-4" & 277-4" and Fire Hose cabinets in Electric Tunnels from Diesel Crew Building Side, valve V71 from Control Bldg. which is not flushed.

(7) & (8): To allow flushing of sprinkler pipings.

(9): These step not required, as these valves are verified open in previous step

FIGURE 2 (2 of 2)

Change Request No. 86-15
Sheet 1 of 1

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ____ Minor Change V

Submitted by: Vishnudeo Tewary Date: 4-12-86

DESCRIPTION OF CHANGE:

(A) Attachment 10.3: Temporary Modification Status for section 6.36 Turbine Building. (Sheet 13 of 47)
(1) Delete valve '548' and add valve '533' instead. VT 4/12/86
(2) Re-restore internals of valve 534 to stop leakage from the valve.

REASON FOR CHANGE:

(A) Typographical Error: Valve 548 is isolation for Wet Pipe Systems which doesn't require modification where as valve '533' is isolation to Deluge Systems, which need flush-modification. (2) Restoration appears to be not done correctly.

QC Review (if applicable) N/A. /

APPROVAL:

VT 4-12-86
TEST SUPV. DATE

4/12/86
LEAD TEST SUPV. DATE

/
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No 86-14
Sheet 1 of 1

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ——— Minor Change X

Submitted by: Ed Wood Date: 4/1/86

DESCRIPTION OF CHANGE: ADD A NEW NOTE AND PRECAUTION TO READ: " 4.16 FLUSHING OF SPRINKLER SYSTEMS SHALL BE DOCUMENTED IN THE FLUSH LOG. A SIMPLE, ONE-LINE SKETCH OF THE SPRINKLER SYSTEM WILL BE MADE IN THE LOG. EACH ~~SPRINKLER~~ 4/1/86 SPRINKLER SYSTEM FLOW PATH WILL BE SEQUENTIALLY NUMBERED ON THE SKETCH. SYSTEM FLUSH MODIFICATION INSTALLATION, FLUSHING AND RESTORATION WILL BE DOCUMENTED IN THE FLUSH LOG PER SUM 12-B. AS EACH SPRINKLER SYSTEM FLOW PATH IS SUCCESFULLY FLUSHED, THE TEST SUPERVISOR AND QC INSPECTOR SHALL SIGN THEIR NAMES AND DATE ADJACENT TO THE FLOW PATH NUMBER ON THE FLUSH LOG SPRINKLER SYSTEM SKETCH. WHEN THE FINAL SPRINKLER SYSTEM FLOW PATH IS FLUSHED, THE TEST SUPERVISOR AND QC INSPECTOR SHALL SIGN OFF THE LAST POINT ON THE FLUSH LOG SKETCH AND SHALL SIGN OFF THE SPRINKLER SYSTEM AS BEING FLUSHED IN THE FLUSH PROCEDURE PROPER."

REASON FOR CHANGE:

TO DESCRIBE SPRINKLER SYSTEM FLUSHING AND DOCUMENTATION THEREOF.

QC Review (if applicable) [signature] 4-1-86

APPROVAL:

[signature] / 4/1/86
TEST SUPV. DATE

[signature] / 4-1-86
LEAD TEST SUPV. DATE

/
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No 86-13
Sheet 1 of 1

FLUSH PROCEDURE
CHANGE REQUEST

Procedure Number: 1-IKC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH.

Major Change ___ Minor Change ✓

Submitted by: Vishnudeo Pandey Date: 3-31-86

DESCRIPTION OF CHANGE: Step 6.13.6. Add a step as follows:
6.13.6A: Disconnect strainer downstream valve 1-2301-U4-220 and connect a flush-mod. on the valve. Flush line 096-4" to waste until effluent meets requirement. ___ / ___

Valve 220 restored ___ / ___

[NOTE: This line is header for sprinklers RD78, R-D79 & R+D100]

REASON FOR CHANGE: To flush 4" line prior to flushing 2½" line through FHS + 099.

QC Review (if applicable) N/A ___ / ___

APPROVAL:

V. M. [signature] / 3/31/86
TEST SUPV. DATE

Howard Pamadue / 3-31-86
LEAD TEST SUPV. DATE

___ / ___
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-12
Sheet 1 of 4

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-IKE-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ____ Minor Change ✓

Submitted by: Vishnudev Pandey Date: 3-28-86

DESCRIPTION OF CHANGE: (1) Add following items in Attachment 10.3, TEMPORARY/FLUSHING MODIFICATION STATUS for section 6.31.

MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
2. Install flush adapter to the strainer flushing valves.		
1-2301-S4-029W	Adapter connected /	Valves Restored /
1-2301-S4-030W	/	/

REASON FOR CHANGE:
(1) To flush Fire water Headers in D.G. Building through larger pipes prior to flushing the sprinklers.

QC Review (if applicable) N/A /

APPROVAL:

TEST SUPV. 3-28-86 DATE

LEAD TEST SUPV. 3-28-86 DATE

SUPERINTENDENT OF ENGINEERING LIAISON / DATE

FIGURE 2 (1 of 2)

Change Request No. 86-12
Sheet 2 of 4

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

3. Install flush adapter to Preaction System Main Drain Valves.	Adapter Connected	Adapter Removed
1-2301-S4-031A	/	/
1-2301-S4-032A	/	/

(ii) Section 6.31.5: Change the section to read as follows:

" Open valves 153 and 154 and flush following lines to waste until effluent meets requirements.

272-6" through Main drain Valve
1-2301-S4-032A ____/____

274-6" through Strainer flushing valve
1-2301-S4-030LV " ____/____

(iii) Section 6.31.6 - Delete 'valves' after 'sprinkler'.

(iV) Section 6.31.7. Change the section to read as follows:

" Open valves 147 and 148 and flush following lines to waste until effluent meets requirements.

122-6" through Main Drain Valve
1-2301-S4-031A ____/____

270-6" through Strainer flushing Valve
1-2301-S4-029LV ____/____

FIGURE 2 (2 of 2)

Change Request No. 86-12
Sheet 3 of 4

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

(v) Section 6.31.8 · Delete, "valves" after "sprinkler".
~~(vi)~~ VM 3/28/86 Delete; "Open valves 096 and 072"

(vi) Add following steps to section 6.31.

6.31.9 · Flush following lines through their respective Fire Hose stations until effluent meets requirements.

276-2½" _____ /
269-2½" _____ /

(vii) Remove the strainer basket from following Strainers, clean them and reinstall them.

1-2301-54-029V _____ /

1-230-54-030V _____ /

REASON FOR CHANGE

(ii) & (iii) To flush FW Header prior to flushing sprinklers and Fire Hose cabinets.
iv & v

vi) To flush lines going to fire hose cabinets

vii) To clean the Fire Main line strainer baskets, which may have collected debris during flush.

FIGURE 2 (2 of 2)

Change Request No. 86-12
Sheet 1 of 4

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

(viii) Section 6.35 Add following items in Attachment 10.3, TEMPORARY MODIFICATION STATUS for this section.

MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
Remove/Restore valve internals and install flushing adaptor with temporary line ~~to~~ waste. Temp. line to have in-line valve and a sampling connection	Remove Internals	Restore Internals
1-2301-U4-149	/	/
1-2301-U4-152	/	/
1-2301-U4-219	/	/

(ix) Section 6.35 Add a step 6.35.4A to read as follows:

"Open temporary valve installed on following lines and flush the lines to waste until effluents meet requirements.

113-6"	/
117-6"	/
120-6"	/

REASON FOR CHANGE

(viii) & (ix): To clean 6" FW Headers prior to flushing the Sprinklers in Aux. Feed Water Pump House.

FIGURE 2 (2 of 2)

Change Request No. 86-11
Sheet 1 of 3

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1-KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH.

Major Change ——— Minor Change ✓

Submitted by: Vishwadeo Pandey Date: 3-17-86

DESCRIPTION OF CHANGE: (i) Step 6.13.3 / Temp. Mod. Attachment 10.3.
Add following Temp. Mod. in Attachment 10.3 for this section;

Section 6.13, Auxiliary Bldg. Level D.

Modification / Restoration	Status Before Flushing	Status After Flushing
Remove/Restore Valve internals and install		

REASON FOR CHANGE:
(i) & (ii): To flush 077-4" through 4"-main line rather than 1½" FHS line for better flow.
(iii) & (iv): To avoid modifying the valves and for better flow.
(v): Line 014-2½ doesn't exist and line 088-4" is flushed Thru 203-2½"

QC Review (if applicable) N/A /

APPROVAL:

/ 3/17/86
TEST SUPV. DATE

Howard Pamicke / 3-18-86
LEAD TEST SUPV. DATE

/
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-11
Sheet 2 of 3

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

adapter with temporary line to waste. Temporary line to have in-line valve and a sampling line (DRG. 1X4DB174-2)

Valve A-2301-U4-389 ____/____ ____/____

(ii) Step 6.13.5: Divide this step into two substeps as follows:

6.13.5.1 Open valve on Temp Mod at valve 389 and flush line 077-4" to waste until effluent meets requirements. ____/____

6.13.5.2 Flush following lines through respective fire hose stations until effluent meets requirements. Flush no more than two fire hose stations at a time.

(iii) Step 6.15.8.: Change the step to read as follows,

"Disconnect pipes 195-1½", 196-1½", 197-1½" and 198-1½" at Union downstream valves A-2301-U4-141, 142, 143 and 144 respectively and install flushing adapter with ball valve on each line.

FIGURE 2 (2 of 2)

Change Request No. 86-11
Sheet 3 of 3

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

(iv) Step 6.15.9 : Delete "Restore valves 141, 143, 142, and 144"; and add, "Restore lines 195-1½", 196-1½", 197-1½", and 198-1½" " instead.

(v) Step 6.16.6 · Delete lines 014-2½" and 088-8" from the list.

FIGURE 2 (2 of 2)

Change Request No. 86-10
Sheet 1 of 3

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ____ Minor Change ✓

Submitted by: J. CHAWLA Date: 3-13-86

DESCRIPTION OF CHANGE:

1. Add the following step in Attachment 10.3 under Flushing Modifications for Section 6.36 - Turbine Bldg

   6. Remove blind flange at the end of the valve 1-2301-827. Attach a hose and route to waste. After flushing line A-2301-703-6" at step 6.36.27.

REASON FOR CHANGE:

1. Removal and reinstallation of the flange should be controlled by the procedure.
2. ~~Typo Error~~ SKL 3/13/86. This step flushes line A203-2½" which branches

QC Review (if applicable) N/A 1

APPROVAL:

3/13/86
TEST SUPV. / ~~3/14/86~~ SKL 3/13/86 DATE

LEAD TEST SUPV. / 3-14-86 DATE

SUPERINTENDENT OF ENGINEERING LIAISON / DATE

FIGURE 2 (1 of 2)

Change Request No. 86-10
Sheet 2 of 3

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

Modification / Restoration	Status before Flushing	Status After Flushing
remove hose and reinstall blind flange	Remove Flange /	Reinstall Flange /

2. Delete line # 088-4" in step 6.16.6 and add line # A203-2½" in its place
3. Step 6.16.6 — Delete the following lines
   411-2½", 410-2½", 409-2½", 408-2½"

4. In attachment 10.3 (sheet # 7) modify 'section 6.8 High Voltage switchyard Valve House No. 3' to 'section 6.9 High Voltage Switchyard Valve House No. 4'

5. In attachment 10.3, under Piping modifications for sections and steps, listed below, modify the ~~last~~ fire 3/13/86

FIGURE 2 (2 of 2)

Change Request No. 86-10
Sheet 3 of 3

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

last sentence to read as follows
'Line to have an in-line valve and a sampling connection'

i) step 1 in sections 6.6, 6.7, 6.8, 6.9, 6.11, 6.15, 6.25, 6.27, 6.28, 6.29, 6.36

ii) step 3 in sections 6.6, 6.8, 6.9

Do not delete dwg references and valve #s listed in these steps.

REASON FOR CHANGE

OFF Line 088-4":

3. These lines, along with corresponding Hose stations, are scoped under the Radwaste system which is to be flushed by the Westinghouse Corp.

4. Typo Errors

5. The size of the sampling connection will be decided in the field.

FIGURE 2 (2 of 2)

Change Request No. 86-9
Sheet 1 of 1

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: Fire Protection Water

Major Change ____ Minor Change ✓

Submitted by: J. CHAWLA / V. Pandey Date: 3-12-86

DESCRIPTION OF CHANGE: Valve lineup (ATTACHMENT 10.1):
(i) change required position of valve 1-2301-357 from 'O' to 'CL'
(ii) change required position of valve 2-2301-U4-357 from 'O' to 'CL'

REASON FOR CHANGE:
(i) Valve 1-2301-357 is the boundary valve for KC-07 subsystem which does not belong to Nuclear Operations Group (ii) Same as above.

QC Review (if applicable) N/A /

APPROVAL:

Ray Jarrett / 3/12/86
TEST SUPV. DATE

Robert A Lloyd / 3/12/86
LEAD TEST SUPV. DATE

/
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-8
Sheet 1 of 4

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ____ Minor Change ✓

Submitted by: J. CHAWLA Date: 3-7-86

DESCRIPTION OF CHANGE:

1. Delete existing step 6.17.5 and add new step 6.17.5 to read as follows

'Open temporary isolation valve at A-2301-123. Flush line 079-6" to waste from valve 123 until effluent meets requirements

REASON FOR CHANGE:

1. It is not necessary to open 2-2301-135 to flush line 079-6" at step 6.17.5

QC Review (if applicable) N/A /

APPROVAL:

3/7/86
TEST SUPV DATE

3/7/86
LEAD TEST SUPV. DATE
for CGH

/
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-8
Sheet 2 of 4

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

DESCRIPTION OF CHANGE

2. Delete section 6.3 in its entirety (including all steps and associated sign offs) in
   a. Main Body of the procedure
   b. Attachment 10.1 (Initial Valve lineup)
   c. Attachment 10.3 (Temporary Modification Status)

3.a) In attachment 10.1 (Initial Valve lineup) change the required positions of the following valves.

Valve #	Required Position	section #
A-2301-123 (Mod.)	CL	6.17
268	O	6.17
160	CL	6.21
A-2301-101 (Mod.)	CL	6.23
A-2301-274 (Mod.)	CL	6.25

FIGURE 2 (2 of 2)

Change Request No. 86-8
Sheet 3 of 4

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

DESCRIPTION OF CHANGE

Valve #	Required Position	Section #
A-2301-103 (Mod.)	CL	6.32
A-2301-292 (mod.)	CL	
A-2301-298 (Mod.)	CL	
2-2301-74	CL	

3b) In attachment 10.1, delete valve A-2301-385 in section 6.25 and add it in section 6.23 as follows

Valve Number	Valve Description	Required Position
A-2301-385	Line 054-2½" (Mod.)	CL /

4. Add vent valve X-272 to the list of valves being flushed at step 6.17.8. change 'close two valves' to 'close three valves'.

5 Add valves X-138, X-139, X-413 to the list of valves being flushed at step 6.18.8

FIGURE 2 (2 of 2)

Change Request No. 86-8
Sheet 4 of 4

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

REASON FOR CHANGE

2. Flushing for Radwaste Solidification building is to be done by Westinghouse Corp. utilizing their own procedures.

3. a) Modified valves A-2301-123, 101, 274, 103, 292, 298 and 2-2301-74 will be opened to commence flushes at steps 6.17.5, 6.23.5, 6.25.6, 6.32.6, 6.32.10, 6.32.7 and 6.32.11 respectively

Valve 160 isolates Sprinkler System 034, which does not belong to Nuclear Ops group

Valve 268, at present, feeds a temporary system which is required to be available for fire suppression.

3b) Valve A-2301-385 will be used during flush step 6.23.9 and hence belongs in section 6.23

4. Vent valve X-272 was inadvertently missed out

5. These valves were inadvertently missed out

FIGURE 2 (2 of 2)

Change Request No. 86-7
Sheet 1 of 6

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-FKC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ____ Minor Change ✓

Submitted by: Jagdish Chawla Date: 3-6-86

DESCRIPTION OF CHANGE:

1. Step 6.23.4 : Change 'P4-063' to 'P4-003'
2. Step 6.19.7 : Add 'Remove blind installed at valve TV-12624'
3. Change required position of the isolation valves (for Sprinkler Systems) listed below. All valves

REASON FOR CHANGE:

1. To Correct Typographical error
2. To remove blind installed per CR #86-6
3. To isolate Sprinkler systems not turned over to Nuclear Operations

QC Review (if applicable) N/A /

APPROVAL:

[signature] 3/6/86
TEST SUPV. DATE

[signature] 3-6-86
LEAD TEST SUPV. DATE

/
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-7
Sheet 2 of 6

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

DESCRIPTION OF CHANGE (CONTINUED)

are listed in Attachment 10.1 (Initial Valve lineup)

Valve #	Required Position	Section #
056	CL	6.17 - Aux Bldg level 1
265	CL	
266	CL	
267	CL	
268	CL	
245	CL	6.16 - Aux Bldg level A
246	CL	
247	CL	
248	CL	
249	CL	
250	CL	
251	CL	
252	CL	
253	CL	
244	CL	
235	CL	6.15 - Aux Bldg level B
236	CL	
237	CL	

FIGURE 2 (2 of 2)

Change Request No. 86-7
Sheet 3 of 6

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

Valve #	Required Position	Section #
238	CL	6.15 - Aux Bldg level B
239	CL	
240	CL	
241	CL	
242	CL	
243	CL	
227	CL	6.14 - Aux Bldg level C
228	CL	
229	CL	
230	CL	
232	CL	
233	CL	
234	CL	
220	CL	6.13 - Aux Bldg level D
221	CL	
222	CL	
223	CL	
224	CL	
225	CL	
226	CL	

FIGURE 2 (2 of 2)

Change Request No. 86-7
Sheet 4 of 6

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

Valve #	Required Position	Section #
155	CL	G.21 – Containment Bldg
156	CL	
157	CL	
159	CL	
161	CL	
162	CL	
163	CL	
165	CL	
166	CL	
057	CL	G.23 – Control Bldg level B
172	CL	
044	CL	
045	CL	
183	CL	
200	CL	
188	CL	
051	CL	
148	CL	G.24 – Electric Tunnels
154	CL	

FIGURE 2 (2 of 2)

Change Request No. 86-7
Sheet 5 of 6

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

Valve #	Required Position	section #
038	CL	G-25 - Control Bldg level A
041	CL	
193	CL	
184	CL	
182	CL	
190	CL	
191	CL	
192	CL	
189	CL	
043	CL	
A-2301-197	CL	G-27 - Control Bldg level 1
039	CL	G-28 - Control Bldg level 2
098	CL	
194	CL	
195	CL	
199	CL	
099	CL	
100	CL	

FIGURE 2 (2 of 2)

Change Request No. 86-7
Sheet 6 of 6

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

Valve #	Required Position	Section #
178	CL	G-29 - Contrd Bldg level 3 ↓
177	CL	
180	CL	G-29 - Control Bldg level 4 ↓
181	CL	
147	CL	G-31 - Diesel Gen. Bldg. ↓
153	CL	
149	CL	G-32 - Fuel Handling Bldg ↓
145	CL	
254	CL	G-33 - Equipment Bldg
149	CL	G-35 - Aux feedwater pump house ↓
219	CL	
152	CL	

FIGURE 2 (2 of 2)

Change Request No. 86-6
Sheet 1 of 2

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title:

Major Change —— Minor Change ✓

Submitted by: Vishnudeo Pandey Date: 3-4-86

DESCRIPTION OF CHANGE:

(i) Step 6.19.4: Delete, 'Close' (valve TV-12625) and add 'Install Blind' at (valve TV-12625).
6.19.5: Add, 'Remove blind at valve TV-12625.'

(ii) Step 6.19.6: Delete. 'Close' (valve TV-~~12624~~ 12624 VH 3/4/86) and 'Install blind at' (valve TV-12624).

REASON FOR CHANGE: Trip valves on FP lines to Filters are leaking by. In order to flush FP lines, blinds needed at these valves to avoid flooding the filters.

QC Review (if applicable) N/A /

APPROVAL:

[signature] 3/4/86
TEST SUPV. DATE

[signature] / 3-4-86
LEAD TEST SUPV. DATE

/
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-6
Sheet 2 of 2

FLUSH PROCEDURE
CHANGE REQUEST

(Continuation Sheet)

(iii) 6.20.4: Delete 'Close' (valve TV-12703) and add, 'Install blind at' (valve TV-12703).

6.20.5: Add, 'Remove blind at valve TV-12703.'

(iv) 6.20.6: Delete, 'Close' (valve TV-12696) and add, 'Install blind at' (valve TV-12696).

6.20.7: Add, 'Remove blind at valve TV-12696.'

(v) 6.20.8: Delete, 'Close' (valve TV-12689) and add, 'Install blind at' (valve TV-12689).

6.20.9: Add, 'Remove blind at valve TV-12689.'

FIGURE 2 (2 of 2)

Change Request No 86-05
Sheet 1 of 1

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ~~X~~ Minor Change ~~X~~

Submitted by: ED WASIL Date: 3/2/86

DESCRIPTION OF CHANGE:
CHANGE REQUIRED POSITION OF LEVEL 1 AUX. BUILDING INITIAL LINEUP FOR SPRINKLER SYSTEMS. (ATTACHMENT 10.1 PAGES 26 AND 27.

VALVE	REQUIRED POSITION
164	C
158	C
107	C
106	C
037	C

REASON FOR CHANGE:
SPRINKLER ISOLATIONS MUST BE CLOSED AS THE SYSTEMS ARE ~~NOT~~ STILL UNDER CONSTRUCTION
RAW 3/2/86

QC Review (if applicable) N/A

APPROVAL:

E Wasil 3/2/86
TEST SUPV. DATE

Howard Amadei 3-2-86
LEAD TEST SUPV. DATE

/
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-4
Sheet 1 of 1

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ____ Minor Change ✓

Submitted by: VISHNUDEO PANDEY Date: 2/27/86

DESCRIPTION OF CHANGE: Steps 6.3.4, 6.6.4, 6.7.4, 6.8.4, 6.9.4, 6.10.3, 6.11.4, 6.12.~~6~~5 (V.P. 2/27/86), 6.13.4, 6.14.4, 6.15.4, 6.16.4, 6.17.4, 6.18.4, 6.19.3, 6.20.3, 6.21.5, 6.22.3, 6.23.4, 6.24.4, 6.25.4, 6.26.3, 6.27.4, 6.28.4, 6.29.4, 6.30.3, 6.31.4, 6.33.4, 6.34.4, 6.35.4: Add, 'P4-002, P4-00~~4~~5 (V.P. 2/27/86) or TEMP. FLUSHING PUMP' after 'pump P4-003', in all above stated steps of procedure.

REASON FOR CHANGE: To allow the flush to be performed with either of the pumps.

QC Review (if applicable) N/A ____ / ____

APPROVAL:

[signature] / 2/27/86
TEST SUPV. DATE

[signature] / 2-28-86
LEAD TEST SUPV. DATE

____ / ____
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-3
Sheet 1 of ___

FLUSH PROCEDURE
CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ___ Minor Change ✓

Submitted by: Vishwinder Pandey Date: 2-9-86

DESCRIPTION OF CHANGE: (i) Delete 'C-2301-P4-001 and' from NOTE before step 6.1.55 of the procedure.
(ii) Correct step No from 6.1.59 to 6.1.56. in change request No 86-2.
(iii) Delete pump 'P4-001' from step 6.1.62. Also delete 'open valve 658' from this step.

REASON FOR CHANGE: (i) Only pump C2301-P4-002 will be run to perform this flush.
(ii) To correct the error and valve line up.

QC Review (if applicable) N/A ___ / ___

APPROVAL:

[signature] / 2-9-86
TEST SUPV. DATE

Howard Vamadino / 2-9-86
LEAD TEST SUPV. DATE

___ / ___
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 86-2
Sheet 1 of 1

FLUSH PROCEDURE
CHANGE REQUEST

Procedure Number: 1-IKC-01 Revision: 0
Procedure Title: FIRE PROTECTION FLUSH

Major Change ——— Minor Change ✓

Submitted by: Vishnudeo Pandey Date: 2-8-'86

DESCRIPTION OF CHANGE: Delete valve C2301-HV-7941 and add valve C2301-U4-T04 in its place in flush procedure, and flush diagram.
under steps 6.1.59

REASON FOR CHANGE: Valve C2301-HV 7941 was a butterfly valve which has been replaced with a gate valve in accordance with CCP-S10016M, which has been assigned a new tag number C2301-U4-T04.

QC Review (if applicable) N/A /

APPROVAL:

V. [illegible] / 2-8-'86
TEST SUPV. DATE

Howard Ramaker / 2-8-'86
LEAD TEST SUPV. DATE

/
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

1/3/86 86-1

Change Request No: ~~85-14~~
Sheet 1 of 1

FLUSH PROCEDURE
CHANGE REQUEST

Procedure Number: 1-JKC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ____ Minor Change X

Submitted by: ED WASIL Date: 3 JAN 86

DESCRIPTION OF CHANGE: CHANGE ATTACHMENT 10.3, TEMPORARY MODIFICATION STATUS, PAGE 13 OF 47, ITEM 3, SECOND SENTENCE TO READ "TEMPORARY LINE TO HAVE IN-LINE VALVE AND A 4" SAMPLING CONNECTION.

REASON FOR CHANGE: TO MORE EXPEDITIOUSLY FLUSH SPRINKLER SYSTEM HEADERS.

QC Review (if applicable) N/A

APPROVAL:

Ed Wasil 1 3 Jan 86
TEST SUPV. DATE

Howard Valgrader 1-3-86
LEAD TEST SUPV. DATE

/
SUPERINTENDENT OF ENGINEERING LIAISON DATE

FIGURE 2 (1 of 2)

Change Request No. 85-13
Sheet 1 of 1

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 **Revision:** 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ☐ **Minor Change** ☒

Submitted by: ED WASIL **Date:** 11/27/85

DESCRIPTION OF CHANGE: 1) CHANGE STEP 6.36.6 TO READ: "6.36.6 CLOSE A-2301-U4-687. FLUSH LINES 536-12", 536-10" AND 696-10" UNTIL EFLUENT REQUIREMENTS ARE MET 1 ".

2) CHANGE STEP 6.36.7 TO READ: " 6.36.7. CLOSE A-2301-U4-686. OPEN A-2301-U4-687. FLUSH LINES 537-10" UNTIL EFLUENT REQUIREMENTS ARE MET. 1 "

3) CHANGE TEMPORARY MODIFICATION STATUS, ATTACHMENT 10.3, PAGE 13 OF 47 ITEM 2 TO READ: "2. REMOVE/RESTORE BLIND FLANGE ON UNIT 2 SIDE OF VALVE A-2301-U4-687 AND INSTALL 10" TEMPORARY LINE TO WASTE. TEMPORARY LINE TO HAVE IN-LINE VALVE AND A 4" SAMPLING LINE. REMOVE FLANGE 1 RESTORE FLANGE 1 "

REASON FOR CHANGE: TO PROVIDE ADAQUATE FLUSH WATER DEWATERING FLOW PATH FROM THE TURBINE BUILDING.

QC Review (if applicable) 1

APPROVAL:

ED Wasil 27 Nov 85
TEST SUPV. DATE

for J. Williams 11/27/85
FLUSH SUPV. DATE

1
SUPERINTENDENT OF ENGINEERING LIAISON DATE

Change Request No 25 19
Sheet 1 of 1

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1 IKC-21 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ☐ Minor Change ☒

Submitted by: ED WELSH Date: 24 NOV 85

DESCRIPTION OF CHANGE: 1) CHANGE STEP 6.4.5 TO READ:
"6.4.5 FLUSH EACH OF THE BELOW LISTED HOSE CABINETS TO WASTE UNTIL EFFLUENT REQUIREMENTS ARE MET.

A2301R4647	1
A2301R4645	1
A2301R4646	1
A2301R4644	1

2) CHANGE ATTACHMENT 10.3, SECTION 6.4 TO READ: "ATTACH HOSES WITH FLUSH BOX ASSEMBLY TO THE FITTINGS OF THE FOLLOWING HOSE CABINETS.

		HOSES ATTACHED	CABINET RESTORED
A2301R4647	A2301R4646	1	1
A2301R4645	A2301R4644	1	1

REASON FOR CHANGE: TO EFFICIENTLY FLUSH THE DEMINERALIZER BUILDING FIRE SYSTEM.

QC Review (if applicable) 1

APPROVAL:

Ed Welsh 1 24 Nov 85
TEST SUPV. DATE

[signature] 1 11/24/85
FLUSH SUPV. DATE

1
SUPERINTENDENT OF ENGINEERING LIAISON DATE

Change Request No. 85-11
Sheet 1 of 1

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 **Revision:** 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ☐ **Minor Change** ☒

Submitted by: ED WASIL **Date:** 11-19-85

DESCRIPTION OF CHANGE: ADD SENTENCE TO STEP 4.14 TO READ: "QC HOLD POINTS ARE NOT IN EFFECT FOR VISUAL FLUSHING OF VENT AND DRAIN LINES, INSTRUMENTATION AND FIRE HYDRANTS.

REASON FOR CHANGE: TO CLARIFY QUALITY CONTROL POLICY IN WITNESSING PROOF FLUSHES ASSOCIATED WITH "Q" SYSTEMS.

QC Review (if applicable) Walter P. Ryan 11/19/85

APPROVAL:

E Wasil 11/19/85
TEST SUPV. DATE

for [illegible] 11/19/85
FLUSH SUPV. DATE

SUPERINTENDENT OF ENGINEERING LIAISON DATE

Change Request No. 85-10
Sheet 1 of 1

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 **Revision:** 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ☐ **Minor Change** ☒

Submitted by: ED WASIL **Date:** 11-18-85

DESCRIPTION OF CHANGE:

CHANGE STEP 6.1.19 TO READ:
"6.1.19 START PUMP P4-003 OR P4-005. OPEN VALVES 011, 713, 898. CLOSE VALVES 016, 008.

REASON FOR CHANGE:

TO ALLOW FIRE WATER SUPPLY FROM EITHER THE NORTH OR SOUTH HEADERS.

QC Review (if applicable) /

APPROVAL:

Ed Wasil / 11-18-85	
TEST SUPV.	DATE
Wm. R. McDonald for / 11-18-85	
FLUSH SUPV.	DATE
/	
SUPERINTENDENT OF ENGINEERING LIAISON	DATE

Change Request No. 85-9
Sheet 1 of 1

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ☐ Minor Change ☒

Submitted by: ED WASIL Date: 2 JULY 85

DESCRIPTION OF CHANGE:

(1) Change Step 6.2.4 TO READ "6.2.4 VERIFY THAT STEPS 6.1.26, 6.1.27.2, 6.1.27.5, 6.1.31, 6.1.34 AND 6.1.37 ARE COMPLETE."

(2) CHANGE STEP 6.2.5 TO READ "6.2.5 START PUMP P4002, P4-003 OR P4-005."

REASON FOR CHANGE: TO EXPEDITE FLUSHING OF FIRE HYDRANTS.

APPROVAL:

Ed Wasil 2 July 85
TEST SUPV. DATE

[signature] 7/2/85
FLUSH SUPV. DATE

/
HOT FUNCTIONAL & S/U TEST SUPT. DATE

Change Request No. 85-8
Sheet 1 of ~~3~~ 2

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ☐ Minor Change ☒

Submitted by: ED WASIL Date: 6-28-85

DESCRIPTION OF CHANGE: SEE CONTINUATION SHEET

REASON FOR CHANGE: To FLUSH LINES 015-10" and 005-1½", 006-12" without contaminating the South Fire Water Storage Tank. ADD ATTACHMENT ~~10.5~~ 10.4.

APPROVAL:

Ed Wasil / 6-28-85
TEST SUPV. DATE

S W Samuel / 6/28/85
FLUSH SUPV. DATE

/
HOT FUNCTIONAL & S/U TEST SUPT. DATE

85-8

Change Request No.
Sheet 2 of 3

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

1. Change Step 6.1.19 to read: "6.1.19 Start Pump P4-003 or P4-005. Open valves 011, 713 and 898. Close valves 016, 008, 659 and 652."

/

2. Change Step 6.1.20 to read: "6.1.20 Flush lines 509-12", 058-10", 008-10" and 015-6" to waste until effluent meets requirements."

/

3. Change Step 6.1.21 to read: "6.1.21 Flush the Jockey Fire Pump 001 mini-flow recirc and discharge line 005-1½" as follows:

6.1.21.1 Open valve 016. Flush mini-flow recirc line 022-1" to waste until effluent meets requirements.

/

6.1.21.2 Close valves 898, 713, 016 and 011.

/

6.1.21.3 Open valve 008. Flush discharge line 005-1½" until effluent meets requirements. Close valve 008."

/

85-8

Change Request No.
Sheet 3 of 3

FLUSH PROCEDURE CHANGE REQUEST

(Continuation Sheet)

4. In note before Step 6.1.55, delete "C-2301-P4-001"

5. Delete Steps 6.1.57, 6.1.60, 6.1.61 and 6.1.63

6. Change Step 6.1.56 to read: "6.1.56 Open valves HV-7933, HV-7941 and 011."

/

7. Change Step 6.1.58 to read: "6.1.58 Start Pump P4-002."

/

8. Change Step 6.1.59 to read: "6.1.59 Flush lines 001-16" and 006-12" to waste until effluent meets requirements."

/

9. Add attached "Attachment 10.4"

10. Add attached "Attachment 10.3, Sheet 16a OF 47"

ATTACHMENT 10.4

CR 85-8

SIGNATURE/INITIAL SHEET

NAME (PRINT)	SIGNATURE	INITIALS

ATTACHMENT 10.3

TEMPORARY FLUSHING MODIFICATIONS

CR 85-8

	DESCRIPTION	STEP	MODIFICATION PERFORMED	STEP	RESTORATION PERFORMED
11.	REMOVE PUMP END OF JOCKEY PUMP 001. CONNECT TEMPORARY FLUSHING HOSE TO LINE 005-1 1/2" FLANGE	6.1.20		6.1.21.3	
12.	REMOVE/INSTALL CHECK VALVE 007 INTERNALS	6.1.21		6.1.21.3	
13.	DISCONNECT/RESTORE FLANGE JOINING LINES 015-6" AND 015-10" TO SOUTH FIRE WATER STORAGE TANK AND CONNECT TEMPORARY FLUSHING HOSE- INSTALL 6" BLIND FLANGE AT STORAGE TANK.	6.1.19		6.1.21.3	

Change Request No. 85-7
Sheet 1 of 2

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change [ ] Minor Change [X]

Submitted by: ED WASIL Date: 6-24-85

DESCRIPTION OF CHANGE: SEE CONTINUATION SHEET

REASON FOR CHANGE: TO FLUSH LINE 515-12" BETWEEN VALVES 814 AND 660.

APPROVAL:

Ed Wasil / 6-24-85
TEST SUPV. DATE

[signature] / 6/24/85
FLUSH SUPV. DATE

/
HOT FUNCTIONAL & S/U TEST SUPT. DATE

85-7
Change Request No.
Sheet 2 of 2

FLUSH PROCEDURE
CHANGE REQUEST

(Continuation Sheet)

1. CHANGE STEP 6.1.35 TO READ " 6.1.35 OPEN VALVES 779 AND 660. —1—

2. CHANGE STEP 6.1.37 TO READ " 6.1.37 CLOSE VALVE 661 AND FLUSH EAST HEADER TO WASTE FROM YARD LOOP DRAIN CONNECTION UNTIL EFFLUENT MEETS REQUIREMENTS." —1—

Change Request No. 85-6
Sheet 1 of 1

FLUSH PROCEDURE CHANGE REQUEST

Procedure Number: 1-1KC-01 Revision: 0
Procedure Title: FIRE PROTECTION WATER FLUSH

Major Change ☐ Minor Change ☒

Submitted by: ED WASIL Date: 6/18/85

DESCRIPTION OF CHANGE: ADD NEW STEP 4.15 TO READ: "4.15 CLASS D CLEANNESS CRITERIA REQUIRES TWO SAMPLES USING FLUSHING CLOTH OR 14 MESH SCREEN/STRAINER. PARTICULATE SIZE ≤ 1/16 INCH IN ANY DIMENSION, EXCEPT THAT HAIRLIKE SLIVERS (≤ 1/16 INCH THICK) ARE PERMISSIBLE UP TO 1/8 INCH LONG. SCREENS AND EFFLUENT APPEAR CLEAR EXCEPT CARBON STEEL SYSTEM MAY HAVE CONSIDERABLE STAINING FROM RUST. FLUSH CLOTHS/SCREENS SHOW NO VISUAL EVIDENCE OF ORGANIC CONTAMINATION. SAMPLE DURATION = MINUTES = $\left(\frac{DPP}{DSP}\right)^2 \times 3$ (MINIMUM 3 MINUTES) WHERE DSP = DIAMETER SAMPLE PIPE AND DPP = DIAMETER PROCESS PIPE. SAMPLE DURATIONS SHALL BE CALCULATED IN THE FLUSH LOG.

REASON FOR CHANGE: TO PROVIDE DOCUMENTATION OF SAMPLE DURATION CALCULATIONS.

APPROVAL:

TEST SUPV. 6/18/85 DATE

FLUSH SUPV. 6/18/85 DATE

HOT FUNCTIONAL & S/U TEST SUPT. DATE

Change Request No. 85-5
Sheet 1 of 3

GEORGIA POWER COMPANY

VOGTLE ELECTRIC GENERATING PLANT

UNIT NO. Common

CHANGE REQUEST

Procedure No./Revision 1-1KC-01 REV 0

Title FIRE PROTECTION WATER FLUSH

1. Make the following pen-and-ink changes: SEE CONTINUATION SHEET.

2. Remove pages:

and replace with attached pages:

3. Reason for change: 1) TO FLUSH CONSTRUCTION FIRE HEADER 2) TO PROVIDE FOR FLUSHING OF LINES 651-12" AND 656-12" WITH VALVES 658 AND 659 UNAVAILABLE.

Check one:

- [x] Minor change
- [ ] Major change - involves changes in intent or acceptance limits

SUBMITTED BY: E D Ward DATE: 1 Mar 85

APPROVED BY: Ray A Sprankle DATE: 3-1-85

APPROVED BY: [signature] DATE: 3-1-85.

APPROVED BY: DATE:

(FIGURE 2)

GEORGIA POWER COMPANY

VOGTLE ELECTRIC GENERATING PLANT

UNIT NO. COMMON

CHANGE REQUEST
(ATTACHMENT)

Procedure No./Revision 1-1KC-01 REV 0

Title FIRE PROTECTION WATER FLUSH

1. Make the following pen-and-ink changes:

1. IN STEP 6.1.28, DELETE VALVES 660 AND ADD VALVES 653 AND 779.
2. CHANGE 6.1.29 TO READ "CLOSE VALVES 652 AND 774."
3. CHANGE 6.1.30 TO READ "START PUMP P4-003 OR P4-005."
4. CHANGE 6.1.31 TO READ "FLUSH LINE 656-12" AND 661-12"..."
5. CHANGE 6.1.32 TO READ "OPEN VALVE 117."
6. CHANGE 6.1.33 TO READ "CLOSE VALVE 779."
7. CHANGE 6.1.34 TO READ "FLUSH LINE 656-12"..."
8. CHANGE 6.1.35 TO READ "OPEN VALVE 779"
9. ADD NOTE PRIOR TO STEP 6.1.28 TO READ "NOTE STEPS 6.1.28 THROUGH 6.1.35 MAY BE PERFORMED UPON COMPLETION OF STEP 6.1.26."
10. DELETE STEP 6.1.36
11. MAKE STEP 6.1.27 STEP 6.1.36.
12. ADD NEW STEP 6.1.27 TO READ.

"6.1.27 FLUSH THE CONSTRUCTION FIRE HEADER BY PERFORMING THE FOLLOWING:

6.1.27.1 OPEN VALVE 716 AND CLOSE VALVES 622 AND 637

Change Request No. 855
Sheet 3 of 3

GEORGIA POWER COMPANY

VOGTLE ELECTRIC GENERATING PLANT

UNIT NO. Common

CHANGE REQUEST
(ATTACHMENT)

Procedure No./Revision 1-1KC-01 REV 0

Title FIRE PROTECTION WATER FLUSH

1. Make the following pen-and-ink changes:

6.1.27.2 FLUSH OUTER CONSTRUCTION LOOP TO WASTE UNTIL EFFLUENT REQUIREMENTS ARE MET. /

6.1.27.3 CLOSE VALVES 716 AND 632. /

6.1.27.4 OPEN VALVES 637 AND 622. /

6.1.27.5 FLUSH INNER CONSTRUCTION LOOP TO WASTE UNTIL EFFLUENT REQUIREMENTS ARE MET. /

Change Request No. 85-4
Sheet 1 of 1

GEORGIA POWER COMPANY

VOGTLE ELECTRIC GENERATING PLANT

UNIT NO. Common

CHANGE REQUEST

Procedure No./Revision 1-KC-01 REV 0

Title FIRE PROTECTION WATER FLUSH

1. Make the following pen-and-ink changes: CHANGE STEP 6.1.25 TO READ = "6.1.25 START PUMP P4-005 OR P4-003

2. Remove pages: _____

and replace with attached pages: _____

3. Reason for change: TO ALLOW FLUSHING OF THE MAIN LOOP WITH EITHER DIESEL FIRE PUMP.

Check one:

- [x] Minor change
- [ ] Major change - involves changes in intent or acceptance limits

SUBMITTED BY: E D Wood DATE: 2/20/85

APPROVED BY: E D Wood DATE: 2/20/85

APPROVED BY: H A James DATE: 2/20/85.

APPROVED BY: _____ DATE: _____

(FIGURE 2)

Change Request No. 85-3
Sheet 1 of 1

GEORGIA POWER COMPANY

VOGTLE ELECTRIC GENERATING PLANT

UNIT NO. C

CHANGE REQUEST

Procedure No./Revision 1-1KC-01 REV 0

Title FIRE PROTECTION WATER FLUSH

1. Make the following pen-and-ink changes: ADD NEW NOTE AND PRECAUTION TO READ "4.14 QC HOLD POINT- NOTIFY VOGTLE NUCLEAR OPERATIONS QC AFTER FIRST CLEAN FLUSH AND PRIOR TO SCREEN INSERTION FOR FINAL FLUSH FOR CLEANLINESS INSPECTION."

2. Remove pages: _____

and replace with attached pages: _____

3. Reason for change: TO ENSURE QC NOTIFICATION OF ACCEPTABLE FLUSHES.

Check one:

☒ Minor change
☐ Major change - involves changes in intent or acceptance limits

SUBMITTED BY: E C Wood DATE: 1/15/85

APPROVED BY: Ray A Sprankle DATE: 1/15/85

APPROVED BY: [signature] DATE: 1/15/85

APPROVED BY: _____ DATE: _____

(FIGURE 2)

Change Request No. 85-2
Sheet 1 of 1

GEORGIA POWER COMPANY

VOGTLE ELECTRIC GENERATING PLANT

UNIT NO. C

CHANGE REQUEST

Procedure No./Revision 1-1KC-01 REV 0

Title FIRE PROTECTION WATER FLUSH

1. Make the following pen-and-ink changes: IN STEP 6.1.24, ADD VALVE 622 AND DELETE VALVE 634

2. Remove pages:

   and replace with attached pages:

3. Reason for change: TO ALLOW FLUSHING OF THE MAIN LOOP WITH VALVE 634 INOPERABLE.

Check one:

- ☒ Minor change
- ☐ Major change - involves changes in intent or acceptance limits

SUBMITTED BY: E.D. [signature] DATE: 1-14-85

APPROVED BY: Ray A [signature] DATE: 1-14-85

APPROVED BY: J. H. [signature] DATE: 1-14-85

APPROVED BY: DATE:

(FIGURE 2)

Change Request No. 85-1
Sheet 1 of 1

GEORGIA POWER COMPANY

VOGTLE ELECTRIC GENERATING PLANT

UNIT NO. C

CHANGE REQUEST

Procedure No./Revision 1-1KC-01 REV. 0

Title FIRE PROTECTION WATER FLUSH.

1. Make the following pen-and-ink changes: 1) DELETE STEP 6.1.10
2) ADD NOTE PRIOR TO STEP 6.1.11 STATING "STEPS 6.1.24 THROUGH 6.1.27 MAY BE PERFORMED PRIOR TO STEPS 6.1.11 THROUGH 6.1.23."
3) IN STEP 6.1.24, DELETE VALVES 814 AND 622.
4) CHANGE TO READ "START PUMP P4-003" IN STEP 6.1.25.

2. Remove pages:

and replace with attached pages:

3. Reason for change: TO ALLOW CONTINUATION OF SYSTEM FLUSH WHILE PUMP P4-003 IS INOPERABLE.

Check one:

- [x] Minor change
- [ ] Major change - involves changes in intent or acceptance limits

SUBMITTED BY: [signature] DATE: 1/14/85

APPROVED BY: Ray A Sperandeo DATE: 1/14/85

APPROVED BY: Julian W. Hyatt DATE: 1/14/85

APPROVED BY: DATE:

(FIGURE 2)

Change Request No. 84-2
Sheet 1 of 1

GEORGIA POWER COMPANY

VOGTLE ELECTRIC GENERATING PLANT

UNIT NO. Common

CHANGE REQUEST

Procedure No./Revision 1-1KC-01 REV 0

Title FIRE PROTECTION WATER FLUSH

1. Make the following pen-and-ink changes: 1) CHANGE STEP 6.1.3 TO READ "... IS ISOLATED PRIOR TO PERFORMING STEP 6.1.11." 2+3) CHANGE SECTION 6.1 PIPING MODIFICATIONS 1 AND 3 TO READ "... AND ALSO A 4" SAMPLING CONNECTION."

2. Remove pages: NONE

   and replace with attached pages: NONE

3. Reason for change: 1) TO SUPPORT STORAGE TANKS CROSS CONNECT FLUSHING WHILE MAINTAINING SITE FIRE PROTECTION. 2+3) TO PROVIDE MORE EFFECTIVE SIDE STREAM FLOW FOR PROOF FLUSHING.

   Check one:

   ☒ Minor change
   ☐ Major change - involves changes in intent or acceptance limits

SUBMITTED BY: [signature] DATE: 12/20/84

APPROVED BY: Ray A [signature] DATE: 12/20/84

APPROVED BY: [signature] DATE: 12/20/84

APPROVED BY: ______ DATE: ______

(FIGURE 2)

Change Request No. 84-1
Sheet 1 of 1

GEORGIA POWER COMPANY

VOGTLE ELECTRIC GENERATING PLANT

UNIT NO. COMMON

CHANGE REQUEST

Procedure No./Revision 1-1KC-01 REV 0

Title FIRE PROTECTION WATER FLUSH

1. Make the following pen-and-ink changes: ADD NEW NOTE AND PRECAUTION TO READ "4.13 FLUSH SUB-SECTION PREREQUISITES INCLUDING INITIAL VALVE LINEUPS, INSTRUMENTATION ISOLATION, TEMPORARY MODIFICATION COMPLETION, WATER SUPPLY TESTING AND TANK INSPECTION MAY BE PERFORMED IN ANY ORDER."
2. Remove pages: N/A

   and replace with attached pages: N/A

3. Reason for change: TO EXPEDITE FLUSH PROCEDURE PERFORMANCE BY ALLOWING STORAGE TANKS TO BE CLEANED AND INSPECTED PRIOR TO LINEUPS AND MODIFICATIONS BEING COMPLETE.

Check one:

☒ Minor change
☐ Major change - involves changes in intent or acceptance limits

SUBMITTED BY: [signature] DATE: 11/19/84

APPROVED BY: Ray Sprankle DATE: 11/19/84

APPROVED BY: Julian W. Lloyd DATE: 11/19/84

APPROVED BY: DATE:

(FIGURE 2)

FIRE PROTECTION WATER FLUSH

1-1KC-01

VOGTLE ELECTRIC GENERATING PLANT

UNIT 1

PROCEDURE NUMBER: 1-1KC-01
REVISION NUMBER: 0
REVISION DATE: May 24, 1984
PREPARED BY: J. Laverty

GEORGIA POWER COMPANY

VOGTLE ELECTRIC GENERATING PLANT

UNIT NO. 1

TITLE FIRE PROTECTION WATER FLUSH

PROCEDURE REVIEW

[signature]	[signature] / 20 Sept 84
Ray A Spranke	RAS / 20 SEPT 84
Julian W. Yonce	JWY / 28 Sep 84
	/
	/

PROCEDURE NUMBER: 1-1KC-01
REVISION NUMBER: 0
REVISION DATE: May 24, 1984
PREPARED BY: J. Laverty

GEORGIA POWER COMPANY

VOGTLE ELECTRIC GENERATING PLANT

UNIT NO. 1

TITLE FIRE PROTECTION WATER FLUSH

PROCEDURE REVIEW, REV. 0

INITIAL TEST PROGRAM MANAGER _____ / 5/16/84

_____ / _____

_____ / _____

_____ / _____

_____ / _____

FLUSH COMPLETED AND RESULTS APPROVED

INITIAL TEST PROGRAM MANAGER _____ / _____

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FIRE PROTECTION WATER FLUSH

1.0 OBJECTIVES

The objective of this procedure is to establish the Fire Protection Water System at a Class D cleanness level. This will be accomplished by velocity flushing of system piping and equipment.

2.0 REFERENCES

2.1 SUM-16 Rev. 3, Cleanness Verification Guidelines

2.2 PIPING AND INSTRUMENTATION DIAGRAMS

1X4DB173, Rev. 7 - F. P. Piping, Turbine Bldg. 2301

CX4DB173-1, Rev. 17 - F. P. Pump Houses, L & 2 2301

CX4DB173-2, Rev. 9 - F. P. Yard Piping 2301

CX4DB173-5, Rev. 3 - F. P. High Voltage Valvehouse 1 2301

CX4DB173-6, Rev. 1 - F. P. High Voltage Valvehouse 2,3,4 2301

1X4DB173-6, Rev. 1 - F. P. Low Voltage Valvehouse 2301

AX4DB173-8, Rev. 2 - F. P. Administration Bldg. 2301

1X4DB174-1, Rev. 7 - F. P. Water & Halon Systems 2301

1X4DB174-2, Rev. 8 - F. P. Water Systems 2301

1X4DB174-3, Rev. 7 - F. P. Water Systems 2301

1X4DB174-4, Rev. 8 - F. P. Water Systems 2301

AX4DB104-5, Rev. 4 - Radwaste Solidification 1903

AX4DB204-1, Rev. 6 - Fuel Handling Bldg. HVAC 1541

1X4DB205-1, Rev. 9 - Piping Penetration HVAC 1561

AX4DB206-1, Rev. 3 - Control Room HVAC - Unit 2, 1531

AX4DB206-3, Rev. 7 - Control Room HVAC - Unit 1, 1531

1X4DB208-1, Rev. 4 - Aux. Bldg. HVAC 1551

1X4DB209, Rev. 6 - Elec. Pen. Room HVAC 1562

1X4DB213-1, Rev. 3 - Purification & Clean Up. 1506

1X4DB213-2, Rev. 2 - Purification & Clean Up. 1504

1X4DB229-3, Rev. 1 - Turbine Bldg. Filtration System

AX4DB215, Rev. 6 - Control Bldg. HVAC. 1533

AX4DB235, Rev. 5 - Tech. Support Center. 1563

AX4DB351-1, Rev. 4 - Radwaste Solid HVAC. 1546

AX4DB351-4, Rev. 5 - Radwaste Solid HVAC. 1546

3.0 TEST EQUIPMENT

3.1 Flushing cloths as specified in SUM-16 or 14 mesh strainer. Satisfactory effluent must meet Class D particle criteria.

4.0 NOTES AND PRECAUTIONS

4.1 All piping and equipment in this procedure are Unit 1 or Common and are in System 2301 unless otherwise noted. Tank T4-002 and Diesel pumps are already in operation.

4.2 All piping and equipment removed from the system shall be cleaned, labeled, and protected.

4.3 Sections of system piping which are flushed but must remain idle for long periods of time pending overall completion of flush shall be laid up.

4.4 Appropriate elements of the data sheets shall be completed as the data is collected.

4.5 Fire hose connections fed by Nuclear Service Cooling Water, as shown on P & ID 1X4DB174-6, Rev. 5, shall be flushed in procedure 1-1EF-01.

4.6 Electrical power will not be initially available to motor driven pumps, P4-001 and P4-002. Hence, all flushing will be performed by the two diesel pumps and jockey pump P4-004 until electrical power is connected.

4.7 Equipment actuation shall be directed by the Test Supervisor as required to perform this procedure and to optimize flushing effectiveness.

4.8 Equipment and component limitations specified in the System Operating Procedure (SOP) shall be followed as applicable.

4.9 The Fire Protection - Water System is already partially in operation.

4.10 Obtain approval from Shift Supervisor before starting the flush.

4.11 If a particular flush requires isolation of a portion of any loop, every effort should be made to complete that test and restore normal fire protection as soon as possible.

4.12 Required Construction Acceptance Tests shall be completed before equipment is operated.

5.0 PREREQUISITES AND INITIAL CONDITIONS

5.1 Verify that a minimum of 1000 gallons of diesel oil is available to support diesel fire pump operation.

_____/_____

SECTION 5.0 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.0 FLUSH PROCEDURE

6.1 FIRE WATER STORAGE TANK, PUMP HOUSE AND YARD LOOP DWGS. C1X4DB173-1 AND C1X4DB173-2

6.1.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.1 are complete and operable.

_____/_____

6.1.2 Initial Valve Lineup for Section 6.1 on Attachment 10.1 is complete.

_____/_____

6.1.3 Instrumentation for Section 6.1 on Attachment 10.2 is isolated.

_____/_____

6.1.4 Temporary Modifications for Section 6.1 on Attachment 10.3 are complete.

_____/_____

6.1.5 Sample and test the supply water. Supply meets Class D water quality.

_____/_____

6.1.6 Inspect/Clean Storage Tank T4-001 to meet Class D cleanness as specified in 9.0 Acceptance Criteria. (REF. DATA SHEET 7.2)

_____/_____

NOTES

As long as suction piping of pumps P4-001 and P4-002 are not restored, perform the following statements:

(1) Place diesel fire pumps P4-003 and P4-005 in the "MANUAL 1" position (HS-7907B and HS-7990B respectively) to prevent automatic operation during flushing of the firewater suction piping.

(2) Station a person in Fire Pump-house #2 to monitor PI-18074 for a drop in system pressure that may indicate sprinkler system or hydrant emergency use.

(3) If the pressure unexpectedly drops below 100 psi or drops faster than expected, close all in-line valves in the temporary flushing piping and start pump P4-003 by depressing the manual start pushbutton. Place HS-7990B in the "AUTO" position to allow automatic operation, if required.

_____/_____

6.1.7 Open HV7932, HV7935, and HV7941. Flush to waste from temporary flush piping installed at suction of pump P4-002. Flush until effluent requirements are met.

_____/_____

6.1.8 Close HV7941 and open valve 002. Flush to waste from temporary flush piping installed at suction of pump P4-001. Flush until effluent requirements are met.

_____/_____

6.1.9 Close HV7935, HV7932. Open valve 502 and flush to waste until effluent meets requirements.

_____/_____

6.1.10 Restore suction piping to pumps P4-001 and P4-002.

_____/_____

6.1.11 Stop pump P4-004 if it is already operating. Connect hose to flange of line 021-1" where FO7942 had been removed and place the other end in the funnel of line 104-3".

_____/_____

6.1.12 Close valve 119. Start pump P4-004. Fill and drain chemical pot feeder through valves 106 and 108 until effluent meets requirements.

6.1.13 Stop pump P4-004 and close valve 106. Reconnect line 021-1" and start pump P4-004.

_____/_____

6.1.14 Close valve 505 and open valve 104. Flush line 021-1" to drain until effluent requirements are met. Close valves 104 and 108.

_____/_____

6.1.15 Open valve X-599. Flush pump P4-004 miniflow line 101-2" to waste until effluent meets requirements. Close valve X-599 and open valve 505.

_____/_____

6.1.16 Open valve 119. Close 597. Open 2" temporary sampling valve and flush line 107-1½" to waste at the temporary modification installed between valves 660 and 661, until effluent meets requirements.

_____/_____

6.1.17 Open valve 597. Close valve 598 and flush line 628-1½" to waste until effluent meets requirements.

_____/_____

6.1.18 Close valve 659.

_____/_____

6.1.19 Start pump P4-003. Open valves 011, 713, 898, and 512.

_____/_____

6.1.20 Flush the following lines through tank T4-001 to waste at drain connection below valve 512 until effluent meets requirements.

058-10" _____/_____

006-12" _____/_____

509-12" _____/_____

035-8" _____/_____

6.1.21 Close valves 011, 713, 898, 512, and 014.

_____/_____

6.1.22 Open valve 023. Flush lines 500-10" and 018-6" to waste through line 018-10" until effluent meets requirements. Close 023 and open valve 014.

_____/_____

6.1.23 Open valves 740 and 743. Close valve 738. Flush diesel engine cooling water by-pass line through drain at heat exchanger until effluent meets requirements. Open 738, close valves 740 and 743 and reinstall filter C-2301-P4-003-F05. Stop pump P4-003 and place it in "AUTO".

_____/_____

6.1.24 Close the following 7 yard loop isolation valves.

660 _____/_____

814 _____/_____

622 _____/_____

634 _____/_____

779 _____/_____

716 _____/_____

653 _____/_____

6.1.25 Open valve 652, 659, and 661. Start pump P4-005.

_____/_____

6.1.26 Flush outer yard loop 515-12" to waste until effluent requirements are met.

_____/_____

6.1.27 Open valves 733 and 742. Close valve 731. Flush diesel engine cooling water by-pass line to drain at heat exchanger until effluent meets requirements. Open 731, close valves 733 and 742 and reinstall filter C-2301-P4-005-F05. Stop pump P4-005.

_____/_____

6.1.28 Open the following isolation valves:

660 _____/_____

814 _____/_____

6.1.29 Close valve 661.

_____/_____

6.1.30 Start pump P4-003.

_____/_____

6.1.31 Flush line 656-12" to waste from yard loop drain connection until effluent criteria are met.

_____/_____

6.1.32 Open valve 779.

_____/_____

6.1.33 Close valve 774.

_____/_____

6.1.34 Flush line 651-12" to waste from the yard loop drain connection until effluent criteria are met.

_____/_____

6.1.35 Open valve 774.

_____/_____

6.1.36 Close valve 814. (Line 651-12")

_____/_____

6.1.37 Flush switchyard loop to waste from yard loop drain connection until effluent meets requirements.

_____/_____

6.1.38 Open valves 814 and 598.

_____/_____

6.1.39 Stop pump P4-003 and restore to "AUTO". Open valve 024.

_____/_____

6.1.40 Close the following 2 valves:

015 (Pump P4-004 Discharge) _____/_____

026 (Pump P4-005 ISO) _____/_____

6.1.41 Using pump P4-005, flush lines 510-10" and 016-6" to waste through a temporary hose attached on line 018-10" until effluent meets requirements.

_____/_____

6.1.42 Close valve 660 and 024. Open valve 026 and 500, 653.

_____/_____

6.1.43 Flush line 501-10" to waste through temporary hose on line 018-10" until effluent meets requirements.

_____/_____

6.1.44 Close valve 505 and open the following valves one at a time and flush line 617-10". (Test Manifold to waste until effluent meets requirements.)

705 _____/_____

706 _____/_____

707 _____/_____

708 _____/_____

709 _____/_____

710 _____/_____

711 _____/_____

712 _____/_____

6.1.45 Stop pump P4-005 and restore to "AUTO". Close valve 500 and open valve 505.

_____/_____

6.1.46 Place the fire protection system in the normal operating condition. Open valves 622, 634, 716, and 660.

_____/_____

6.1.47 Open valves 110 and 108. Flush line 103-2" to waste through valve 108 until effluent meets requirements. Close valves 110 and 108.

_____/_____

6.1.48 Place HS-7907B in "TEST" position. Open KV-7907 and X-652. Flush line 640-1" and line 684-1/2" to waste at the drain until effluent meets requirements. Close valve KV-7907 and X-652.

_____/_____

6.1.49 Open valve 017 and 741. Flush line 502-3" to waste through valve 741 until effluent meets requirements. Close valve 741.

_____/_____

6.1.50 Open valve 823, X-653 and KV-7990. Flush line 639-1/2" to waste at drain until effluent meets requirements. Close valve KV-7990 and X-653.

_____/_____

6.1.51 Open valve 501 and flush drain line to waste until effluent meets requirements. Close valve 501.

_____/_____

6.1.52 Close valve 017 (Sprinkler System S4-519). Attach hoses in fittings of the sprinkler valves.

_____/_____

6.1.53 Flush through valve 017 until effluent meets requirements. Close valve 017.

_____/_____

6.1.54 Restore sprinklers to original state. Open valve 017.

_____/_____

NOTE

The following steps are to be performed when electrical power is available to pumps C-2301-P4-001 and C-2301-P4-002 and storage tank T4-001 is full of water.

6.1.55 Verify the suction piping to pumps P4-001 and P4-002 has been restored

_____/_____

6.1.56 Open valve 011 and HV-7933. Close valves 008 and 658.

_____/_____

6.1.57 Disconnect valve 898 from line 058-10".

_____/_____

6.1.58 Start pumps P4-001 and P4-002.

_____/_____

6.1.59 Flush the following lines to waste until effluent meets requirements.

Line 006-12" _____/_____

Line 509-12" _____/_____

Line 637-1" _____/_____

6.1.60 Flush line 022-1"out of open spool on line 058-10" to waste until effluent requirements are met. Close valve 016.

_____/_____

6.1.61 Open valve 008 and flush line 005-1-1/2 to waste until effluent meets the requirements. Open valve 661.

_____/_____

6.1.62 Shut down pumps P4-001 and P4-002. Open valve 658.

_____/_____

6.1.63 Restore valve 898. Open valve 016.

_____/_____

6.1.64 Flush all vents, drains and test connections until effluent meets requirements.

_____/_____

6.1.65 Flush instrumentation for Section 6.1 on Attachment 10.2 to waste until effluent meets requirements.

_____/_____

SUBSECTION 6.1 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.2 FIRE HYDRANTS AT YARD LOOP - DWG. CX4DB173-2

6.2.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.2 are complete and operable.

_____/_____

6.2.2 Initial Valve Lineup for Section 6.2 on Attachment 10.1 is complete.

_____/_____

6.2.3 Temporary Modifications for Section 6.2 on Attachment 10.3 are complete.

_____/_____

6.2.4 Verify that Section 6.1 is complete.

_____/_____

6.2.5 Start pump P4-003.

_____/_____

6.2.6 Flush the following fire hydrants to waste until visually clean.

931 _____/_____

929 _____/_____

926 _____/_____

927	_____/_____
994	_____/_____
938	_____/_____
939	_____/_____
962	_____/_____
940	_____/_____
942	_____/_____
945	_____/_____
993	_____/_____
924	_____/_____
947	_____/_____
992	_____/_____
925	_____/_____
999	_____/_____
948	_____/_____
998	_____/_____
937	_____/_____
997	_____/_____
996	_____/_____
995	_____/_____
941	_____/_____
943	_____/_____
944	_____/_____
946	_____/_____

SUBSECTION 6.2 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.3 RADWASTE SOLIDIFICATION BUILDING - DWG. 1X4D174-1

6.3.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.3 are complete and operable.

_____/_____

6.3.2 Initial Valve Line up for Section 6.3 on Attachment 10.1 is complete.

_____/_____

6.3.3 Temporary Modifications for Section 6.3 on Attachment 10.3 are complete.

_____/_____

6.3.4 Verify that pump P4-003 is in service.

_____/_____

6.3.5 Flush line 678-6" through the following fire hose stations in groups of three, until effluent meets requirements.

426-2½" _____/_____

427-2½" _____/_____

428-2½" _____/_____

429-2½" _____/_____

430-2½" _____/_____

431-2½" _____/_____

432-2½" _____/_____

433-2½" _____/_____

434-2½" _____/_____

435-2½" _____/_____

447-2½" _____/_____

6.3.6 Open vent valve X-384, X-382 and X-401.
Open drain valve X-383.
Flush, then close all 4 valves.

_____/_____

6.3.7 Attach hoses to the fittings of the preaction sprinkler valves in the following rooms, and flush line 677-6" to waste until effluent requirements are met.

Room 201 _____/_____

Room 202 _____/_____

Room 203 _____/_____

Room 204 _____/_____

Room 205 _____/_____

Restore sprinklers to previous condition.

_____/_____

6.3.8 On line 442-1½", close TV-11098, and open HV-11097 and drain valve 003. Flush to waste at valve 003 until effluent meets requirements.

_____/_____

6.3.9 Close HV-11097 and 003.

_____/_____

6.3.10 On line 443-1½", close TV-11037 and open HV-11094 and drain valve 224. Flush to waste at valve 224 until effluent meets requirements.

_____/_____

6.3.11 Close HV-11094 and valve 224.

_____/_____

6.3.12 On line 444-1½", close TV-11047 and open valves HV-11095 and 223. Flush to waste at valve 223 until effluent meets requirements.

_____/_____

6.3.13 Close HV-11095 and valve 223.

_____/_____

6.3.14 Attach drain hoses to the flanged ends of lines 439-1" and 440-1", in the off-gas filter rooms.

_____/_____

6.3.15 Open valves A-2301-360 and A-2301-361 and flush to waste until effluent requirements are met. Remove hoses, restore flanges to original state and close valves A-2301-360 and A-2301-361.

_____/_____

6.3.16 Open vent valve X-386 and drain valves X-403, and X-385 and flush to waste. Close valves X-385, X-386, and X-403. Open valve 810.

_____/_____

SUBSECTION 6.3 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.4 DEMINERALIZER BUILDING - DWG. CX4DB173-2

6.4.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.4 are complete and operable.

_____/_____

6.4.2 Initial Valve Lineup for Section 6.4 on Attachment 10.1 is complete.

_____/_____

6.4.3 Temporary modifications for Section 6.4 on Attachment 10.3 are complete.

_____/_____

6.4.4 Verify that pump P4-003 is in service.

_____/_____

6.4.5 Flush line 633-6" to waste at the temporary isolation valve until effluent requirements are met.

_____/_____

SUBSECTION 6.4 COMPLETED BY:

_____/_____

6.5 RIVER INTAKE STRUCTURE-DWG. CX4DB173-2

6.5.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.5 are complete and operable.

_____/_____

6.5.2 Initial Valve Lineup for Section 6.5 on Attachment 10.1 is complete.

_____/_____

6.5.3 Temporary Modifications for Section 6.5 on Attachment 10.3 are complete.

_____/_____

6.5.4 Verify that pump P4-003 is in service.

_____/_____

6.5.5 Flush line 634-8" to waste at the temporary isolation valve until effluent requirements are met.

_____/_____

SUBSECTION 6.5 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.6 HIGH VOLTAGE SWITCHYARD VALVEHOUSE NO.1 DWG. CX4DB173-5

6.6.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.6 are complete and operable.

_____/_____

6.6.2 Initial Valve Lineup for Section 6.6 on Attachment 10.1 is complete.

_____/_____

6.6.3 Temporary Modifications for Section 6.6 on Attachment 10.3 are complete.

_____/_____

6.6.4 Verify that pump P4-003 is in service.

_____/_____

NOTE

Isolation of Unit 2 piping will be left to the discretion of the flushing engineer.

6.6.5 Remove filter internals from filter (F4-601). Open valve 751 and 750.

_____/_____

6.6.6 Flush line 690-8" through the filter and to waste until effluent requirements are met.

_____/_____

6.6.7 Flush line 691-6" to waste at the following five temporary isolation valves until effluent requirements are met:

A-2301-752 _____/_____

A-2301-753 _____/_____

A-2301-754 _____/_____

A-2301-755 _____/_____

A-2301-756 _____/_____

Close valve 750 _____/_____

Restore Valves to Original State

_____/_____

6.6.8 Open valve 750 and flush valve 757 to waste. Restore removed internals to filter (F4-601). Close valve 751 and 757.

_____/_____

SUBSECTION 6.6 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.7 HIGH VOLTAGE SWITCHYARD VALVE HOUSE NO. 2 DWG. CX4DB173-6

6.7.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6 are complete and operable.

_____/_____

6.7.2 Initial Valve Lineup for Section 6.7 on Attachment 10.1 complete.

_____/_____

6.7.3 Tempory Modifications for Section 6.7 on Attachment 10.3 are complete.

_____/_____

6.7.4 Verify that pump P4-003 is in service.

_____/_____

6.7.5 Close valve 877.

_____/_____

6.7.6 Remove filter internal from filter F4-600.

_____/_____

6.7.7 Open valves 878 and 877.

_____/_____

6.7.8 Flush line 733-10" to waste until effluent meets requirement. Close valve 878.

_____/_____

6.7.9 Flush the following valves, one at a time, through temporary isolation valves installed at valve bodies:

Valve 879 _____/_____

Valve 880 _____/_____

Valve 881 _____/_____

6.7.10 Close valve 877.

_____/_____

6.7.11 Replace filter F4-600 and open valve 877.

_____/_____

6.7.12 Close valve 878.

_____/_____

SUBSECTION 6.7 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.8 HIGH VOLTAGE SWITCHYARD VALVE HOUSE NO. 3 DWG. CX4DB173-6

6.8.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.8 are complete and operable.

_____/_____

6.8.2 Initial Valve Lineup for Section 6.8 and Attachment 10.1 is complete.

_____/_____

6.8.3 Temporary Modifications for Section 6.8 on Attachment 10.3 are complete.

_____/_____

6.8.4 Verify that pump P4-003 is in service.

_____/_____

6.8.5 Close valve 882.

_____/_____

6.8.6 Remove filter internal from filter F4-603.

_____/_____

6.8.7 Open valves 883 and 882.

_____/_____

6.8.8 Flush line 739-10 to waste until effluent meets requirements. Close valve 883.

_____/_____

6.8.9 Flush the following valves, one at a time, through temporary isolation valves installed at valve bodies:

Valve 884 _____/_____

Valve 888 _____/_____

Valve 889 _____/_____

6.8.10 Flush through the following spare valves:

Valve 885 _____/_____

Valve 886 _____/_____

Valve 887 _____/_____

close three valves _____/_____

6.8.11 Close valve 882.

_____/_____

6.8.12 Replace filter F4-603 and open valve 882.

_____/_____

6.8.13 Close valve 883.

_____/_____

SUBSECTION 6.8 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.9 HIGH VOLTAGE SWITCHYARD VALVE HOUSE NO. 4-DWG. CX4DB173-6

6.9.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.9 are complete and operable.

_____/_____

6.9.2 Initial Valve Lineup for Section 6.9 on Attachment 10.1 is complete.

6.9.3 Temporary Modifications for Section 6.9 on Attachment 10.3 are complete.

_____/_____

6.9.4 Verify that pump P4-003 is in service.

_____/_____

6.9.5 Close valve 890.

_____/_____

6.9.6 Remove filter internal from filter F4-604.

_____/_____

6.9.7 Open valves 891 and 890.

_____/_____

6.9.8 Flush line 748-10" to waste until effluent meets requirements. Close valve 891.

_____/_____

6.9.9 Flush the following valves, one at a time, through temporary isolation valves installed at valve bodies:

Valve 892 _____/_____

Valve 893 _____/_____

Valve 894 _____/_____

6.9.10 Flush through the following spare valves:

Valve 895 _____/_____

Valve 896 _____/_____

Valve 897 _____/_____

Close three valves _____/_____

6.9.11 Close valve 890.

_____/_____

6.9.12 Replace filter F4-604 and open valve 890.

_____/_____

6.9.13 Close valve 891.

_____/_____

SUBSECTION 6.9 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.10 FIRE HYDRANTS AT HIGH VOLTAGE SWITCHYARD LOOP - DWG. CX4DB173-6

6.10.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6 are complete and operable.

_____/_____

6.10.2 Initial Valve Lineup for Section 6 on Attachment 10.1 is complete.

_____/_____

6.10.3 Verify that pump P4-003 is in service.

_____/_____

6.10.4 Flush the following fire hydrants 3 at a time to waste until effluent requirements are met.

906 _____/_____

907 _____/_____

908 _____/_____

909 _____/_____

910 _____/_____

911 _____/_____

912 _____/_____

913 _____/_____

914 _____/_____

915 _____/_____

916 _____/_____

917 _____/_____

918 _____/_____

919 _____/_____

920 _____/_____

921 _____/_____

922 _____/_____

923 _____/_____

SUBSECTION 6.10 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.11 LOW VOLTAGE SWITCHYARD VALVEHOUSE-UNIT NO. 1 DWG. 1X4DB173-6

6.11.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6 are complete and operable.

_____/_____

6.11.2 Initial Valve Lineup for Section 6 on Attachment 10.1 is complete.

_____/_____

6.11.3 Temporary Modifications for Section 6 on Attachment 10.3 are complete.

_____/_____

6.11.4 Verify that pump P4-003 is in service.

_____/_____

6.11.5 Remove filter internals from filter (F4-602). Open valve 759.

_____/_____

6.11.6 Flush line 648-8 through the filter and to waste until effluent meets requirements.

_____/_____

6.11.7 Flush line 649-6 to waste at the following temporary isolation valves until effluent meets requirements. (No more than two valves simultaneously)

760 _____/_____

761 _____/_____

762 _____/_____

763 _____/_____

764 _____/_____

765 _____/_____

766 _____/_____

767 _____/_____

Close valve 758 _____/_____

Restore valves to original state

_____/_____

6.11.8 Restore removed internals to filter (F4-602). Close valve 759, and open valve 758.

_____/_____

SUBSECTION 6.11 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.12 FIRE WATER SUPPLY HEADER TO AUX. BUILDING - DWG. 1X4DB174-2 and 1X4DB174-4

6.12.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.2 are complete and operable.

_____/_____

6.12.2 Initial Valve Lineup for Section 6.12 on Attachment 10.1 is complete.

_____/_____

6.12.3 Instrumentation for Section 6.12 on Attachment 10.2 is isolated.

_____/_____

6.12.4 Temporary Modifications for Section 6.12 on Attachment 10.3 are complete.

_____/_____

6.12.5 Verify that pump P4-003 is in service.

_____/_____

6.12.6 Sample and test the supply water to Aux. Bldg. Supply meets Class D water quality.

_____/_____

6.12.7 Close the following valves.

HV-27930 (Aux. Bldg.) _____/_____

055 (Line 071-8") _____/_____

6.12.8 Flush line 556-8" to waste at valve 293 until effluent meet requirements.

_____/_____

6.12.9 Open the following vent and drain valve and flush to waste until effluent meets requirements:

X-113 _____/_____

X-357 _____/_____

Close two valves _____/_____

6.12.10 Close the following valves:

808 (Yard Loop) _____/_____

294 _____/_____

6.12.11 Open valve 055.

_____/_____

6.12.12 Flush line 071-8" to waste at valve 293 until effluent meets requirements.

_____/_____

6.12.13 Open the following vent and drain valves and flush to waste until visually clean:

X-007 _____/_____

X-073 _____/_____

X-174 _____/_____

X-173 _____/_____

X-198 _____/_____

X-318 _____/_____

X-316 _____/_____

X-202 _____/_____

close all valves. _____/_____

6.12.14 Close valve 055.

_____/_____

6.12.15 Restore valve 293.

_____/_____

6.12.16 Open the following valves:

808 _____/_____

294 _____/_____

055 _____/_____

6.12.17 Flush instrumentation for Section 6.12 on Attachment 10.2 to waste until effluent meets requirements.

_____/_____

SUBSECTION 6.12 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.13 AUXILIARY BUILDING LEVEL D - DWG. 1X4DB174-2

6.13.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.13 are complete and operable.

_____/_____

6.13.2 Initial Valve Lineup for Section 6.13 on Attachment 10.1 is complete.

_____/_____

6.13.3 Temporary Modifications for Section 6.13 on Attachment 10.3 are complete.

_____/_____

6.13.4 Verify that pump P4-003 is in service.

_____/_____

6.13.5 Open HV-27930 and flush lines 077-4" and 096-4" to waste until effluent meets requirements. Flush these fire hose stations no more than two simultaneously.

2-2301-125-2½" _____/_____

1-2301-125-2½" _____/_____

2-2301-128-2½ _____/_____

1-2301-128-2½ _____/_____

1-2301-129-2½ _____/_____

1-2301-127-2½ _____/_____

1-2301-099-2½ _____/_____

1-2301-126-2½ _____/_____

1-2301-098-2½ _____/_____

1-2301-124-2½ _____/_____

1-2301-123-2½ _____/_____

6.13.6 Attach hoses in the fittings of the preaction sprinkler valves in the following rooms and flush to waste until effluent meets requirements. Flush in one room at a time.

R-D48 _____/_____

R-D49 _____/_____

R-D101 _____/_____

R-C91 _____/_____

R-C95 _____/_____

R-C99 _____/_____

R-D75 _____/_____

R-D77 _____/_____

R-D74 _____/_____

R-D76 _____/_____

R-D78 _____/_____

R-D79 _____/_____

R-D100 _____/_____

Restore sprinklers to previous condition _____/_____

6.13.7 Open drain and vent valves X-031, X-030, X-029, X-028, X-270, X-269, X-256, X-036, X-157, X-238, X-237, X-189, and X-042. Flush to waste, then close valves.

_____/_____

SUBSECTION 6.13 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.14 AUXILIARY BUILDING LEVEL C - DWG. 1X4DB174-2

6.14.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.14 are complete and operable.

_____/_____

6.14.2 Initial Valve Lineup for Section 6.14 on Attachment 10.1 is complete.

_____/_____

6.14.3 Temporary Modifications for Section 6.14 on Attachment 10.3 are complete.

_____/_____

6.14.4 Verify that pump P4-003 is in service.

_____/_____

6.14.5 Open temporary isolation valves at A-2301-364 and A-2301-264 and flush to waste until effluent meets requirements.

Line 090-4" _____/_____

Line 082-4" _____/_____

6.14.6 Flush to waste through the following fire hose stations until effluent meets requirements. No more than two fire hose stations simultaneously.

162-2½" _____/_____

161-2½" _____/_____

158-2½" _____/_____

155-2½" _____/_____

106-2½" _____/_____

156-2½" _____/_____

157-2½" _____/_____

160-2½" _____/_____

160-2½" _____/_____

159-2½" _____/_____

142-2½" _____/_____

141-2½" _____/_____

6.14.7 Attach hoses in the fittings of the preaction sprinkler valves in the following rooms and flush to waste until effluent meets requirements. Flush in one room at a time.

R-D51 _____/_____

R-D121 _____/_____

R-D118 _____/_____

R-DC88 _____/_____

R-C119 _____/_____

R-C120 _____/_____

R-C104 _____/_____

R-B10 _____/_____

R-C113 _____/_____

R-C114 _____/_____

R-C118 _____/_____

R-C111 _____/_____

R-C115 _____/_____

Restore sprinklers to original condition _____/_____

6.14.8 Open valve in line 145-4" and the following vent and drain valves, X-241, X-016, X-016, X-116, X-118, X-015, X-143. Flush to drain, then close these valves and restore valves A-2301-264 and A-2301-364 to original condition at open position.

_____/_____

SUBSECTION 6.14 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.15 AUXILIARY BUILDING LEVEL B - DWG. 1X4DB174-2

6.15.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.15 are complete and operable.

_____/_____

6.15.2 Initial Valve Lineup for Section 6.15 on Attachment 10.1 is complete.

_____/_____

6.15.3 Temporary Modifications for Section 6.15 on Attachment 10.3 are complete.

_____/_____

6.15.4 Verify that pump P4-003 is in service.

_____/_____

6.15.5 Close valve 269. Open temporary isolation valve at A-2301-125 and flush line 081-6" until effluent meet requirements.

_____/_____

6.15.6 Open temporary isolation valve at valve A-2301-121. Flush line 089-4" to waste until effluent meets requirements.

_____/_____

6.15.7 Close temporary isolation valve at valve A-2301-121.

_____/_____

6.15.8 Remove valve bonnets from A-2301-141, -142, -143, and -144. Install adaptors in these four 1½" valves with hose or temporary lines connected to waste.

_____/_____

6.15.9 Flush the following lines to waste until effluent meets requirements:

195-1½" _____/_____

196-1½" _____/_____

197-1½" _____/_____

198-1½" _____/_____

Restore valves 141, 142, 143, and 144.

_____/_____

6.15.10 Flush to waste at the following fire hose stations until effluent meets requirements. No more than two hoses simultaneously.

192-2½" _____/_____

193-2½" _____/_____

194-2½" _____/_____

190-2½" _____/_____

187-2½ _____/_____

189-2½" _____/_____

186-2½" _____/_____

191-2½" _____/_____

188-2½" _____/_____

164-2½" _____/_____

165-2½" _____/_____

163-2½" _____/_____

6.15.11 Attach hoses in the fittings of the preaction sprinkler valves in the following rooms and flush to waste until effluent meets requirements. Flush in one room at a time.

R-B31 _____/_____

R-C100 _____/_____

R-B17 _____/_____

R-B50 _____/_____

R-B11 _____/_____

R-B12 _____/_____

R-B13 _____/_____

R-B2 _____/_____

R-B4 _____/_____

R-B7 _____/_____

R-B8 _____/_____

R-B19 _____/_____

R-B15 _____/_____

R-B23 _____/_____

R-B24 _____/_____

Restore sprinklers to previous condition _____/_____

6.15.12 Open vent and drain valves X-146, X-114, X-144, X-145, X-105, X-313, X-336, X-314, X-217, X-218, X-219, X-220. and X-221. Flush to waste and close valves.

_____/_____

SUBSECTION 6.15 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.16 AUXILARY BUILDING LEVEL A - DWG. 1X4DB174-2

6.16.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.16 are complete and operable.

_____/_____

6.16.2 Initial Valve Lineup for Section 6.16 on Attachment 10.1 is complete.

_____/_____

6.16.3 Temporary Modifications for Section 6.16 on Attachment 10.3 are complete.

_____/_____

6.16.4 Verify that pump P4-003 is in service.

_____/_____

6.16.5 Close valve 2-2301-135. Open temporary isolation valve at A-2301-124. Flush line 080-6" to waste from valve 124 until effluent meets requirements.

_____/_____

NOTE

Flush the following fire hose stations in groups of no more than three to assure maximum velocity in the main headers.

6.16.6 Flush the following lines to waste at the fire hose stations until effluent meets requirements.

209-2½" _____/_____

411-2½" _____/_____

410-2½" _____/_____

409-2½" _____/_____

408-2½" _____/_____

203-2½" _____/_____

201-2½" _____/_____

204-2½" _____/_____

180-2½" _____/_____

179-2½" _____/_____

178-2½" _____/_____

177-2½" _____/_____

199-2½" _____/_____

176-2½" _____/_____

6.17.6 Flush to waste through the following fire hose stations until effluent meets requirements. No more than two stations sirultaneously.

213-2½" _____/_____

214-2½" _____/_____

215-2½" _____/_____

216-2½" _____/_____

217-2½" _____/_____

218-2½" _____/_____

233-2½" _____/_____

6.17.7 Attach hoses in the fittings of the preaction sprinkler valves in the following rooms and flush to waste until effuent meets requirements. Flush in one room at a time.

R-110 _____/_____

R-A09 _____/_____

R-108 _____/_____

R-105 _____/_____

R-104 _____/_____

R-116 _____/_____

R-122 _____/_____

R-136 _____/_____

Restore sprinklers to original condition _____/_____

6.17.8 Open drain and vent valves X-402 and X-375 to waste until effluent meets requirements. Close two valves.

_____/_____

181-2½"	_____/_____
183-2½"	_____/_____
184-2½"	_____/_____
084-2½"	_____/_____
206-2½"	_____/_____
014-2½"	_____/_____
205-2½"	_____/_____
208-2½"	_____/_____
088-4"	_____/_____
207-2½"	_____/_____

6.16.7 Attach hoses in the fittings of the preaction sprinkler valves in the following rooms and flush to waste until effluent meets requirement. Flush in one room at a time.

R-A51	_____/_____
R-A53	_____/_____
R-B52	_____/_____
R-114	_____/_____
R-A23	_____/_____
R-A49	_____/_____
R-A03	_____/_____
R-A04	_____/_____
R-A05	_____/_____
R-A17	_____/_____
R-111	_____/_____
R-A15	_____/_____
R-A19	_____/_____
R-A50	_____/_____

R-A40A _____/_____

1T5A (Tunnel) _____/_____

1T5B (Tunnel) _____/_____

Restore sprinklers to original condition _____/_____

6.16.8 Open drain and vent valves X-305, X-107, X-307, X-304, X-090, X-302, X-303, X-020, X-358, X-035. Flush, then close these valves.

_____/_____

SUBSECTION 6.16 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.17 AUXILIARY BUILDING LEVEL 1 - DWG. 1X4DB174-2

6.17.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.17 are complete and operable.

_____/_____

6.17.2 Initial Valve Lineup for Section 6.17 on Attachment 10.1 is complete.

_____/_____

6.17.3 Temporary Modifications for Section 6.17 on Attachment 10.3 are complete.

_____/_____

6.17.4 Verify that pump P4-003 is in service.

_____/_____

6.17.5 Open valve 2-2301-135 and temporary isolation valve at A-2301-123. Flush line 079-6" to waste from valve 123 until effluent meets requirements.

_____/_____

SUBSECTION 6.17 COMPLETED BY:

_____ /
SIGNATURE DATE

6.18 AUXILIARY BUILDING LEVEL 2-DWG. 1X4DB174-2

6.18.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.18 are complete and operable.

_____ /

6.18.2 Initial Valve Lineup for Section 6.18 on Attachment 10.1 is complete.

_____ /

6.18.3 Temporary Modifications for Section 6.18 on Attachment 10.3 are complete.

_____ /

6.18.4 Verify that pump P4-003 is in service.

_____ /

6.18.5 Open temporary isolation valve at A-2301-122. Flush line 078-6" to waste from valve 122 until effluent meets requirements.

_____ /

6.18.6 Flush to waste through the following fire hose stations until effluent meets requirements. No more than two stations flushed simultaneously.

211-2½" _____ /

212-2½" _____ /

223-2½" _____ /

224-2½" _____ /

225-2½" _____ /

226-2½" _____ /

227-2½" _____ /

228-2½" _____ /

229-2½" _____/_____

230-2½" _____/_____

6.18.7 Attach hoses in the fittings of the preaction sprinkler valves in the following rooms and flush to waste until effluent meets requrements. Flush in one room at a time.

R-121 _____/_____

R-210 _____/_____

R-211 _____/_____

R-212 _____/_____

R-207 _____/_____

R-208 _____/_____

R-203 _____/_____

R-205 _____/_____

R-202 _____/_____

Restore sprinklers to original condition _____/_____

6.18.8 Open drain and vent valves X-308, X-309, X-310, X-311, X-312, X-135, X-405 X-402. Flush to waste and close these valves.

SUBSECTION 6.18 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.19 PIPING PENETRATION ROOM - DWG. 1X4BD205-1

6.19.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.19 are complete and operable.

_____/_____

6.19.2 Initial Valve Lineup for Section 6.19 on Attachment 10.1 is complete.

_____/_____

6.19.3 Verify that pump P4-003 is in service.

_____/_____

6.19.4 Close valve TV-12625. Open valves HV-12591 and drain valve A-2301-286. Flush line 097-2" to drain until effluent meets requirements.

_____/_____

6.19.5 Close valves HV-12591 and A-2301-286.

_____/_____

6.19.6 Close valve TV-12624. Open valves HV-12590 and A-2301-285. Flush line 057-2" to drain until effluent meets requirements.

_____/_____

6.19.7 Close valves HV-12590 and A-2301-285.

_____/_____

SUBSECTION 6.19 COMPLETE BY:

_____/_____
SIGNATURE DATE

6.20 AUX. BLDG. CONTINUOUS EXHAUST UNIT - DWG. 1X4DB208-1

6.20.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.20 are complete and operable.

_____/_____

6.20.2 Initial Valve Lineup for Section 6.20 on Attachment 10.1 is complete.

_____/_____

6.20.3 Verify that pump P4-003 is in service.

_____/_____

6.20.4 Close valve TV-12703. Open valves HV-12796 and drain valve A-2301-289. Flush line 400-1½" until effluent meets requirements.

_____/_____

6.20.5 Close valves HV-12796 and A-2301-289.

_____/_____

6.20.6 Close valve TV-12696. Open valves HV-12795 and A-2301-288. Flush line 399-1½" until effluent meets requirements.

_____/_____

6.20.7 Close valve HV-12795 and A-2301-288.

_____/_____

6.20.8 Close valve TV-12689. Open valves HV-12794 and A-2301-287. Flush line 401-1½" to drain until effluent meets requirements.

_____/_____

6.20.9 Close valve HV-12794 and A-2301-287.

_____/_____

SUBSECTION 6.20 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.21 CONTAINMENT BUILDING-DWG. 1X4DB174-4

6.21.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.21 are complete and operable.

_____/_____

6.21.2 Initial Valve Lineup for Section 6.21 on Attachment 10.1 is complete.

_____/_____

6.21.3 Instrumentation for Section 6.21 on Attachment 10.2 is isolated.

_____/_____

6.21.4 Temporary Modifications for Section 6.21 on Attachment 10.3 are complete.

_____/_____

6.21.5 Verify that pump P4-003 is in service.

_____/_____

6.21.6 Open HV-27901 and flush through the following fire hose stations until effluent requirements are met. No more than two stations simultaneously.

382-2½" _____/_____

383-2½" _____/_____

384-2½" _____/_____

385-2½" _____/_____

396-2½" _____/_____

386-2½" _____/_____

387-2½" _____/_____

392-2½" _____/_____

393-2½" _____/_____

394-2½" _____/_____

395-2½" _____/_____

238-2½" _____/_____

237-2½" _____/_____

240-2½" _____/_____

239-2½" _____/_____

241-2½" _____/_____

388-2½" _____/_____

6.21.7 Open the temporary isolation valves installed on the following removed PSV's and flush associated lines to waste until effluent meets requirements. Then close temporary isolation valves.

PSV-27926 _____/_____

PSV-28002 _____/_____

PSV-28003 _____/_____

PSV-27931 _____/_____

6.21.8 Open valves 132, 018, 058, X-150, X-151, X-377, X-381, X-489, X-365, X-376. Flush to waste, then close these valves.

_____/_____

6.21.9 Attach hoses in fittings of the preaction sprinkler valves in the following rooms, and flush to waste until effluent meets requirements. Flush in one room at a time.

R.C. Pump No. 4 _____/_____

R.C. Pump No. 1 _____/_____

Lower A Trays _____/_____

Lower B Trays _____/_____

R.C. Pump No. 3 _____/_____

Middle A Trays _____/_____

Middle B Trays _____/_____

Upper A Trays _____/_____

Upper B Trays _____/_____

R.C. Pump No. 2 _____/_____

Restore sprinkler to original condition _____/_____

SUBSECTION 6.21 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.22 CTB PREACCESS FILTER UNIT - DWG. 1X4DB213-2

6.22.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.22 are complete and operable.

_____/_____

6.22.2 Initial Valve Lineup for Section 6.22 on Attachment 10.1 is complete.

_____/_____

6.22.3 Verify that pump P4-003 is in service.

_____/_____

6.22.4 Close Valve TV-12654. Open HV-12958 and the drain valve A-2301-319. Flush line 235-1½" to waste until effluent meets requirements.

_____/_____

6.22.5 Close valves HV-12958 and A-2301-319.

_____/_____

6.22.6 Close valve TV-12655. Open HV-12987 and the drain valve A-2301-320. Flush line 236-1½" to waste until effluent meets requirements.

_____/_____

6.22.7 Close valve HV-12987 and A-2301-320.

_____/_____

6.22.8 Close valves 150 and 029. Restore PSV's 27931, 28277, 28002 and 28003 to original condition. Open valves 150 and 029.

_____/_____

6.22.9 Close valve HV-27901.

_____/_____

SUBSECTION 6.22 COMPLETED BY:

_____ /
SIGNATURE DATE

6.23 CONTROL BUILDING LEVEL B - DWG. 1X4DB174-3

6.23.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6. are complete and operable.

_____ /

6.23.2 Initial Valve Lineup for Section 6.23 on Attachment 10.1 is complete.

_____ /

6.23.3 Temporary Modifications for Section 6.23 on Attachment 10.3 are complete.

_____ /

6.23.4 Verify that pump P4-063 is in service.

_____ /

6.23.5 Close isolation valve 2-2301-050. Open 1-2301-050. Open temporary isolation valve at valve 101. Flush line 048-4" to waste through valve 101 until effluent meets requirements.

_____ /

6.23.6 Close the following valves:

279 _____ /

278 _____ /

277 _____ /

6.23.7 Flush the following lines to waste at the fire hose stations until effluent meets requirements. No more than 2 stations simultaneously.

281-2½" _____ /

249-2½" _____ /

407-2½" _____ /

251-2½" _____/_____

248-2½" _____/_____

284-2½" _____/_____

287-2½" _____/_____

288-2½" _____/_____

289-2½" _____/_____

283-2½" _____/_____

371-2½" _____/_____

285-2½" _____/_____

286-2½" _____/_____

6.23.8 Open the following drain and vent isolation valves and flush the associated drain lines to waste. Close isolation valves.

X-053 _____/_____

X-017 _____/_____

X-063 _____/_____

X-097 _____/_____

X-101 _____/_____

X-102 _____/_____

X-096 _____/_____

X-099 _____/_____

X-103 _____/_____

X-087 _____/_____

X-142 _____/_____

X-098 _____/_____

X-123 _____/_____

X-057 _____/_____

X-018 _____/_____

X-064 _____/_____

X-100 _____/_____

X-124 _____/_____

X-019 _____/_____

X-136 _____/_____

X-140 _____/_____

X-400 _____/_____

6.23.9 Flush Line 054-2½" to waste at temporary isolation valve A-2301-385 until effluent meets requirements.

_____/_____

6.23.10 Attach hoses in fittings of the preaction sprinkler valves in the following rooms and flush to waste until effluent meets requirements. Flush in one room as a time.

R-B50 _____/_____

R-B60 _____/_____

R-B70 _____/_____

R-B81 _____/_____

R-B78 _____/_____

R-B63 _____/_____

R-B64 _____/_____

R-B65 _____/_____

R-B73 _____/_____

R-B77 _____/_____

R-B65 _____/_____

R-C01 _____/_____

R-C02 _____/_____

R-C03 _____/_____

R-C06 _____/_____

R-C09 _____/_____

Restore sprinklers to original condition. _____/_____

6.23.11 Remove valve bonnets in valves 057, 172, 175 and 176. Install adaptors in the four valve bodies with hoses leading to drains.

_____/_____

6.23.12 Flush the following lines to waste until effluent meets requirements.

413-2" _____/_____

338-2" _____/_____

342-2" _____/_____

343-2" _____/_____

6.23 13 Restore valves 057, 172, 175, and 176 to original state.

_____/_____

6.23.14 Open valve 279 and temporary isolation valve at A-2301-121. Close valve 094 (Level B Aux. Bldg.)

_____/_____

6.23.15 Flush line 043-4" to waste at valve A-2301-121 until effluent meets requirements. Close temporary isolation valve 121.

_____/_____

6.23.16 Flush the following lines to waste from the fire hose stations until effluent meets requirements flush no more than two hose stations simultaneously.

041-2½" _____/_____

256-2½" _____/_____

259-2½" _____/_____

258-2½" _____/_____

260-2½" _____/_____

257-2½" _____/_____

278-2½" _____/_____

261-2½" _____/_____

SUBSECTION 6.23 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.24 ELECTRIC TUNNELS - DWG. 1X4DB174-4

6.24.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.24 are complete and operable.

_____/_____

6.24.2 Initial Valve Lineup for Section 6 24 on Attachment 10.1 is complete.

_____/_____

6.24.3 Temporary Modifications for Section 6.24 on Attachment 10.3 are complete.

_____/_____

6.24.4 Verify that pump P4-003 is in service.

_____/_____

6.24.5 Open valve 094 and 277. Close valve 114. Flush line 268-4" through the following fire hose stations until effluent meets requirements. No more than two stations simultaneously.

374-2½"	_____/_____
280-2½"	_____/_____
279-2½"	_____/_____
275-2½"	_____/_____
271-2½	_____/_____
273-2½"	_____/_____
269-2½"(Diesel Gen. Bldg.)	_____/_____

6.24.6 Attach hoses in fittings of the preaction sprinkler valves downstream of valve 029, and flush remainder of line 268-4" to waste until effluent meets requirements. Restore sprinklers to original condition.

_____/_____

6.24.7 Close valve 096. Open valve 278. Flush line 277-4" to waste through the following fire hose stations until effluent meets requirement. No more than two fire hoses simultaneously.

210-2½"	_____/_____
154-2½"	_____/_____
153-2½"	_____/_____
152-2½"	_____/_____
150-2½"	_____/_____
151-2½"	_____/_____
276-2½"	_____/_____

6.24.8 Attach hoses in fittings of the preaction sprinkler valves downstream of valve 030, and flush remainder of line 277-4" to waste until effluent meets requirements. Restore sprinklers to original condition.

_____/_____

6.24.9 Open valves 114 and 096.

_____/_____

6.24.10 Open vent valves X-126 and X-127 and flush to waste until visually clean. Close two valves.

_____/_____

SUBSECTION 6.24 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.25 CONTROL BUILDING LEVEL A-DWG. 1X4DB174-3

6.25.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.25 are complete and operable.

_____/_____

6.25.2 Initial Valve Lineup for Section 6.25 on Attachment 10.1 is complete.

_____/_____

6.25.3 Temporary Modifications for Section 6.25 on Attachment 10.3 are complete.

_____/_____

6.25.4 Verify that pump P4-003 is in service.

_____/_____

6.25.5 Close the following valves:

102 _____/_____

351 _____/_____

049 _____/_____

6.25.6 Open Temporary Isolation Valve at valve 274. Flush line 047-6" to waste from valve 274 until effluent meets requirements.

_____/_____

6.25.7 Close valves 186 and 274.

_____/_____

6.25.8 Open valve 049. Flush line 300-4" to waste from the Temporary Isolation Valve at valve 185 until visually clean.

_____/_____

6.25.9 Open valve 186. Close valves 077 and 187.

_____/_____

6.25.10 Flush line 311-4" to waste from valve 185 until effluent meets requirements.

_____/_____

6.25.11 Open valve 187. Close valve 170 and flush line 300-6" through valve 185.

_____/_____

6.25.12 Flush the following lines to waste at the fire hose stations until effluent meets requirements. Not more than two hoses simultaneously.

291-2½" _____/_____

292-2½" _____/_____

296-2½" _____/_____

297-2½" _____/_____

298-2½" _____/_____

301-2½" _____/_____

302-2½" _____/_____

304-2½" _____/_____

306-2½" _____/_____

307-2½" _____/_____

308-2½" _____/_____

316-2½" _____/_____

315-2½" _____/_____

149-2½" _____/_____

139-2½" _____/_____

138-2½" _____/_____

312-2½" _____/_____

313-2½" _____/_____

314-2½" _____/_____

6.25.13 Open valve 351 and temporary isolation valve at valve A-363. Flush to waste until effluent meets requirements through temporary isolation valve A-363 and fire hose station on line 310-2½".

_____/_____

6.25.14 Attach hoses in fittings of the preaction sprinkler valves in the following rooms and flush to waste until effluent meets requirements. Flush in one room at a time.

R-A39 _____/_____

R-B45 _____/_____

R-A40 _____/_____

R-B46 _____/_____

R-A44 _____/_____

R-A51 _____/_____

R-A52 _____/_____

R-A53 _____/_____

R-A55 _____/_____

R-A59 _____/_____

R-A62 _____/_____

R-A65 _____/_____

R-A47 _____/_____

R-B59 _____/_____

R-A46 _____/_____

R-B58 _____/_____

R-A70 _____/_____

R-A58 _____/_____

R-A44 _____/_____

Restore sprinklers to original condition. _____/_____

6.25.15 Open the following vent and drain valves and flush to waste until visually clean:

X-403 _____/_____

X-402 _____/_____

X-162 _____/_____

X-262 _____/_____

X-350 _____/_____

X-153 _____/_____

X-161 _____/_____

X-317 _____/_____

X-175 _____/_____

X-154 _____/_____

X-152	_____/_____
X-155	_____/_____
X-160	_____/_____
X-158	_____/_____
X-159	_____/_____
X-182	_____/_____
X-181	_____/_____
X-180	_____/_____
X-179	_____/_____
X-178	_____/_____
X-156	_____/_____
X-184	_____/_____
X-291	_____/_____
X-183	_____/_____
X-320	_____/_____
Close all valves	_____/_____

SUBSECTION 6.25 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.26 CONTROL BLDG. ELECTRICAL PENETRATION FILTER UNIT - DWG. 1X4DB209

6.26.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.26 are complete and operable.

_____/_____

6.26.2 Initial Valve Lineup for Section 6.26 on Attachment 10.1 is complete.

_____/_____

6.26.3 Verify that pump P4-003 is in service.

_____/_____

6.26.4 Close valve TV-12559 and open HV-12569 and drain valve A-2301-300. Flush line 405-2" to drain until effluent meets requirements.

_____/_____

6.26.5 Close valves A-2301-300 and HV-12569.

_____/_____

6.26.6 Close valve TV-12558 and open HV-12570 and drain valve A-2301-301. Flush line 404-2" to drain until effluent meets requirements.

_____/_____

6.26.7 Close valves HV-12570 and A-2301-301.

_____/_____

6.26.8 Flush line 311-4" to waste from the temporary isolation valve installed at valve 102.

_____/_____

SUBSECTION 6.26 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.27 CONTROL BUILDING LEVEL 1 - DWG. 1X4DB174-3

6.27.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.27 are complete and operable.

_____/_____

6.27.2 Initial Valve Lineup for Section 6.27 on Attachment 10.1 is complete.

_____/_____

6.27.3 Temporary Modifications for Section 6.27 on Attachment 10.3 are complete.

_____/_____

6.27.4 Verify that pump P4-003 is in service.

_____/_____

6.27.5 Close valves 040 and 2-2301-048.

_____/_____

6.27.6 Open Temporary Isolation Valve at valve A-2301-271. Flush line 046-6" to waste from valve 271 until effluent meets criteria.

_____/_____

6.27.7 Open valves 040 and the Temporary Isolation Valve at valve 1-2301-060. Close valve 167 and flush line 335-4 to waste from valve 060 until effluent meets requirements.

_____/_____

6.27.8 Flush the following lines to waste at the fire hose stations until effluent meets requirements. No more than 2 stations simultaneously.

321-2½" _____/_____

322-2½" _____/_____

317-2½" _____/_____

318-2½" _____/_____

420-2½" _____/_____

418-2½" _____/_____

263-2½" _____/_____

319-2½" _____/_____

6.27.9 Attach hoses in fittings of the preaction sprinkler valves in the following rooms and flush to waste until effluent meets requirements. Flush in one room at a time.

Room R-120 _____/_____

R-128 _____/_____

R-138 _____/_____

R-141 _____/_____

R-145 _____/_____

R-147 _____/_____

R-149 _____/_____

R-154 _____/_____

Restore sprinklers to original condition. _____/_____

6.27.10 Remove valve bonnets on valves 030 and 031. Install adapters on the two valve bodies with hoses leading to drains.

_____/_____

6.27.11 Flush the following lines to waste until effluent meets requirements.

421-2" _____/_____

419-4" _____/_____

6.27.12 Restore valves 030 and 031 to original state.

_____/_____

6.27.13 Close valve TV-21012. Open valves HV-21013 and drain valve A-2301-309. Flush Line 422-2" until effluent meets requirements.

_____/_____

6.27.14 Close valves HV-21013 and A-2301-309.

_____/_____

6.27.15 Open the following vent and drain valves and flush to waste until visually clean:

X-214 _____/_____

X-215 _____/_____

X-324 _____/_____

X-348 _____/_____

X-349 _____/_____

X-346 _____/_____

X-345 _____/_____

X-344 _____/_____

X-343 _____/_____

X-342 _____/_____

X-228 _____/_____

X-328 _____/_____

X-210 _____/_____

X-209 _____/_____

X-329 _____/_____

X-331 _____/_____

X-330 _____/_____

X-325 _____/_____

X-208 _____/_____

X-326 _____/_____

X-325 _____/_____

Close all valves. _____/_____

SUBSECTION 6.27 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.28 CONTROL BUILDING LEVEL 2 - DWG. 1X4DB174-3

6.28.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.28 are complete and operable.

_____/_____

6.28.2 Initial Valve Lineup for Section 6.28 on Attachment 10.1 is complete.

_____/_____

6.29.3 Temporary Modifications for Section 6.28 on Attachment 10.3 are complete.

_____/_____

6.28.4 Verify that pump P4-003 is in service.

_____/_____

6.28.5 Open valve 167 and temporary isolation valve at A-2301-207. Close valve 206 and flush line 320-4" to waste through valve 207 until effluent meets requirements. Close valve 167.

_____/_____

6.28.6 Open valve 206. Flush line 330-6" to waste at A-2301-207 until effluent requirements are met. Open valve 167.

_____/_____

6.28.7 Attach hoses in the fittings of preaction sprinkler valves in the following rooms, and flush to waste until effluent meets requirements. Flush in one room at a time.

Room R-227 _____/_____

R-228 _____/_____

R-239 _____/_____

R-245 _____/_____

R-251 _____/_____

R-225 _____/_____

R-230 _____/_____

R-231 _____/_____

R-232 _____/_____

R-233 _____/_____

R-237 _____/_____

R-241 _____/_____

R-247 _____/_____

R-242 _____/_____

Restore the sprinklers to their previous state.

_____/_____

6.28.8 Close valve TV-12779. Open valve HV-12798 and drain valve A-2301-323. Flush line 406-2" to drain until effluent meets requirements.

_____/_____

6.28.9 Close valves HV-12798 and A-2301-323.

_____/_____

6.28.10 Flush to waste through the following fire hose stations until effluent meets requirements. Flush all four simultaneously.

323-2½" _____/_____

325-2½" _____/_____

328-2½" _____/_____

327-2½" _____/_____

6.28.11 Flush line 045-6" to waste through the temporary isolation valve installed at the Unit 2 interface.

_____/_____

6.28.12 Open the following vent and drain valves and flush to waste until visually clean:

X-230 _____/_____

X-232 _____/_____

X-231 _____/_____

X-227 _____/_____

X-226 _____/_____

X-225 _____/_____

Close all valves. _____/_____

SUBSECTION 6.28 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.29 CONTROL BUILDING LEVEL 3 - DWG. 1X4DB174-3

6.29.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.29 are complete and operable.

_____/_____

6.29.2 Initial Valve Lineup for Section 6.29 on Attachment 10.1 is complete.

_____/_____

6.29.3 Temporary Modifications for Section 6.29 on Attachment 10.3 are complete.

_____/_____

6.29.4 Verify that pump P4-003 is in service.

_____/_____

6.29.5 Close valve 213. Open temporary isolation valve at valve 273 and flush line 072-6" to waste until effluent meets requirements.

_____/_____

6.29.6 Open valve 213. Flush line 340-6" to waste at Unit 2 isolation valve 2-2301-210 until effluent meets requirements.

_____/_____

6.29.7 Flush to waste through the following fire hose stations until effluent meets requirements. No more than four simultaneously.

049-2½" _____/_____

056-2½" _____/_____

352-2½" _____/_____

348-2½" _____/_____

345-2½" _____/_____

349-2½" _____/_____

336-2½" _____/_____

6.29.8 Attach hoses in place of the preaction sprinkler valves in the following rooms and flush to waste until effluent meets requirements. Flush in one room at a time.

R-324 _____/_____

R-320 _____/_____

R-321 _____/_____

R-323 _____/_____

R-325 _____/_____

R-317 _____/_____

R-312 _____/_____

R-313 _____/_____

R-314 _____/_____

R-316 _____/_____

R-319 _____/_____

R-322 _____/_____

Restore the sprinklers to the previous state.

_____/_____

6.29.9 Close valve TV-12543. Open valve HV-12486 and drain valve A-2301-284. Flush line 339-2" to waste until effluent meets requirements.

_____/_____

6.29.10 Close valves HV-12486 and A-2301-284.

_____/_____

6.29.11 Close valve TV-12544. Open HV-12487 and drain valve A-2301-283. Flush line 341-2" to waste until effluent meets requirements.

_____/_____

6.29.12 Close valves HV-12487 and A-2301-283.

_____/_____

6.29.13 Open the following vent and drain valves and flush to waste until visually clean:

A-2301-X-002 _____/_____

X-262 _____/_____

X-384 _____/_____

X-253 _____/_____

X-252 _____/_____

X-251 _____/_____

X-250 _____/_____

X-248 _____/_____

X-286 _____/_____

Close all valves. _____/_____

SUBSECTION 6.29 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.30 CONTROL BUILDING CONTROL ROOM HVAC DWG. AX4DB206-3

6.30.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.30 are complete and operable.

_____/_____

6.30.2 Initial Valve Lineup for Section 6.30 on Attachment 10.1 is complete.

_____/_____

6.30.3 Verify that pump P4-003 is in service.

_____/_____

6.30.4 Close valve 1TV-12134. Open 1HV-12193 and drain valve A-2301-305. Flush line 347-2" to waste until effluent meets requirements.

_____/_____

6.30.5 Close valves 1HV-12193 and A-2301-305.

_____/_____

6.30.6 Close valve 1TV-12135. Open 1HV-12194 and drain valve A-2301-304. Flush line 337-2" to waste until effluent meets requirements.

_____/_____

6.30.7 Close valves 1HV-12194 and A-2301-304.

_____/_____

SUBSECTION 6.30 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.31 DIESEL GENERATOR BUILDING - DWG. 1X4DB174-4

6.31.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.31 are complete and operable.

_____/_____

6.31.2 Initial Valve Lineup for Section 6.31 on Attachment 10.1 is complete.

_____/_____

6.31.3 Temporary Modifications for Section 6.31 on Attachment 10.3 are complete.

_____/_____

6.31.4 Verify that pump P4-003 is in service.

_____/_____

6.31.5 Close valve 115 and 072. Flush line 272-6" out of FHS on line 276-2½" until effluent meets requirements.

_____/_____

6.31.6 Attach hoses in fittings of the preaction sprinkler valves at the end of line 272-6" and flush to waste until effluent meets requirements. Restore sprinkler to previous condition.

_____/_____

6.31.7 Open valve 115 and close valve 096. Flush line 268-4" to waste at fire hose station until effluent meets requirements.

_____/_____

6.31.8 Attach hoses in fittings of the preaction sprinkler valves at the end of line 122-6" and flush to waste until effluent meets requirements. Restore sprinklers to previous condition. Open valves 096 and 072.

_____/_____

SUBSECTION 6.31 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.32 FUEL HANDLING BUILDING - DWG. 1X4DB174-4

6.32.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.32 are complete and operable.

_____/_____

6.32.2 Initial Valve Lineup for Section 6.32 on Attachment 10.1 is complete.

_____/_____

6.32.3 Instrumentation for Section 6.32 on Attachment 10.2 is isolated.

_____/_____

6.32.4 Temporary Modifications for Section 6.32 on Attachment 10.3 are complete.

_____/_____

6.32.5 Close the temporary isolation valves installed at the following valves:

A-2301-103 _____/_____

A-2301-292 _____/_____

A-2301-298 _____/_____

2-2301-074 _____/_____

6.32.6 Flush line 059-6" through HV-27903 to waste through temporary isolation valve at A-2301-103 until effluent meets requirements.

_____/_____

6.32.7 Flush line 221-4" to waste at temporary isolation valve at A-2301-298 until effluent meets requirements.

_____/_____

6.32.8 Flush to waste at the following fire hose stations. No more than two stations simultaneously.

062-2½" _____/_____

360-2½" _____/_____

354-2½" _____/_____

361-2½" _____/_____

061-2½" _____/_____

6.32.9 Attach hoses in fittings of preaction sprinkler valves in the following rooms, and flush to waste until effluent meets requirements. Flush in one room at a time.

R-C07 _____/_____

R-C08 _____/_____

R-C09 _____/_____

R-B11 _____/_____

Restore the sprinkler to previous state

_____/_____

6.32.10 Flush line 060-4" through temporary isolation valve at A-2301-292 until effluent meets requirements.

_____/_____

6.32.11 Flush line 075-2½" through temporary isolation valve at 2-2301-74 until effluent meets requirements.

_____/_____

6.32.12 Flush the following lines to waste simultaneously from the following fire hose station until requirements are met.

357-2½" _____/_____

121-2½" _____/_____

6.32.13 Attach hoses in fittings of preaction sprinkler valves in the following rooms, and flush to waste until effluent meets requirements. Flush in one room at a time.

R-A07 _____/_____

R-A08 _____/_____

R-409 _____/_____

R-A10 _____/_____

R-104 _____/_____

R-B12 _____/_____

Restore the sprinklers to previous condition

_____/_____

6.32.14 Flush the following lines to waste simultaneously from the following fire hose stations.

355-2½" _____/_____

359-2½" _____/_____

074-2½" _____/_____

6.32.15 Open the following vent and drain valves and flush to waste until visually clean:

X-071 _____/_____

X-070 _____/_____

X-267 _____/_____

X-068 _____/_____

X-069 _____/_____

X-372 _____/_____

Close all valves. _____/_____

SUBSECTION 6.32 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.33 EQUIPMENT BULIDING -DWG. 14DB174-4

6.33.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.33 are complete and operable.

_____/_____

6.33.2 Initial Valve Lineup for Section 6.33 on Attachment 10.1 is complete.

_____/_____

6.33.3 Temporary Modifications for Section 6.33 on Attachment 10.3 are complete.

_____/_____

6.33.4 Verify that pump P4-003 is in service.

_____/_____

6.33.5 Flush line 220-4" to waste until effluent meets requirements, from the following fire hose stations.

265-2½" _____/_____

264-2½" _____/_____

6.33.6 Attach hoses in fittings of preaction sprinkler valves in the equipment building exit corridor, and flush to waste through remainder of line 220-4" until effluent meets requirements.

_____/_____

6.33.7 Close valve 256, open valve 270, and flush line 220-6" to waste through the same hoses. Restore the sprinklers to previous condition and open valve 256.

_____/_____

6.33.8 Open the following vent and drain valves and flush to waste until visually clean:

X-360 _____/_____

X-361 _____/_____

X-363 _____/_____

X-207 _____/_____

X-362 _____/_____

X-288 _____/_____

X-364 _____/_____

Close all valves. _____/_____

SUBSECTION 6.33 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.34 CTB PURGE FILTER EXHAUST UNIT - DWG. 1X4DB174-4 AND 1X4DB213-1

6.34.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.34 are complete and operable.

_____/_____

6.34.2 Initial Valve Lineup for Section 6.34 on Attachment 10.1 is complete.

_____/_____

6.34.3 Temporary Modifications for Section 6.34 on Attachment 10.3 are complete.

_____/_____

6.34.4 Verify that pump P4-003 is in service.

_____/_____

6.34.5 Close valve TV-12653. Open valve HV-12986 and drain valve A-2301-321. Flush line 220-1½" to waste until effluent meets requirements.

_____/_____

6.34.6 Close valves HV-12986 and A-2301-321.

_____/_____

6.34.7 Close valve TV-12651. Open valve HV-12658 and drain valve A-2301-322. Flush lines 014-2" and 222-2" to waste until effluent meets requirements.

_____/_____

6.34.8 Close valves HV-12658 and A-2301-322.

_____/_____

6.34.9 Close HV-27961. Open temporary isolation valve at valve 060 and flush line 335-4" until effluent meets requirements. Open HV-27961.

_____/_____

6.34.10 Restore valve 060 in open position.

_____/_____

SUBSECTION 6.34 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.35 AUXILIARY FEEDWATER PUMPHOUSE - DWG. 1X4DB174-4

6.35.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.35 are complete and operable.

_____/_____

6.35.2 Initial Valve Lineup for Section 6.35 on Attachment 10.1 is complete.

_____/_____

6.35.3 Temporary Modifications for Section 6.35 on Attachment 10.3 are complete.

_____/_____

6.35.4 Verify that pump P4-003 is in service.

_____/_____

6.35.5 Flush simultaneously through the following fire hose stations until effluent meets requirements.

115-2½" _____/_____

116-2½" _____/_____

119-2½" _____/_____

6.35.6 Attach hoses in fittings of the preaction sprinkler valves at the end of the following lines and flush to waste until effluent meets requirements.

113-6" _____/_____

117-6" _____/_____

120-6" _____/_____

Restore sprinklers to previous state _____/_____

6.35.7 Open the following vent and drain valves briefly, flush to waste, then close valves.

X-373 _____/_____

X-321 _____/_____

X-323 _____/_____

SUBSECTION 6.35 COMPLETED BY:

_____/_____
SIGNATURE DATE

6.36 TURBINE BUILDING - DWG. 1X4DB173

6.36.1 Verify that Startup System KC, Fire Protection Water System piping and equipment required for Section 6.36 are complete and operable.

_____/_____

6.36.2 Initial Valve Lineup for Section 6.36 on Attachment 10.1 is complete.

_____/_____

6.36.3 Instrumentation for Section 6.36 on Attachment 10.2 is isolated.

_____/_____

6.36.4 Temporary Modifications for Section 6.36 on Attachment 10.3 are complete.

_____/_____

6.36.5 Verify that pump P4-003 is in service.

_____/_____

6.36.6 Flush lines 536-12" and 536-10" to waste from temporary isolation valve at A-2301-686 until effluent meets requirements.

_____/_____

6.36.7 Flush line 537-10" to waste from temporary isolation valve at A-2301-687 until effluent meets requirements.

_____/_____

6.36.8 Flush the following fire hose stations to waste until effluent meets requirements. Flush no more than two simultaneously.

526 _____/_____

527 _____/_____

528 _____/_____

537 _____/_____

529 _____/_____

530	/
531	/
532	/
533	/
534	/
535	/
536	/
538	/
539	/
540	/
541	/
542	/
543	/
544	/
545	/
546	/
547	/
548	/
549	/
550	/
551	/
552	/
553	/
554	/

6.36.9 Flush line 538-8" to waste at temporary isolation valve installed at removed strainer 1-2301-F4-500, flush until effluent meets requirements.

_____/_____

6.36.10 Restore line 538-8" and attach hoses in the fittings of the wet sprinkler valves in the lube oil spill area (Level 1, Fl. El. 220'). Flush to waste until effluent meets requirements.

_____/_____

6.36.11 Flush drain valve 832 and reinstall strainer 1-2301-F4-500.

_____/_____

6.36.12 Flush line 758-8" to waste at temporary isolation valve installed at removed strainer 1-2301-F4-505. Flush until effluent meets requirements.

_____/_____

6.36.13 Restore line 758-8" and attach hoses in the fittings of the wet sprinkler valves in the lube oil spill area (Level A, Fl. El. 195'). Flush to waste until effluent meets requirements.

_____/_____

6.36.14 Flush drain valve 904 to waste and reinstall strainer 1-2301-F4-505.

_____/_____

6.36.15 Flush line 759-8" to waste at temporary isolation valve installed at removed strainer 1-2301-F4-504. Flush until effluent meets requirements.

_____/_____

6.36.16 Restore line 759-8" and attach hoses in the fittings of the wet sprinkler valves in the lube oil spill area (Level 1, EL. 220). Flush to waste until effluent meets requirements.

_____/_____

6.36.17 Flush drain valve 550 to waste and reinstall strainer 1-2301-F4-504.

_____/_____

6.36.18 Flush line 539-6" to waste at temporary isolation valve installed at removed strainer 1-2301-F4-501. Flush until effluent meets requirements.

_____/_____

6.36.19 Restore line 539-6". Attach hoses in place of the wet pipe sprinkler valves in the battery room (Level 1, El.220'). Flush to waste until effluent meets requirements.

_____/_____

6.36.20 Flush the remainder of line 539-6" from the four hoses attached to valves 685, 516, 524, and 523. Flush to waste until effluent meets requirements.

_____/_____

6.36.21 Restore valves 685, 516, 523, and 524.

_____/_____

6.36.22 Flush drain valve 831 and reinstall strainer 1-2301-F4-501.

_____/_____

6.36.23 Flush line 550-6" to waste at temporary isolation valve installed at removed strainer 1-2301-F4-502. Flush until effluent requirements are met.

_____/_____

6.36.24 Restore line 550-6" and flush to waste at the hoses attached to valves 533, 534, 535 and 548, until effluent meets requirements.

_____/_____

6.36.25 Restore valves 533, 534, 535, and 548.

_____/_____

6.36.26 Flush drain valve 830 to waste and restore strainer 1-2301-F4-502.

_____/_____

6.36.27 Flush line A-2301-703-6" to waste through valve A-2301-827 until effluent meets requirements. Then close valve 827.

_____/_____

6.36.28 Flush line 547-6" to waste at temporary isolation valve installed at removed strainer 1-2301-F4-503. Flush until effluent meets requirements.

_____/_____

6.36.29 Restore line 547-6" and attach hoses to the fittings of the preaction sprinkler valves (Level 3, Fl. El. 270'). Flush until effluent meets requirements.

_____/_____

6.36.30 Flush drain valve 829 to waste and reinstall strainer 1-2301-F4-503.

_____/_____

6.36.31 Flush line 761-8" to waste at temporary isolation valve installed at removed strainer 1-2301-F4-506. Flush until effluent meets requirements.

_____/_____

6.36.32 Restore line 761-8" and attach hoses to the fittings of the wet sprinkler valves in the lube oil spill area (Level 2, Fl. El. 245'). Flush to waste until effluent meets requirements.

_____/_____

6.36.33 Flush drain valve 555 to waste and reinstall strainer 1-2301-F4-506.

_____/_____

6.36.34 Flush all vents and drains and test connections associated with Section 6.36 to waste until visually clean.

_____/_____

6.36.35 Flush instrumentation for Section 6.36 on Attachment 10.2 to waste until effluent is visually clean.

_____/_____

SUBSECTION 6.36 COMPLETED BY:

_____ / _____
SIGNATURE DATE

SECTION 6.0 COMPLETED BY:

_____ / _____
SIGNATURE DATE

7.0 DATA SHEETS

7.1 FLUSH WATER CHEMISTRY DATA SHEETS (NONE)

7.2 CLEANNESS VERIFICATION OF HAND CLEANING

DATA SHEET 7.2

CLEANNESS VERIFICATION OF HAND CLEANING

PROCEDURE NAME Fire Protection Water Flush

CLEANNESS CLASS D DATE _____

P & ID/DRAWINGS/REV. NO. CX4DB173-1

STEP NO. 6.1.6

COMPONENT/BOUNDARIES Storage Tank C-2301-T4-001

CLEANING METHOD Hand or Fill/Drain

INSPECTION METHOD _____

The above described component/piping has been cleaned and inspected
and meets the acceptance criteria of the assigned cleanness class.

_____ _____
FLUSHING ENGINEER

_____ _____
FLUSHING COORDINATOR

8.0 SYSTEM RESTORATION AND LAYUP

8.1 Verify that all modifications on Attachment 10.3 are in the After Flushing Status.

_____/_____

8.2 Verify that all instruments on Attachment 10.2 are placed in service.

_____/_____

8.3 Notify Operations, Control Room and Startup Scheduling that the flush of the system KC, Fire Protection, is complete, layup is not required and the system is ready for further testing or operation.

_____/_____

8.4 No welded restoration is required.

_____/_____

SECTION 8.0 COMPLETED BY:

_____/_____
SIGNATURE DATE

9.0 ACCEPTANCE CRITERIA

9.1 The Fire Protection Water System is Cleanness Class D Acceptance Criteria shall be designated in SUM-16, Cleanness Verification Guidelines.

9.2 The Startup System KC, Fire Protection System Cleanness is satisfactory.

_____
FLUSHING COORDINATOR

_____/_____
TIME DATE

10.0 ATTACHMENTS

10.1 INITIAL VALVE LINEUP

10.2 INSTRUMENT LINE FLUSH STATUS

10.3 TEMPORARY MODIFICATION STATUS

ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
CX4DB173-1	Sections 6.1 Fire Water Storage Tank, Pump House and Yard Loop.		
HV-7933	South Storage Tank Iso.	CL	/
512	South Storage Tank Drain Iso.	CL	/
HV-7941	Pump (P4-002) Suction	CL	/
002	Jockey Pump (P4-001) Suction	CL	/
016	Jockey Pump (P4-001) Miniflow	CL	/
713	Pump (P4-002) Recirc.	CL	/
011	Pump (P4-002) Discharge	CL	/
898	Pump (P4-002) Recirc.	CL	/
008	Jockey Pump (P4-001) Discharge	CL	/
HV-7932	Crossover Iso.	CL	/
HV-7935	Crossover Iso.	CL	/
HV-7930	North Storage Tank Iso.	O	/
501	North Storage Tank Drain	CL	/
HV-7940	Pump (P4-003) Suction	O	/
014	Pump P4-003) Discharge	O	/

*O = Open CL = Closed T = Throttled L = Locked (Prefix)

ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
CX4DB173-1	Section 6.1 Fire Water Storage Tank, Pumphouse and Yard Loop (Cont'd)		
015	Pump (P4-004) Mini-Flow	O	____/____
110	Chem. Pet Feeder Inlet	CL	____/____
597	Pump (P4-003) Discharge	O	____/____
104	Chem. Pot. Feeder Iso.	CL	____/____
108	Chem. Pot. Feeder Drain	CL	____/____
106	Chem. Pot. Feeder Iso.	CL	____/____
117	Jockey Pump (P4-004) Suction	O	____/____
119	Jockey Pump (P4-004) Discharge	O	____/____
017	Sprinkler System Iso.	O	____/____
741	Sprinkler System Drain	CL	____/____
822	Pump Controller Iso.	O	____/____
KV-7907	Pump Controller Iso.	CL	____/____
023	Pump (P4-003) Recirc.	CL	____/____
738	Pump (P4-003) Cooler Pressure Regulator Iso.	O	____/____
739	Pump (P4-003) Cooler Pressure Regulator Iso.	O	____/____

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
CX4DB173-1	Section 6.1 (Cont'd)		
740	Pump (P4-003) Cooler Pressure Regulator Bypass	CL	____/____
743	Pump (P4-003) Cooler Pressure Regulator Bypass	CL	____/____
507	Fuel Oil Tank No. 2 Iso.	O	____/____
019	Fuel Oil Tank No. 2 Iso.	O	____/____
504	Fuel Oil Tank No. 2 Iso.	O	____/____
508	Fuel Oil Tank No.2 Drain	CL	____/____
X-599	Test Conn. Iso.	CL	____/____
505	Diesel Pump Recirc. Iso.	O	____/____
705	Test Manifold Iso.	CL	____/____
706	Test Manifold Iso.	CL	____/____
707	Test Manifold Iso.	CL	____/____
708	Test Manifold Iso.	CL	____/____
709	Test Manifold Iso.	CL	____/____
710	Test Manifold Iso.	CL	____/____
711	Test Manifold Iso.	CL	____/____
712	Test Manifold Iso.	CL	____/____
598	P4-004 Disch.	O	____/____
024	P4-005 Recirc. Iso.	CL	____/____

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
CX4DB173-1	Section 6.1(Cont'd)		
500	Loop Recirc. Iso.	CL	___/___
502	External Inlet Line	CL	___/___
HV-7943	Pump P4-005 Suction	O	___/___
026	Pump P4-005 Disch.	O	___/___
823	Pump Controller Iso.	O	___/___
KV-7990	Pump Controller Iso.	CL	___/___
731	Pump (P4-005) Cooler Pressure Regulator Iso.	O	___/___
732	Pump (P4-005) Cooler Pressure Regulator Iso.	O	___/___
733	Pump (P4-005) Cooler Pressure Regulator Bypass	CL	___/___
742	Pump (P4-005) Cooler Pressure Regulator Bypass	CL	___/___
596	Fuel Oil Tank Iso.	O	___/___
009	Fuel Oil Tank Iso.	O	___/___
509	Fuel Oil Tank Iso.	O	___/___
595	Fuel Oil Tank Drain	CL	___/___
X-652	Controller Drain Line Iso.	CL	___/___
X-653	Controller Drain Line Iso.	CL	___/___

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
CX4DB173-2	Section 6.1 (Cont'd)		
616	Line 508-12 Iso.	O	___/___
652	Line 515-12" Iso.	O	___/___
653	Line 515-12" Iso.	O	___/___
655	Line 515-12" Iso.	O	___/___
658	Line 515-12" Iso.	O	___/___
659	Line 515-12" Iso.	O	___/___
660	Line 515-12" Iso.	O	___/___
661	Line 515-12" Iso.	O	___/___
718	Line 515-12" Iso.	CL	___/___
813	River Intake Struct. Iso.	O	___/___
735	Maint. Bldg. Iso.	O	___/___
656	Line 554-12" Iso.	O	___/___
814	Line 651-12" Iso.	O	___/___
657	Line 515-12" Iso.	CL	___/___
734	Service Bldg. Isol.	O	___/___
A-2301-746	Security Bldg. Iso.	O	___/___

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
CX4DB173-2	Section 6.1 (Cont'd)		
737	Demin. Bldg. Iso.	O	____/____
723	Admin. Bldg. Iso.	O	____/____
X-606	Vent	CL	____/____
774	Line 656-12" Iso.	O	____/____
775	Line 656-12" Iso.	O	____/____
776	Envir. Bldg. Iso.	O	____/____
779	Line 656-12" Iso.	O	____/____
768	Line 651-12" Iso.	O	____/____
612	Prod. Whse. Iso.	O	____/____
643	Prod. Whse. Iso.	O	____/____
809	Line 651-12" Iso.	O	____/____
1-2301-770	Control Building Supply	O	____/____
808	Line 651-12" Iso.	O	____/____
A-2301-810	Rad. Bldg. Iso.	O	____/____
A-2301-811	Rad. Bldg. Iso.	O	____/____
R84	Rad. Bldg. Iso.	O	____/____
676	Rad. Bldg. Iso.	O	____/____
662	Line 515-12" Iso.	O	____/____

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
CX4DB173-2	Section 6.1 (Cont'd)		
639	Line 515-12" Iso.	O	____/____
1-2301-726	Aux. Bldg. Iso.	O	____/____
2-2301-726	Aux. Bldg. Iso.	O	____/____
A-2301-812	Field Support Bldg.	O	____/____
781	Line 515-12" Iso.	O	____/____
791	Line 667-12" Iso.	CL	____/____
638	Line 515-12" Iso.	O	____/____
634	Line 515-12" Iso.	O	____/____
637	Line 515-12" Iso.	O	____/____
632	Line 515-12" Iso.	O	____/____
622	Line 517-12" Iso.	O	____/____
642	Line 515-12" Iso.	O	____/____
667	Line 515-12" Iso.	CL	____/____
716	Line 523-8" Iso.	O	____/____
N09	Line 515-12" Iso.	CL	____/____
645	Line 515-12" Iso.	O	____/____
650	Line 515-12" Iso.	O	____/____

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB173-2	Sections 6.1 (Cont'd)		
826	Line 700-12" Iso.	CL	___/___
799	Line 515-12" Iso.	O	___/___
798	Line 515-12" Iso.	O	___/___
2-2301-748	Low Voltage Switchyard Iso.	O	___/___
797	Line 515-12" Iso.	O	___/___
796	Line 515-12" Iso.	O	___/___
A-2301-747	High Voltage Switchyard Iso.	O	___/___
651	Line 515-12" Iso.	O	___/___
794	Line 515-12" Iso.	O	___/___
1-2301-748	Line 569-6" Iso.	O	___/___
792	Line 515-12" Iso.	O	___/___
825	Line 700-12" Iso.	O	___/___
CX4DB173-2	Section 6.2 Fire Hydrants at Yard Loop.		
674	Line 569-6" Iso.	O	___/___
675	Fire Hydrant (992) Iso.	O	___/___
806	Fire Hydrant (947) Iso.	O	___/___
803	Fire Hydrant (925) Iso.	O	___/___

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
CX4DB173-2	Section 6.2 Fire Hydrants at Yard Loop. (Cont'd)		
805	Fire Hydrant (924) Iso.	O	/
677	Fire Hydrant (993) Iso.	O	/
773	Fire Hydrant (942) Iso.	O	/
777	Fire Hydrant (940) Iso.	O	/
689	Fire Hydrant (962) Iso.	O	/
780	Fire Hydrant (939) Iso.	O	/
778	Fire Hydrant (941) Iso.	O	/
772	Fire Hydrant (943) Iso.	O	/
771	Fire Hydrant (944) Iso.	O	/
676	Fire Hydrant (938) Iso.	CL	/
769	Fire Hydrant (946) Iso.	O	/
818	Fire Hydrant (938) Iso.	O	/
666	Fire Hydrant (994) Iso.	O	/
665	Fire Hydrant (927) Iso.	O	/
817	Fire Hydrant (927) Iso.	O	/
782	Fire Hydrant (926) Iso.	O	/
788	Fire Hydrant (933) Iso.	O	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
CX4DB173-2	Section 6.2 Fire Hydrants at Yard Loop. (Cont'd)		
819	Fire Hydrant 589 Iso.	O	___/___
790	Fire Hydrant (936) Iso.	O	___/___
669	Fire Hydrant (996) Iso.	O	___/___
668	Fire Hydrant (995) Iso.	O	___/___
801	Fire Hydrant (931) Iso.	O	___/___
802	Fire Hydrant (929) Iso.	O	___/___
670	Fire Hydrant (997) Iso.	O	___/___
671	Fire Hydrant (937) Iso.	O	___/___
821	Fire Hydrant (937) Iso.	O	___/___
672	Fire Hydrant (998) Iso.	O	___/___
673	Fire Hydrant (948) Iso.	O	___/___
820	Fire Hydrant (948) Iso.	O	___/___
1X4DB174-1	Section 6.3 Radwaste Solidification Building		
A-2301-032	Line 438-6" Iso.	O	___/___
A-2301-020	Line 437-6" Iso.	O	___/___
A-2301-012	Line 436-6" Iso.	O	___/___
A-2301-350	Line 445-2½" Iso.	O	___/___

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-1	Section 6.3 Radwaste Solidification Building		
A-2301-362	Line 441-2" Iso.	O	___/___
A-2301-361	Line 439-1" Iso.	CL	___/___
A-2301-360	Line 440-1" Iso.	CL	___/___
A-2301-028	Line 423-4" Iso.	O	___/___
A-2301-035	Line 424-4" Iso.	O	___/___
A-2301-065	Line 425-4" Iso.	O	___/___
A-2301-X-384	Line 423-4" Vent	CL	___/___
A-2301-X-401	Line 424-4" Vent	CL	___/___
A-2301-X-382	Line 425-4" Vent	CL	___/___
A-2301-X-383	Line 425-4" Drain	CL	___/___
A-2301-X-386	Line 438-6" Vent	CL	___/___
A-2301-X-385	Line 436-6" Vent	CL	___/___
A-2301-X-403	Line 446-2½" Drain	CL	___/___
AX4DB351-4			
HV-11097	Line 442-1½" Iso.	CL	___/___

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
AX4DB351-1	Section 6.3 Radwaste Solidification Bldg. (Cont'd)		
TV-11098	Line 442-1½" Iso.	CL	____/____
003	Drain Valve 122-1"	CL	____/____
AX4DB351-1			
HV-11094	Line 443-1½" Iso.	CL	____/____
TV-11037	Line 443-1½" Iso.	CL	____/____
224	Drain Valve 124-1"	CL	____/____
HV-11095	Line 444-1½" Iso.	CL	____/____
TV-11047	Line 444-1½" Iso.	CL	____/____
223	Drain Valve 126-1"	CL	____/____
CX4DB173-2	Section 6.4 Demin. Bldg.		
737	Demin. Building Iso. Line 633-6"	O	____/____
	Section 6.5 River Intake Structure		
813	River Intake Structure Line 634-8	O	____/____

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
CX4DB173-5	Section 6.6 High Voltage Switchyard Valve House No. 1		
A-2301-751	Line A-2301-673-4" Iso.	CL	____/____
A-2301-750	Line 645-10" Iso.	CL	____/____
A-2301-752	Line 691-6" Iso.	CL	____/____
A-2301-753	Line 691-6" Iso.	CL	____/____
A-2301-754	Line 691-6" Iso.	CL	____/____
A-2301-755	Line 691-6" Iso.	CL	____/____
A-2301-756	Line 691-6" Iso.	CL	____/____
A-2301-757	Line 691-6" Iso.	CL	____/____
CX4DB173-6	Section 6.7 High Voltage Switchyard Valve House No. 2		
878	Drain Valve	CL	____/____
877	Line 733-10" Iso.	O	____/____
879	Iso. Valve-Deluge	CL	____/____
880	Iso. Valve-Deluge	CL	____/____
881	Iso. Valve-Deluge	CL	____/____
861	Line 733-10" Iso.	O	____/____

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
CX4DB173-6	Section 6.8 High Voltage Switchyard Valve House No. 3		
883	Drain Valve	CL	___/___
882	Line 739-10" Iso.	O	___/___
888	Isolation Valve-Deluge	CL	___/___
889	Isolation Valve-Deluge	CL	___/___
885	Spare	CL	___/___
886	Spare	CL	___/___
887	Spare	CL	___/___
864	Line 739-10" Iso.	O	___/___
CX4DB173-6	Section 6.9 High Voltage Switchyard Valve House No. 4		
891	Drain Valve	CL	___/___
890	Line 748-10" Iso.	O	___/___
892	Isolation Valve-Deluge	CL	___/___
893	Isolation Valve-Deluge	CL	___/___
894	Isolation Valve-Deluge	CL	___/___
895	Spare	CL	___/___
896	Spare	CL	___/___

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
CX4DB173-6	Section 6.9 High Voltage Switchyard Valve House No. 4 (Cont'd)		
897	Spare	CL	___/___
872	Line 748-10" Iso.	O	___/___
CX4DB173-6	Section 6.10 Fire Hydrant at High Voltage Switchyard Loop		
860	Main Header Iso. Line 700-12"	O	___/___
868	Main Header Iso. Line 700-12"	O	___/___
870	Line 756-10" Iso.	CL	___/___
853	Fire Hydrant Iso.	O	___/___
854	Fire Hydrant Iso.	O	___/___
855	Fire Hydrant Iso.	O	___/___
856	Fire Hydrant Iso.	O	___/___
857	Fire Hydrant Iso.	O	___/___
858	Fire Hydrant Iso.	O	___/___
859	Fire Hydrant Iso.	O	___/___

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
CX4DB173-6	Section 6.10 (Cont'd)		
862	Fire Hydrant Iso.	O	___/___
863	Fire Hydrant Iso.	O	___/___
865	Fire Hydrant Iso.	O	___/___
866	Fire Hydrant Iso.	O	___/___
867	Fire Hydrant Iso.	O	___/___
869	Fire Hydrant Iso	O	___/___
871	Fire Hydrant Iso.	O	___/___
873	Fire Hydrant Iso.	O	___/___
874	Fire Hydrant Iso.	O	___/___
875	Fire Hydrant Iso.	O	___/___
876	Fire Hydrant Iso.	O	___/___
1X4DB173-6	Section 6.11 Low Voltage Switchyard Valve House		
758	Line 646-10" Iso.	O	___/___
759	Line 672-4" Iso.	CL	___/___
760	Line 649-6" Iso.	CL	___/___
761	Line 649-6" Iso.	CL	___/___
766	Line 649-6" Iso.	CL	___/___

*O = Open CL = Closed T = Throttled L = Locked (Prefix)

ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB173-6	Section 6.11 (Cont'd)		
762	Line 649-6" Iso.	CL	/
763	Line 649-6" Iso.	CL	/
764	Line 649-6" Iso.	CL	/
765	Line 649-6" Iso.	CL	/
767	Line 649-6" Iso.	CL	/
1X4DB174-2	Section 6.12 Fire Water Supply Header to Aux. Bldg.		
HV-27952	Line 556-8" Iso.	O	/
294	Line 556-8" Iso.	O	/
293	Line 071-8" Iso. (Mod.)	CL	/
HV-27930	Line 013-6" Iso.	O	/
X-113	Drain, Line 071-8" Iso.	CL	/
X-357	Vent, Line 071-8" Iso.	CL	/
1X4DB174-4			
055	Line 071-8" Isolation	O	/
X-007	Drain Line 071-8"	CL	/
X-073	Vent, Line 071-8"	CL	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-4	Section 6.12 (Cont'd)		
X-202	Drain, Line 071-8"	CL	/
X-174	Vent, Line 071-8"	CL	/
X-173	Drain, Line 071-8"	CL	/
X-198	Vent, Line 071-8"	CL	/
X-318	Drain, Line 071-8"	CL	/
X-316	Vent, Line 071-8"	CL	/
CX4DB173-2			
808	Line 651-12" Isolation	O	/
1X4DB174-2	Section 6.13 Auxiliary Building Level D		
220	Sprinkler Sys. Iso.	O	/
222	Sprinkler Sys. Iso.	O	/
223	Sprinkler Sys. Iso.	O	/
224	Sprinkler Sys. Iso.	O	/
259	Line 077-4" Iso.	O	/
129	Line 096-4" Iso.	O	/
128	Line 096-4" Iso.	O	/
221	Sprinkler Sys. Iso.	O	/
225	Sprinkler Sys. Iso.	O	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-2	Section 6.13 (Cont'd)		
226	Sprinkler Sys. Iso.	O	___/___
261	Line A-2301-091-2½" Iso.	O	___/___
1X4DB174-2	Section 6.13 Auxiliary Building Level D		
263	Line A-2301-263 Iso.	O	___/___
261	Line 125-2½" Iso.	O	___/___
X-042	Line 077-4" Drain	CL	___/___
X-189	Line 077-4" Vent	CL	___/___
X-237	Line 131-2" Drain	CL	___/___
X-238	Line 132-2" Drain	CL	___/___
X-157	Line 231-4" Vent	CL	___/___
X-036	Line 231-4" Drain	CL	___/___
X-268	Line 093-2" Drain	CL	___/___
X-269	Line 094-2" Drain	CL	___/___
X-270	Line 095-2" Drain	CL	___/___
X-028	Line 096-4" Vent	CL	___/___
X-029	Line 096-4" Vent	CL	___/___
X-030	Line 096-4" Drain	CL	___/___
X-031	Line 096-4" Drain	CL	___/___

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-2	Section 6.14 Auxiliary Building Level C		
260	Line 082-4" Iso.	O	/
087	Line 140-4" Iso.	O	/
139	Line 140-4" Iso.	O	/
262	Line 140-4" Iso.	O	/
A-2301-264	Line 140-4" Iso (Mod.)	CL	/
227	Sprinkler Sys. Iso.	O	/
228	Sprinkler Sys. Iso.	O	/
229	Sprinkler Sys. Iso.	O	/
230	Sprinkler Sys. Iso.	O	/
232	Sprinkler Sys. Iso.	O	/
233	Sprinkler Sys. Iso.	O	/
234	Sprinkler Sys. Iso.	O	/
A-2301-364	Line 090-4" Iso.	CL	/
X-118	Line 082-4" Drain	CL	/
X-143	Line A-2301-4" Drain	CL	/
X-015	Line A-2301-162-2½" Vent	CL	/
X-116	Line 144-4" Drain	CL	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-2	Section 6.14 (Cont'd)		
X-014	Line 144-4" Drain	CL	____/____
X-016	Line 141-2½" Vent	CL	____/____
X-241	Line 140-4" Drain	CL	____/____
1X4DB174-2	Section 6.15 Auxiliary Building Level B		
082	Line 081-6" Iso.	O	____/____
090	Line 170-4" Iso	O	____/____
138	Line 170-4" Iso.	O	____/____
A-2301-125	Line 170-4" Iso.	CL	____/____
094	Line 170-4" Iso.	O	____/____
235	Sprinkler Sys. Iso.	O	____/____
241	Sprinkler Sys. Iso.	O	____/____
242	Sprinkler Sys. Iso.	O	____/____
243	Sprinkler Sys. Iso.	O	____/____
237	Sprinkler Sys. Iso.	O	____/____
240	Sprinkler Sys. Iso.	O	____/____
238	Sprinkler Sys. Isc.	O	____/____
236	Sprinkler Sys. Iso.	O	____/____
239	Sprinkler Sys. Iso.	O	____/____

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-2	Section 6.15 Auxiliary Building Level B (Cont'd)		
269	Line 043-4" Iso.	O	___/___
A-2301-121	Line A-2301-089-4" (Mod.)	CL	___/___
A-2301-144	Sprinkler Line Iso. (Mod.)	CL	___/___
142	Sprinkler Sys. Iso. (Mod.)	CL	___/___
A-2301-143	Sprinkler Line Iso. (Mod.)	CL	___/___
141	Sprinkler Line Iso. (Mod.)	CL	___/___
X-146	Line 089-4" Drain	CL	___/___
X-114	Line 166-4" Drain	CL	___/___
X-144	Line 172-4 Drain	CL	___/___
X-145	Line 170-4" Vent	CL	___/___
X-105	Line 170-4" Drain	CL	___/___
X-313	Line 170-4" Vent	CL	___/___
X-335	Line 170-4" Vent	CL	___/___
X-314	Line 170-4" Drain	CL	___/___
X-217	Line 081-6" Drain	CL	___/___
X-218	Line 164-2½" Drain	CL	___/___
X-220	Line 165-2½" Drain	CL	___/___
X-219	Line 164-2½" Vent	CL	___/___

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-2	Section 6.15 Auxiliary Building Level B (Cont'd)		
X-221	Line 165-2½" Vent	CL	____/____
1X4DB174-2	Section 6.16 Auxiliary Building Level A		
081	Line 080-6" Iso.	O	____/____
135	Line 080-6" Iso.	O	____/____
136	Line 136-6" Iso.	O	____/____
093	Line A-2301-0[illegible]-4"	O	____/____
A-2301-124	Line 080-6" Iso. (Mod.)	CL	____/____
1-357	Line A-2301-408-4"	O	____/____
2-357	Line A-2301-408-4"	O	____/____
252	Sprinkler Sys. Iso.	O	____/____
253	Sprinkler Sys. Iso.	O	____/____
245	Sprinkler Sys. Iso.	O	____/____
251	Sprinkler Sys. Iso.	O	____/____
244	Sprinkler Sys. Iso.	O	____/____
246	Sprinkler Sys. Iso.	O	____/____
247	Sprinkler Sys. Iso.	O	____/____
248	Sprinkler Sys. Iso.	O	____/____

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-2	Section 6.16 (Cont't)		
249	Sprinkler Sys. Iso.	O	____/____
250	Sprinkler Sys. Iso.	O	____/____
A-2301-367	Line 088-4" Iso.	CL	____/____
X-305	Line 134-4" Drain	CL	____/____
X-306	Line 167-4" Drain	CL	____/____
X-107	Line 085-6" Vent	CL	____/____
X-307	Line 085-6 Drain	CL	____/____
X-304	Line 200-6" Drain	CL	____/____
X-020	Line 199-4" Vent	CL	____/____
X-090	Line 084-4" Vent	CL	____/____
X-302	Line 084-4" Vent	CL	____/____
X-035	Line 184-2½" Vent	CL	____/____
X-303	Line 084-4" Drain	CL	____/____
X-358	Line 084-4" Drain	CL	____/____
1X4DB174-2	Section 6.17 Auxiliary Building Level 1		
080	Line 079-6" Iso.	O	____/____
296	Line 218-4" Iso.	O	____/____
295	Line 218-4" Iso.	O	____/____

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-2	Section 6.17 Auxiliary Building Level 1 (Cont'd)		
A-2301-123	Line 079-6" Iso. (Mod.)	O	___/___
092	Line 079-6" Iso.	O	___/___
056	Sprinkler Sys. Iso.	O	___/___
265	Sprinkler Sys. Iso.	O	___/___
266	Sprinkler Sys. Iso.	O	___/___
267	Sprinkler Sys. Iso.	O	___/___
268	Sprinkler Sys. Iso.	O	___/___
X-375	Line 215-2½" Vent	CL	___/___
X-402	Line 415-4" Drain	CL	___/___
1X4DB174-2	Section 6.18 Auxiliary Building Level 2		
079	Line 078-6" Iso.	O	___/___
137	Line 400-4" Iso.	O	___/___
078	Line 078-6" Iso.	O	___/___
A-2301-122	Line 078-6" Iso. (Mod.)	CL	___/___
164	Sprinkler Sys. Iso.	O	___/___
158	Sprinkler Sys. Iso.	O	___/___
127	Sprinkler Sys. Iso.	O	___/___

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-2	Section 6.18 Auxiliary Building Level 2 (Cont'd)		
126	Sprinkler Sys. Iso.	O	/
037	Sprinkler Sys. Iso.	O	/
X-308	Line 030-4" Drain	CL	/
X-309	Line 242-4" Drain	CL	/
X-310	Line 389-4" Drain	CL	/
X-311	Line 391-4" Drain	CL	/
X-312	Line 414-4" Drain	Cl	/
X-135	Line 229-4" Vent	CL	/
X-406	Line 229-2½" Vent	CL	/
1X4DB205-1	Section 6.19 Piping Penetration Room		
HV-12591	Filter Unit Iso.	CL	/
TV-12625	Filter Unit Iso.	CL	/
286	Drain Iso.	CL	/
HV-12590	Filter Unit Iso.	CL	/
TV-12624	Filter Unit Iso.	CL	/
285	Drain Iso.	Cl	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB208-1	Section 6.20 Aux. Bldg. Continuous Exhaust Unit		
HV-12796	Filter Unit Iso.	CL	____/____
TV-12703	Filter Unit Iso.	CL	____/____
289	Drain Iso.	CL	____/____
HV-12795	Filter Unit Iso.	CL	____/____
TV-12696	Filter Unit Iso.	CL	____/____
288	Drain Iso.	CL	____/____
HV-12794	Filter Unit Iso.	CL	____/____
TV-12689	Filter Unit Iso.	CL	____/____
287	Drain Iso.	CL	____/____
1X4DB174-4	Section 6.21 Containment Building		
HV-27901	Line 092-6" Iso.	CL	____/____
133	Line 063-6" Iso.	CL	____/____
215	Line 390-4" Iso.	CL	____/____
214	Line 381-4" Iso.	O	____/____
134	Line 055-4" Iso.	O	____/____
029	Line 032-4" Iso.	O	____/____
058	Drain Line 397-1" Iso.	CL	____/____

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-4	Section 6.21 Containment Building (Cont'd)		
018	Drain Line 398-1" Iso.	CL	___/___
132	Line 243-1" Iso.	O	___/___
160	Sprinkler Sys. Iso.	O	___/___
150	Line 031-6" Iso.	O	___/___
217	Air Filter Iso.	O	___/___
218	Air Filter Iso.	O	___/___
159	sprinkler Sys. Iso.	O	___/___
166	Sprinkler Sys. Iso.	O	___/___
161	Sprinkler Sys. Iso.	O	___/___
155	Sprinkler Sys. Iso.	O	___/___
165	Sprinkler Sys. Iso.	O	___/___
162	Sprinkler Sys. Iso.	O	___/___
156	Sprinkler Sys. Iso.	O	___/___
163	Sprinkler Sys. Iso.	O	___/___
157	Sprinkler Sys. Iso.	O	___/___
X-150	Line 261-4" Drain	CL	___/___
X-151	Line 055-4" Vent	CL	___/___

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-4	Section 6.21 Containment Building (Cont'd)		
X-377	Line 390-4" Vent	CL	/
X-376	Line 031-6" Drain	CL	/
X-365	Line 366-6" Drain	CL	/
X-378	Line 031-6" Drain	CL	/
X-381	Line 240-2½" Drain	CL	/
1X4DB213-2	Section 6.22 CTB Preaccess Filter Unit		
HV-12985	Filter Unit Iso.	CL	/
TV-12654	Filter Unit Iso.	CL	/
TV-12655	Filter Unit Iso.	CL	/
HV-12987	Filter Unit Iso.	CL	/
319	Drain Valve	CL	/
320	Drain Valve	CL	/
1X4DB174-3	Section 6.23 Control Bldg. Level B		
HV-27902	Line 072-6" Iso.	O	/
044	Sprinkler Sys. Iso.	O	/
057	Sprinkler Sys. Iso.	CL	/
172	Sprinkler Sys. Iso.	CL	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-3	Sections 6.23 Control Bldg. Level B (Cont'd)		
X-101	Drain Iso.	CL	/
278	Line 277-4" Iso.	O	/
277	Line 268-4" Iso.	O	/
279	Line 041-4" Iso.	O	/
X-142	Drain Line Iso.	CL	/
042	Line 048-6" Iso.	O	/
201	Line 048-6" Iso.	O	/
202	Line 048-6" Iso.	O	/
071	Line 048-6" Iso.	O	/
072	Line 048-6" Iso.	O	/
073	Line 048-4" Iso.	O	/
075	Line 048-4" Iso.	O	/
X-019	Line 048-4" Iso. Vent	CL	/
X-124	Line 048-4" Iso. Vent	CL	/
X-100	Line 048-4" Iso. Vent	CL	/
X-064	Line 048-4" Iso. Vent	CL	/
X-102	Line 048-4" Drain Iso.	CL	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-3	Section 6.23 Control Bldg. Level B (Cont'd)		
X-097	Line 048-4" Drain Iso.	CL	___/___
X-053	Line 048-4" Drain Iso.	CL	___/___
X-017	Line 048-4" Drain Iso.	CL	___/___
X-063	Line 048-4" Drain Iso.	CL	___/___
175	Sprinkler Sys. Iso. (Mod.)	CL	___/___
176	Sprinkler Sys. Iso. (Mod.)	CL	___/___
X-057	Vent Iso.	CL	___/___
X-018	Vent Iso.	CL	___/___
045	Sprinkler Sys. Iso.	O	___/___
183	Sprinkler Sys. Iso.	O	___/___
200	Sprinkler Sys. Iso.	O	___/___
188	Sprinkler Sys. Iso.	O	___/___
051	Sprinkler Sys. Iso.	O	___/___
X-099	Drain Iso.	CL	___/___
X-098	Drain Iso.	CL	___/___
X-103	Drain Iso.	CL	___/___
X-140	Vent Iso.	CL	___/___
050	Line A-2301-054-2½"	O	___/___

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-3	Section 6.23 Control Bldg. Level B (Cont'd)		
A-2301-101	Line 048-4" Iso. (Mod.)	O	/
X-136	Line 254-6" Vent	CL	/
X-123	Line 168-4" Drain	CL	/
X-400	Line 043-4" Vent	CL	/
X-087	Line 048-4" Drain	CL	/
1X4DB174-4	Section 6.24 Electric Tunnels		
148	Sprinkler Sys. Iso.	O	/
114	Line 270-6" Iso.	O	/
154	Sprinkler Sys. Iso.	O	/
1X4DB174-3	Section 6.25 Control Bldg. Level A		
203	Line 047-6" Iso.	O	/
204	Line 047-6" Iso.	O	/
A-2301-274	Line 047-6" Iso.	O	/
076	Line 300-4" Iso.	O	/
A-2301-385	Line 054-2½" Iso. (Mod.)	O	/
077	Line 300-4" Iso.	O	/
185	Line 300-4" Iso. (Mod.)	CL	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-3	Section 6.25 Control Bldg. Level A (Cont'd)		
186	Line 300-4" Iso.	O	/
188	Line 300-4" Iso.	O	/
187	Line 300-4" Iso.	O	/
169	Line 300-4" Iso.	O	/
038	Sprinkler Sys. Iso.	O	/
041	Sprinkler Sys. Iso.	O	/
193	Sprinkler Sys. Iso.	O	/
184	Sprinkler Sys. Iso.	O	/
182	Sprinkler Sys. Iso.	O	/
190	Sprinkler Sys. Iso	O	/
191	Sprinkler Sys. Iso.	O	/
192	Sprinkler Sys. Iso.	O	/
189	Sprinkler Sys. Iso.	O	/
043	Sprinkler Sys. Iso.	O	/
170	Line 311-4" Iso.	O	/
049	Line 311-4" Iso.	O	/
A-2301-102	Line 311-4" Iso. (Mod.)	CL	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-3	Section 6.25 Control Bldg. Level A		
351	Line 047-6" Iso.	O	/
X-403	Line 053-2½" Drain	CL	/
X-402	Line 053-2½" Vent	CL	/
X-153	Line 300-6" Vent	CL	/
X-161	Line 047-6" Vent	CL	/
X-317	Line 047-6 Vent	CL	/
X-350	Line 047-6" Drain	CL	/
X-175	Line 300-4" Drain	CL	/
X-154	Line 300-4" Drain	CL	/
X-152	Line 300-4" Drain	CL	/
X-178	Line 300-4" Drain	CL	/
X-181	Line 300-4" Drain	CL	/
X-183	Line 300-4" Drain	CL	/
X-158	Line 315-4" Vent	CL	/
X-160	Line 311-4" Vent	CL	/
X-159	Line 311-4" Drain	CL	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-3	Section 6.25 Control Bldg. Level A		
X-182	Line 300-4" Vent	CL	/
X-180	Line 305-6" Drain	CL	/
X-179	Line 300-4" Vent	CL	/
X-156	Line 300-4" Vent	CL	/
X-184	Line 299-6" Drain	CL	/
X-291	Line 300-4" Vent	CL	/
X-290	Line 297-2½" Vent	CL	/
X-320	Line 292-2½" Vent	CL	/
1X4DB209	Section 6.26 Control Bldg. Electrical Penetration		
HV-12570	Filter Unit Iso.	CL	/
301	Test Conn.	CL	/
TV-12558	Filter Unit Iso.	CL	/
HV-12569	Filter Unit Iso.	CL	/
300	Test Conn.	CL	/
TV-12559	Filter Unit Iso.	CL	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-3	Section 6.27 Control Bldg. Level 1		
040	Line 320-4" Iso.	O	/
120	Line 320-4" Iso.	O	/
167	Line 320-4" Iso.	O	/
059	Line 335-4" Iso.	O	/
255	Line 335-4" Iso.	O	/
060	Line 335-4" Iso. (Mod.)	CL	/
2-048	Unit 2-Line 052-2½" Iso.	CL	/
1-048	Line 046-6" Iso.	O	/
A-2301-271	Line 046-6" Iso. (Mod.)	CL	/
A-2301-197	Sprinkler Sys. Iso.	O	/
030	Sprinkler Sys. Iso. (Mod.)	CL	/
031	Sprinkler Sys. Iso. (Mod.)	CL	/
X-214	Line 046-6" Drain	CL	/
X-324	Line 319-2½" Vent	CL	/
X-349	Line 263-2½" Drain	CL	/
X-215	Line 046-6" Vent	CL	/
X-348	Line 263-2½" Vent	CL	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-3	Section 6.27 Control Bldg. Level 1 (Cont'd)		
X-346	Line 335-4" Vent	CL	/
X-345	Line 419-4" Drain	CL	/
X-344	Line 419-4" Drain	CL	/
AX4DB235			
TV-21012	Filter Unit Iso.	CL	/
HV-21013	Filter Unit Iso.	CL	/
309	Drain Valve	CL	/
X-343	Line 419-4" Vent	CL	/
X-342	Line 419-4" Drain	CL	/
X-341	Line 420-2½" Vent	CL	/
X-228	Line 320-4" Vent	CL	/
X-210	Line 320-4" Drain	CL	/
X-209	Line 320-4" Drain	CL	/
X-328	Line 318-2½" Vent	CL	/
X-329	Line 320-4" Vent	CL	/
X-330	Line 320-4" Drain	CL	/
X-331	Line 320-4" Vent	CL	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
AX4DB235	Section 6.27 Control Bldg. Level 1 (Cont'd)		
X-208	Line 320-4" Drain	CL	/
X-326	Line 320-4" Vent	CL	/
X-325	Line 320-4" Drain	CL	/
1X4DB174-3	Section 6.28 Control Bldg. Level 2		
205	Line 330-6" Iso.	O	/
206	Line 330-6" Iso.	O	/
A-363	Line 309-2½" Iso. (Mod.)	CL	/
A-2301-207	Line 030-6" Iso. (Mod.)	CL	/
282	Filter Iso.	O	/
039	Sprinkler Sys. Iso.	O	/
098	Sprinkler Sys. Iso.	O	/
194	Sprinkler Sys. Iso.	O	/
195	Sprinkler Sys. Iso.	O	/
199	Sprinkler Sys. Iso.	O	/
099	Sprinkler Sys. Iso.	O	/
100	Sprinkler Sys. Iso.	O	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-3	Section 6.28 Control Bldg. Level 2 (Cont'd)		
X-230	Line 330-6" Drain	CL	/
X-232	Line 330-6" Drain	CL	/
X-231	Line 330-6" Vent	CL	/
X-227	Line 330-6" Drain	CL	/
X-226	Line 330-6" Vent	CL	/
X-225	Line 330-6" Drain	CL	/
AX4DB215			
HV-12798	Filter Unit Iso.	CL	/
TV-12779	Filter Unit Iso.	CL	/
323	Drain Valve	CL	/
1X4DB174-3	Section 6.29 Control Bldg. Level 3		
178	Sprinkler Sys. Iso.	O	/
177	Sprinkler Sys. Iso.	O	/
180	Sprinkler Sys. Iso. Level 4	O	/
181	Sprinkler Sys. Iso. Level 4	O	/
208	Line 340-6" Iso.	O	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
IX4DB174-4	Section 6.29 Control Bldg. Level 3 (Cont'd)		
209	Line 340-6" Iso.	O	/
210	Line 340-6" Iso.	O	/
Temporary Isolation Valve	Line 045-6" Iso. Unit 2	CL	/
A-2301-213	Line 340-6" Iso.	O	/
046	Line 072-6" Iso.	O	/
A-2301-273	Line 072-6" Iso. (Mod.)	CL	/
2-2301-210	Unit 2, Line 340-6" (Mod.)	CL	/
A-2301-X-022	Line 336-2½" Vent	CL	/
X-262	Line 340-6" Drain	CL	/
X-384	Line 349-2½" Vent	CL	/
X-253	Line 340-6" Vent	CL	/
X-251	Line 340-6" Vent	CL	/
X-252	Line 340-6" Drain	CL	/
X-250	Line 340-6" Drain	CL	/
X-248	Line 340-6" Vent	CL	/
X-286	Line 049-2½" Vent	CL	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-3	Section 6.29 Control Bldg. Level 3 (Cont'd)		
X-250	Line 340-6" Drain	CL	/
AX4DB204-1			
HV-12486	Filter Iso.	CL	/
HV-12487	Filter Iso.	CL	/
TV-12543	Filter Iso.	CL	/
TV-12544	Filter Iso.	CL	/
A-2301-284	Drain Valve	CL	/
A-2301-283	Drain Valve	CL	/
AX4DB206-3	Section 6.30 Control Bldg. Control Room HVAC		
TV-12134	Filter Iso.	CL	/
HV-12193	Filter Iso.	CL	/
305	Drain Valve	CL	/
TV-12135	Filter Iso.	CL	/
HV-12194	Filter Iso.	CL	/
304	Drain Valve	CL	/
	No valves shown. Just a blank flange at end of line.		

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-4	Section 6.31 Diesel Generator Building		
147	Sprinkler Sys. Iso.	O	/
153	Sprinkler Sys. Iso.	O	/
115	Line 073-8"	O	/
1X4DB174-4	Section 6.32 Fuel Handling Building		
A-2301-103	Line 059-4" Iso. (Mod.)	O	/
069	Line 059-4" Iso.	O	/
297	Line 220-4" Iso.	O	/
149	Sprinkler Sys. Iso.	O	/
070	Line 060-4" Iso.	O	/
1-074	Line A-2301-075-2½"	O	/
A-2301-292	Line 060-4" Iso. (Mod.)	O	/
145	Sprinkler Sys. Iso.	O	/
299	Line 221-4" Iso.	O	/
2-2301-74	Line 075-2½" (Mod.)	O	/
A-2301-298	Line 221-4" Iso. (Mod.)	O	/
HV-27903	Line 059-6" Iso.	O	/
X-071	Line 221-4" Drain	CL	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-4	Section 6.32 Fuel Handling Building (Cont'd)		
X-070	Line 062-2½" Vent	CL	/
X-267	Line 360-2½" Vent	CL	/
X-068	Line 353-4" Vent	CL	/
X-372	Line 355-2½" Vent	CL	/
X-069	Line 059-6" Vent	CL	/
1X4DB174-4 and 1X4DB174-3	Section 6.33 Equipment Building		
270	Line 220-6" Iso. (Level 2)	CL	/
254	Sprinkler Sys. Iso.	O	/
257	Line 220-4" Iso.	O	/
258	Line 220-4" Iso.	O	/
256	Line 220-4" Iso.	O	/
X-362	Line 220-4" Vent	CL	/
X-363	Line 265-2½" Vent	CL	/
X-364	Line 220-4" Drain	CL	/
X-360	Line 220-4" Drain	CL	/
X-207	Line 220-6" Drain	CL	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-4 and 1X4DB174-3	Section 6.33 Equipment Building (Cont'd)		
X-288	Line 220-6" Vent	CL	/
X-361	Line 220-6" Vent	CL	/
1X4DB174-4 and 1X4DB213-1	Section 6.34 CTB Purge Filter Exhaust Unit.		
HV-12658	Filter Unit Iso.	CL	/
TV-12651	Filter Unit Iso.	CL	/
HV-12986	Filter Unit Iso.	CL	/
TV-12653	Filter Unit Iso.	CL	/
321	Drain Iso.	CL	/
322	Drain Iso.	CL	/
HV-27961	Line 335-4" Iso.	O	/
1X4DB174-4	Section 6.35 Auxiliary Feedwater Pump House		
149	Sprinkler Sys. Iso.	O	/
219	Sprinkler Sys. Iso.	O	/
152	Sprinkler Sys. Iso.	O	/
095	Line 117-6" Iso.	O	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB174-4	Section 6.35 Auxiliary Feedwater Pump House (Cont'd)		
096	Line 073-8" Iso.	O	/
052	Line 071-8" Iso.	O	/
053	Line 071-8" Iso.	O	/
054	Line 071-8" Iso.	O	/
X-373	Line 120-6" Vent	CL	/
X-323	Line 113-6" Drain	CL	/
X-321	Line 113-6" Vent	CL	/
118	Line 272-6" Iso.	O	/
116	Line 073-8" Iso.	O	/
112	Line 073-8" Iso.	O	/
113	Line 113-6" Iso.	O	/
1X4DB173	Section 6.36 Turbine Building		
527	Sprinkler Sys. Iso.	O	/
528	Sprinkler Sys. Iso.	O	/
899	Sprinkler Sys. Iso.	O	/
529	Sprinkler Sys. Iso.	O	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB173	Section 6.36 Turbine Building (Cont'd)		
832	Strainer Drain Iso.	CL	/
525	Line 536-10" Iso.	O	/
519	Fire Hose Station Iso.	O	/
517	Fire Hose Station Iso.	O	/
A-2301-686	Line 536-10" Iso. (Mod.)	CL	/
520	Line 539-6" Iso.	O	/
831	Drain Line Iso.	CL	/
522	Sprinkler Sys. Iso. (Mod.)	CL	/
523	Sprinkler Sys. Iso. (Mod.)	CL	/
524	Sprinkler Sys. Iso. (Mod.)	CL	/
516	Sprinkler Sys. Iso. (Mod.)	CL	/
685	Line 539-6" Iso. (Mod.)	CL	/
530	Line 544-4" Iso.	O	/
548	Sprinkler Sys. Is.	O	/
549	Line 759-8" Iso.	O	/
905	Line 758-8" Iso.	O	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
IX4DB173	Section 6.36 Turbine Bldg. (Cont'd)		
535	Sprinkler Sys. Iso.	O	/
534	Sprinkler Sys. Iso.	O	/
533	Sprinkler Sys. Iso.	O	/
531	Line 550-6" Iso.	O	/
830	Drain Iso.	CL	/
A-2301-827	Line A-2301-703-6" Iso.	CL	/
537	Line 537-10" Iso.	O	/
536	Line 537-10" Iso.	O	/
538	Line 537-10" Iso.	O	/
554	Line 761-8" Iso.	O	/
829	Drain Iso.	O	/
550	Drain Iso.	CL	/
540	Sprinkler Sys. Iso.	O	/
556	Sprinkler Sys. Iso.	O	/
541	Sprinkler Sys. Iso.	O	/
557	Sprinkler Sys. Iso.	O	/
542	Sprinkler Sys. Iso.	O	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
1X4DB173	Section 6.36 Turbine Building (Cont'd)		
558	Sprinkler Sys. Iso.	O	/
551	Sprinkler Sys. Iso.	O	/
552	Sprinkler Sys. Iso.	O	/
553	Sprinkler Sys. Iso.	O	/
900	Sprinkler Sys. Iso.	O	/
901	Sprinkler Sys. Iso.	O	/
902	Sprinkler Sys. Iso.	O	/
903	Sprinkler Sys. Iso.	O	/
543	Sprinkler Sys. Iso.	O	/
544	Sprinkler Sys. Iso.	O	/
545	Sprinkler Sys. Iso.	O	/
904	Drain Iso.	CL	/
546	Line 537-10" Iso.	O	/
555	Drain Iso.	CL	/
A-2301-687	Line 537-10" Iso. (Mod.)	CL	/

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ATTACHMENT 10.1

INITIAL VALVE LINEUP

VALVE NUMBER	VALVE DESCRIPTION	*REQUIRED POSITION	
CX4DB173-2	Section 6.37		
2-2301-770	Line 2-2301-073-8" Iso.	O	/
2-2301-656	Turbine Bldg. Iso.	O	/
789	Line 667-12" Iso.	O	/

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ATTACHMENT 10.2

INSTRUMENT LINE FLUSH STATUS

INSTRUMENT	ISOLATED	FLUSHED
Section 6.1 Fire Water Storage Tanks, Pumphouse & Yard Loop		
LT-7955	___/___	___/___
LT-7956	___/___	___/___
LG-7993	___/___	___/___
LISHL-18073	___/___	___/___
LSHL-7913	___/___	___/___
LISHL-7989	___/___	___/___
LSHL-7912	___/___	___/___
LG-9075	___/___	___/___
LSL-9076	___/___	___/___
LSL-7992	___/___	___/___
PI-7915	___/___	___/___
PI-7906	___/___	___/___
PI-7903	___/___	___/___
PSL-7905	___/___	___/___
PSL-7953	___/___	___/___
PT-7918	___/___	___/___
FI-7951	___/___	___/___
FI-18170	___/___	___/___

ATTACHMENT 10.2

INSTRUMENT LINE FLUSH STATUS

INSTRUMENT	ISOLATED	FLUSHED
Section 6.1 Fire Water Storage Tanks, Pumphouse & Yard Loop (Cont'd)		
FS-18080	___/___	___/___
FI-18170	___/___	___/___
PI-7949	___/___	___/___
PI-7948	___/___	___/___
PI-18069	___/___	___/___
PI-18071	___/___	___/___
PSL-7957	___/___	___/___
PI-18077	___/___	___/___
PSL-7952	___/___	___/___
PI-18074	___/___	___/___
PSL-7907	___/___	___/___
PR-7907	___/___	___/___
PR-7990	___/___	___/___
PSL-7990	___/___	___/___
PI-7991	___/___	___/___
PI-7928	___/___	___/___
PI-7917	___/___	___/___
PI-7908	___/___	___/___

ATTACHMENT 10.2

INSTRUMENT LINE FLUSH STATUS

INSTRUMENT	ISOLATED	FLUSHED
Section 6.12 Fire Water Supply Header to Aux. Building		
FS-27962	/	/
FS-27929	/	/
FS-27951	/	/
Section 6.21 Containment Building		
PI-28279	/	/
PI-28278	/	/
PI-28277	/	/
Section 6.32 Fuel Handling Building		
FS-27928	/	/
PI-28280	/	/
Section 6.36 Turbine Building		
PI-7976	/	/
PI-7975	/	/
PI-7974	/	/
PI-7970	/	/

ATTACHMENT 10.2

INSTRUMENT LINE FLUSH STATUS

INSTRUMENT	ISOLATED	FLUSHED
Section 6.36 Turbine Building (Cont'd)		
PI-7971	/	/
PI-7972	/	/
PP-X-970	/	/
PI-7973	/	/
Section 6.16 Control Bldg. Level A		
FS-27927	/	/

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	PIPING MODIFICATIONS Section 6.1 Fire Water Storage Tanks, Pump House and Yard Loop		
1.	Remove/Restore pump suction 12" X 10" reducer immediately upstream of pump P4-002. Install 12" adapter to line 010-12. Rum temporary line to waste. Temporary line to have an in-line valve and also a 2" sampling connection. (DWG. CX4DB173-1, E-2)	Remove Pump Suction Reducer ___/___	Restore ___/___
2.	Remove/Restore FE-18170. Install spacer and reconnect line 058-10". (DWG. CX4DB173-1, D-1)	Remove FE-18170. ___/___	Remove spacer. Restore FE-18170 ___/___
3.	Locate buried T-line between valves 660 and 661. Remove/Restore blind flange and install 12" adapter with temporary line to waste. Temporary line to have in-line valve and a 2" sampling line. (DWG. CX4DB173-2)	Remove Flange ___/___	Restore Flange ___/___

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	PIPING MODFICATIONS		
	Section 6.1 Fire Water Storage Tank, Pump House and Yard Loop (Cont'd)		
4.	Remove/Restore FE-7951. Install Spacer and re-connect line 500-10" (DWG. CX4DB173-1, C-5)	Remove FE-7951	Remove Spacer. Restore FE-9751
	Section 6.4 Demineralizer Building		
1.	Demin. Building. Install temporary adapter with valve at the farthest flange of the 6" fire water pipe. Temporary line to be routed to drain and have a 2" sampling line connection (DWG. CX4DB173-2)	Install Adapter ____/____	Restore Water Line ____/____
	Section 6.5 River Intake Structure		
1.	River Intake Structure. Install temporary adapter with valve at the farth est flange of the 8" fire water line. Temporary line to be routed to fire drain and have a 2" sampling line connection. (DWG. CX4DB173-2)	Install Adapter ____/____	Restore Water Line ____/____

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

MODIFICATION/RESTORATION		STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	PIPING MODIFICATIONS		
	Section 6.6 High Voltage Switchyard Valvehouse No. 1		
1.	Remove/Restore the following valves. Install 6" adapter and line to waste. Temporary line to have an in-line valve and a 2" sampling line connection (DWG. CX4DB173-5)		
		Remove Valve	Restore Valve
	A-2301-752	/	/
	A-2301-753	/	/
	A-2301-754	/	/
	A-2301-755	/	/
	A-2301-756	/	/
	A-2301-757	/	/
2.	Remove/Restore inside backet strainer. (DWG. CX4DB173-5)		
	A-2301-F4-601	/	/

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	PIPING MODIFICATIONS		
	Section 6.6 High Voltage Switchyard Valvehouse No. 1 (Cont'd)		
3.	Attach 6" adapter with temporary line to waste for valve 757. Line to have in-line valve and 2" sampling connection. (DWG. CX4DB173-5)	Attach Temporary Line /	Restore /
	Section 6.7 High Voltage Switchyard Valvehouse No. 2		
	Remove/Restore the following valves. Install 6" adapter and line to waste. Temporary line to have an in-line valve and a 2" sampling line connection. (DWG. CX4DB173-6)	Remove Valve	Restore Valve
	A-2301-897	/	/
	A-2301-880	/	/
	A-2301-881	/	/
2.	Remove/Restore inside basket strainer. (DWG. CX4DB173-6) C-2301-F4-600	Remove /	Restore /

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	PIPING MODIFICATIONS		
	Section 6.8 High Voltage Switchyard Valve House No. 3		
1.	Remove/Restore the following valves. Install 6" adapter and line to waste. Temporary line to have an in-line valve and a 2" sampling line connection. (DWG. CX4DB173-6)	Remove Valve	Restore Valve
	A-2301-884	____/____	____/____
	A-2301-888	____/____	____/____
	A-2301-889	____/____	____/____
2.	Remove/Restore inside basket strainer: (DWG. CX4DB173-6)	Remove	Restore
	C-2301-F4-603	____/____	____/____
3.	Attach 6" adapter with temporary line to waste for the following valves line to have in-line valve and 2" sampling connection. (DWG. CX4DB173-6)	Attach Temporary Line	Restore
	885	____/____	____/____
	886	____/____	____/____

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	PIPING MODIFICATIONS		
	Section 6.8 High Voltage Switchyard Valve House No.3 (Cont'd)		
	887	___/___	___/___
	Section 6.9 High Voltage Switchyard Valve House No 4		
1.	Remove/Restore the following valves. Install 6" adapter and line to waste. Temporary line to have an in-line valve and a 2" sampling line connection. (DWG. CX4DB173-)	Remove Valve	Restore Valve
	A-2301-892	___/___	___/___
	A-2301-893	___/___	___/___
	A-2301-894	___/___	___/___
2.	Remove/Restore inside basket strainer: (DWG. CX4DB173-6)	Remove	Restore
	C-2301-F4-604	___/___	___/___

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
PIPING MODIFICATIONS		
Section 6.8 High Voltage Switchyard Valve House No. 3 (Cont'd)		
3. Attach 6" adapter with temporary line to waste the following valves. Line to have in-line valve and 2" sampling connection. (DWG. CX4DB173-6)	Attach Temporary line	Restore
895	___/___	___/___
896	___/___	___/___
897	___/___	___/___
Section 6.11 Low Voltage Switchyard Valve House - Unit No. 1		
1. Remove/Restore the following valves. Install 6" adampter and line to waste. Temporary line to have an in-line valve and a 2" sampling line connection. (DWG. 1X4DB173-6)	Remove Valve	Restore Valve
A-2301-760	___/___	___/___
A-2301-761	___/___	___/___
A-2301-762	___/___	___/___

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	PIPING MODIFICATIONS		
	Section 6.11 Low Voltage Switchyard Valve House Unit No. 1 (Cont'd)		
	A-2301-763	/	/
	A-2301-764	/	/
	A-2301-765	/	/
	A-2301-766	/	/
	A-2301-767	/	/
2.	Remove/Restore inside basket strainer: (DWG. 1X4DB173-6)	Remove	Restore
	1-2301-F4-602	/	/
	Section 6.12 Fire Water Supply Header to Aux. Bldg.		
1.	Remove/Restore valve internals and install 8" adapter with temporary line to waste. Temporary line to have in-line valve and a 2" sampling connection. (DWG. 1X4DB174-2, D-2) Valve 293	Remove Internals /	Restore Internals /

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	PIPING MODIFICATIONS		
	Section 6.12 Fire Water Supply Header to Aux. Bldg. (Cont'd)		
2.	Remove/Restore FE-27951 and install spacer in line 071-8". (DWG. 1X4DB174-2)	Remove FE-27951 ____/____	Restore FE-27951 ____/____
	Section 6.15 Auxiliary Bldg. Level B		
1.	Remove/Restore valve internals and install 6" adapter with temporary line to waste. Temporary line to have inline valve and a 2" sampling line. (DWG. 1X4DB174-2) A-2301-125	Remove Valve Internals ____/____	Restore Valve Internals ____/____
	Section 6.16 Auxiliary Bldg. Level A		
1.	Remove/Restore valve internals and install 6" adapter with temporary line to waste. Temporary line to have in-line valve and a 2" sampling line. (DWG. 1X4DB174-2)	Remove Internals	Restore Internals

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	PIPING MODIFICATIONS		
	Section 6.16 Aux. Bldg. Level A (Cont'd)		
	A-2301-124	____/____	____/____
	Section 6.17 Auxiliary Bldg. Level 1		
1.	Remove/Restore valve internals and install 6" adapter with temporary line to waste. Temporary line to have in-line valve and a 2" sampling line. (DWG. 1X4DB174-2)	Remove Valve Internals	Restore Valve Internals
	A-2301-123	____/____	____/____
	Section 6.18 Auxiliary Bldg. Level 2		
1.	Remove/Restore valve internals and install 6" adapter with temporary line to waste. Temporary line to have in-line valve and a 2" sampling line. (DWG. 1X4DB174-2)	Remove Valve	Restore Valve

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	PIPING MODIFICATIONS		
	Section 6.18 Auxiliary Bldg. Level 2 (Cont'd)		
		Remove Valve Internals	Restore Valve Internals
	A-2301-122	___/___	___/___
	Section 6.25 Control Bldg. Level A		
1.	Remove/Restore valve internals and install 6 adapter with temporary line to waste. Temporary line to have in-line valve and a 2" sampling line. (DWG. 1X4DB174-3)	Remove Valve Internals	Restore Valve Internals
	A-2301-274	___/___	___/___
	Section 6.27 Control Bldg. Level 1		
1.	Remove/Restore valve internals and install 6" adapter with temporary line to waste. Temporary line to have in-line valve and a 2" sampling line. (DWG. 1X4DB174-3)	Remove Valve Internals	Restore Valve Internals
	A-2301-271	___/___	___/___

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
PIPING MODIFICATIONS		
Section 6.28 Control Bldg. Level 2		
1. Remove/Restore valve internals and install 6" adapter with temporary line to waste. Temporary line to have in-line valve and 2" sampling line. (DWG. 1X4DB174-3)	Remove Valve Internals	Restore Valve Internals
A-2301-207	___/___	___/___
A-2301-272	___/___	___/___
Section 6.29 Control Bldg. Level 3		
1. Remove/Restore valve internals and install 6" adapter with temporary line to waste. Temporary line to have in-line valve and a 2" sampling line. (DWG. 1X4DB174-3)	Remove Valve Internals	Restore Valve Internals
A-2301-273	___/___	___/___
Section 6.36 Turbine Bldg.		
1. Remove/Restore the following valve internals and install 6" adapter with temporary line to waste. Temporpary line to have in-line valve and a 2" sampling connection:		

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
PIPING MODIFICATIONS		
Section 6.36 Turbine Bldg. (Cont'd)		
	Remove Internals	Restore Internals
534	/	/
535	/	/
548	/	/
(DWG. 1X4DB173, F-2)		
2. Remove/Restore internals and install 10" adapter with temporary line to waste. Temporary line to have in-line valve and a 2" sampling connection.	Remove Internals	Restore Internals
A-2301-686	/	/
A-2301-687	/	/
(DWG. 1X4DB173)		
3. Remove/Replace the following Y-Strainer and install 8" adapter with temporary line to waste. Temporary line to have in-line valve and a 2" sampling connection.		
1-2301-F4-500	Remove Y-Strainer	Replace Y-Strainer
1-2301-F4-500	/	/

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
PIPING MODIFICATIONS		
Section 6.36 Turbine Bldg. (Cont'd)		
	Remove Y-Strainer	Replace Y-Strainer
1-2301-F4-501	/	/
1-2301-F4-502	/	/
1-2301-F4-503	/	/
1-2301-F4-504	/	/
1-2301-F4-505	/	/
1-2301-F4-506	/	/
(DWG. 1X4DB173)		

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATION		
	Section 6.1 Fire Water Storage Tank, Pumphouse and Yard Loop		
1.	Remove/Restore pump suction spool immediately upstream of pump P4-001. Install adapter on storage tank side. Connect temporary pipe to waste. (DWG. CX4DB173-1)	Remove Pipe Spool ____/____	Restore Pipe Spool ____/____
2.	Remove/Restore strainer element from the follow-strainers.	Remove	Restore
	C-2301-P4-003-F05	____/____	____/____
	C-2301-P4-005-F05	____/____	____/____
	(DWG. CX4DB173-1)		
3.	Remove/Restore the following flow orifices.	Remove	Restore
	FO-7920	____/____	____/____
	FO-7942	____/____	____/____
	FO-7947	____/____	____/____
	(DWG. CX4DB173-1)		

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.1 Fire Water Storage Tank, Pump House and Yard Loop (cont'd)		
4.	Connect/Disconnect temporary hose with in-line isolation valve at removed FO-7942 on line 021-1". DWG.CX4DB173-1)	Connect ___/___	Disconnect ___/___
5.	Remove/Restore pipe cap, andd install adapter and temporary line to waste on valve 502. (DWG. CX4DB173-1)	Remove ___/___	Restore ___/___
6.	Remove/Restore the following PSV's, and install adapters.	Remove	Restore
	PSV-7914	___/___	___/___
	PSV-18076	___/___	___/___
	PSV-7946	___/___	___/___
	(DWG. CX4DB173-1)		
7.	Attach 1" Hose downstream of valve X-599 and connect to waste. (DWG. CX4DB173-1)	Hose Attached ___/___	Hose Removed ___/___

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.1 Fire Water Storage Tank, Pump House and Yard Loop (Cont'd)		
8.	Attach hoses to the fittings of the following wet pipe sprinkler system and connect to waste. Removed Sprinklers downstream of line 502-3". (DWG. CX4DB173-1)	Hose Attached /	Hose Removed /
9.	Disconnect/Restore Flange joining lines 066-10" and 070-10". Install 10" blind flange at end of line 070-10".	Disconnected Piping Install Blind Flange /	Removed blind flange and Restored Piping /
10.	Remove/Re-install blind flange at the end of line 018-10" and connect temporary hose in-line isolation vlave.	Removed /	Reinstalled /
	Section 6.2 Fire Hydrants at Yard loop-Dwg. CX4DB173-2		
1.	Connect/Disconnect temporary hoses to flush Fire Hydrants	Connected /	Disconnected /

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
FLUSHING MODIFICATIONS Section 6.3 Radwaste Solidification Bldg.		
1. Attach hoses to flanged ends of following lines upstream of carbon filter area. Connect hose to waste.	Hoses Installed	Hoses Removed
Line 439-1"	/	/
Line 440-1"	/	/
(DWG. AX4DB104-5)		
2. Attach hoses to the fittings of the following sprinklers and connect to waste.		
NOTE: These hoses may be installed just prior to flushing in the designated area, and then removed immediately after completion, for use in the next area. In this way, the number of hoses can be minimized.		

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.3 Radwaste Solidification Bldg. (Contd.)		
	Preaction sprinklers downstream of the following isolation valves.	Hoses Attached	Sprinklers Restored to Original State
	A-2301-012	/	/
	A-2301-032	/	/
	A-2301-020	/	/
	A-2301-350	/	/
	A-2301-351	/	/
	(DWG. 1X4DB174-2, -3,-4)		
3.	Connect/Disconnect temporary hoses at Fire Hose Station & Fire Hydrants.	Connected /	Disconnected /
	Section 6.13 Auxiliary Bldg. Level D		
1.	Attach hose to the fittings of the following sprinklers and connect to waste.		

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.13 Auxiliary Bldg. Level D (Cont'd.)		
	NOTE:		
	These hoses may be installed just prior to flushing in the designated area, and then removed immediately after completion, for use in the next area. In this way, the number of hoses can be minimized.	Hoses Attached	Sprinklers Restored to Original State
	226	___/___	___/___
	225	___/___	___/___
	221	___/___	___/___
	224	___/___	___/___
	223	___/___	___/___
	222	___/___	___/___
	220	___/___	___/___
	(DWG. 1X4DB174-2)		
2.	Connect/Disconnect temporary hoses at Fire Hose Station & Fire Hydrants.	Connected ___/___	Disconnected ___/___

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
FLUSHING MODIFICATIONS Section 6.14 Auxiliary Bldg. Level C		
1. Attach hoses to the fittings of the following sprinklers and connect to waste. NOTE: These hoses may be installed just prior to flushing in the designated area, and then removed immidiately after completion, for use in the next area. In this way, the number of hoses can be minimized.		
	Hose Attached	Sprinklers Restored to Original to State
232	____/____	____/____
233	____/____	____/____
230	____/____	____/____

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.14 Auxiliary Bldg. Level C (Cont'd)		
	229	___/___	___/___
	228	___/___	___/___
	227	___/___	___/___
	(DWG. 1X4DB174-2)		
2.	Remove/Restore valve bonnet and install adapter with temporary line to waste. Temporary line to have in-line valve.	Remove	Restore
	A-2301-264	___/___	___/___
	A-2301-364	___/___	___/___
3.	Connect/Disconnect temporary hoses at Fire Hose Stations and Fire Hydrants.	Connected ___/___	Disconnected ___/___
	Section 6.15 Auxiliary Bldg. Level B		
1.	Attach hoses to the fittings of the following sprinklers and connect to waste.		

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
FLUSHING MODIFICATIONS Section 6.15 Auxiliary Bldg. Level B (Cont'd) NOTE: These hoses may be installed just prior to flushing in the designated area, and then removed immediately after completion, for use in the next area. In this way, the number of hoses can be minimized.	Hose Attached	Sprinklers Restored to Original to state
243	___/___	___/___
242	___/___	___/___
241	___/___	___/___
235	___/___	___/___
239	___/___	___/___

ATTACHMENT 10.3

TEMPOPARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.15 Auxiliary Bldg. Level B (Cont'd)	Hose Attached	Sprinklers Restored To Original State
	236	/	/
	240	/	/
	238	/	/
	237	/	/
2.	Remove/Restore valve bonnet and install adapter with temporary line to waste. Temporary line to have in-line valve.	Remove	Restore
	A-2301-121	/	/
3.	Remove/Restore valve bonnets and install adapter with temporary line to waste. Temporary line to have an in-line valve. Only in the event that the deluge system is already installed, is it necessary to plug the lines downstream of these valves.	Valve Internals Removed	Valves Restored
	141	/	/

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.15 Auxiliary Bldg. Level B (Cont'd.)	Valve Internals Removed	Valves Restored
	142	___/___	___/___
	143	___/___	___/___
	144	___/___	___/___
4.	Connect/Disconnect temporary hoses at Fire Hose Stations and Fire Hydrants.	Connected ___/___	Disconnected ___/___
	Section 6.16 Auxiliary Bldg. Level A		
1.	Attach hoses to the fittings of the following sprinklers and connect to waste.		
	NOTE:		
	These hoses may be installed just prior to flushing in the designated area, and then removed immediately after completion, for use in the next area. In this way, the number of hoses can be minimized.	Hoses Attached	Sprinklers Restored to Original State
	250	___/___	___/___

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.16 Auxiliary Bldg. Level A (Cont'd)	Hoses Attached	Sprinklers Restored to Original State
	249	___/___	___/___
	248	___/___	___/___
	247	___/___	___/___
	246	___/___	___/___
	244	___/___	___/___
	251	___/___	___/___
	245	___/___	___/___
	253	___/___	___/___
	252	___/___	___/___
2.	Connect/Disconnect temporary hoses at Fire Hose Stations & Fire Hydrants	Connected ___/___	Disconnected ___/___

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

MODIFICATION/RESTORATION		STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.17 Auxiliary Bldg Level 1		
1.	Attach hoses to the fittings of the following sprinklers and connect to waste. NOTE: • These hoses may be installed just prior to flushing in the designated area, and then removed immediately way, the number of hoses can be minimized.		
		Hoses Attached	Sprinklers Restored
	265	____/____	____/____
	056	____/____	____/____
	266	____/____	____/____
	268	____/____	____/____
	267 (DWG. 1X4DB174-2)	____/____	____/____
2.	Connect/Disconnect temporary hoses at Fire Hose Stations and Fire Hydrants	Connected ____/____	Disconnected ____/____

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.18 Auxiliary Bldg. Level 2		
1.	Attach hoses to the fittings of the following sprinklers and connect to waste.		
	NOTE:		
	These hoses may be installed just prior to flushing in the designated area, and then removed immediately after completion, for use in the next area. In this way, the number of hoses can be minimized.	Hoses Attached	Sprinklers Restored to Original State
	037	____/____	____/____
	126	____/____	____/____
	127	____/____	____/____
	158	____/____	____/____
	164 (DWG. 1X4DB174-2)	____/____	____/____
2.	Connect/Disconnect temporary hoses at Fire Hose Stations and Fire Hydrants.	Connected ____/____	Disconnected ____/____

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.21 Containment Bldg.		
1.	Attach hoses to the fittings of the following sprinklers and connect to waste.		
	NOTE:		
	These hoses may be installed just prior to flushing in the designated area, and then remove immediately after completion, for use in the next area. In this way, the number of hoses cna be minimized.		
	Preaction sprinklers downstream of the following isolation valves.		
		Hoses Attached	Sprinklers Restored to Original
	160	___/___	___/___
	159	___/___	___/___
	166	___/___	___/___
	161	___/___	___/___

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

MODIFICATION/RESTORATION		STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.21 Containment Bldg. (Cont'd)		
		Hoses Attached	Sprinklers Restored to Original
	155	/	/
	165	/	/
	162	/	/
	156	/	/
	163	/	/
	157	/	/
	(DWG. 1X4DB174-4)		
2.	Connect/Disconnect temporary hoses at Fire Hose Stations & Fire Hydrants.	Connected /	Disconnected /
	Section 6.23 Control Bldg. Level B		
1.	Attach hoses to the fittings of the following sprinklers and connect to waste.		

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
FLUSHING MODIFICATIONS Section 6.23 Control Bldg. Level B (Cont'd)		
NOTE: These hoses may be installed just prior to flushing in the designated area, and then removed immediately after completion, for use in the next area. In this way, the number of hoses can be minimized. Preaction sprinklers downstream of the following isolation valves.	Hoses Attached	Sprinklers Restored to Original State
051	____/____	____/____
168	____/____	____/____
200	____/____	____/____
183	____/____	____/____
045	____/____	____/____
044 (DWG. 1X4DB174-3)	____/____	____/____

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATION Section 6.23 Control Bldg. Level B (Cont'd)		
2.	Remove/Restore valve bonnets and install adapter with temporary line to waste. Temporary line to have an in-line valve. Only in the event that the deluge system is already installed. is it necessary to plug the lines downstream of these valves.	Valve Internals	Valves kestored
	176	____/____	____/____
	175 (DWG. 1X5DB174-3)	____/____	____/____
3.	Remove/Restore valve bonnets and install adapter with temporary line to have in-line valve.	Valve internals Removed	Valve Restored
	A-2301-101	____/____	____/____
	A-2301-385	____/____	____/____
4.	Connect/Disconnect temporary hoses at Fire Hose Stations and Fire Hydrants.	Connected ____/____	Disconnected ____/____

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
FLUSHING MODIFICATIONS Section 6.24 Electric Tunnels		
1. Attach hoses to the fittings of the following sprinklers and connect to waste. NOTE: These hoses may be installed just prior to flushing in the designated area, and then removed immediately after completion, for use in the next area. In this way, the number of hoses can be minimized.	Hose Attached	Sprinklers Restored
154	____/____	____/____
148 (DWG. 1X4DB174-4)	____/____	____/____
2. Connect/Disconnect temporary hoses at Fire Hose Stations and Fire Hydrants.	Connected ____/____	Disconnected ____/____

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
FLUSHING MODIFICATIONS		
Section 6.25 Control Bldg. Level A		
1. Attach hoses to the fittings of the following sprinklers and connect to waste.		
NOTE:		
These hoses may be installed just prior to flushing in the designated area, and then removed immediately after completion, for use in the next area. In this way, the number of hoses can be minimized.	Hoses Attached	Sprinklers Restored
192	____/____	____/____
191	____/____	____/____
190	____/____	____/____
182	____/____	____/____
184	____/____	____/____
189	____/____	____/____
041	____/____	____/____
193	____/____	____/____
038 (DWG. 1X4DB174-3)	____/____	____/____

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.25 Control Bldg. Level A (Cont'd)		
2.	Remove/Restore valve bonnets and install adapter with temporary line to waste. Temporary line to have in-line valve.	Valve Internals Removed	Restored
	A-2301-274	____/____	____/____
	A-2301-363	____/____	____/____
	A-2301-102 (DWG. 1X4DB174-3)	____/____	____/____
3.	Connect//Disconnect temporary hoses at Fire Hose Stations and Fire Hydrants.	Connected ____/____	Disconnected ____/____
1.	Attach hoses to the fittings of the following sprinklers and connect to waste.		
	NOTE:		
	These hoses may be installed just prior to flushing in the designated area, and then removed immediately after completion, for use in the next area. In this way, the number of hoses can be minimized.		

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.25 Control Bldg. Level A (Cont'd)		
		Hose Attached	Sprinklers Restored
	197 (DWG. 1X4DB174-3)	____/____	____/____
2	Remove/Restore valve bonnets and install adapter with temporary line to waste. Temporary line to have an in-line valve. Only in the event that the deluge system is already installed, is it necessary to plug the line downstream of these valves.	Valve Internals Removed	Valves Restored
	030	____/____	____/____
	031 (DWG. 1X4DB174-3)	____/____	____/____
3.	Remove/Restore valve bonnets and install adapter with temporary line to waste temporary line to have in-line valve.	Removed	Restore
	A-2301-271	____/____	____/____
	A-2301-185	____/____	____/____

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.25 Control Bldg. Level A (Cont'd)		
		Removed	Restore
	A-2301-060	____/____	____/____
4.	Connect/Disconnect temporary hoses at Fire Hose Stations and Fire Hydrants.	Connected ____/____	Disconnected ____/____
	Section 6.28 Control Bldg. Level 2		
1.	Attach hoses to the fittings of the following sprinklers and connect to waste.		
	NOTE:		
	These hoses may be installed just prior to flushing in the designated area, and then removed immediately after complecion, for use in the next area. In this way, the number of hoses can be minimized.	Hose Attached	Sprinklers Restored
	254	____/____	____/____
	039	____/____	____/____
	098	____/____	____/____

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.28 Control Bldg. Level 2 (Cont'd)		
		Hoses Attached	Sprinklers Restored
	194	___/___	___/___
	195	___/___	___/___
	199	___/___	___/___
	099	___/___	___/___
	100 (DWG. 1X4DB174-3)	___/___	___/___
2.	Connect/Disconnect temporary hoses at Fire Hose Stations and Fire Hydrants.	Connected ___/___	Disconnected ___/___
	Section 6.29 Control Bldg. Level 3		
1.	Attach hoses to the fittings of the following sprinklers and connect to waste.		

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.29 Control Bldg. Level 3 (Cont'd)		
	NOTE:		
	These hoses may be installed just prior to flushing in the designated area, and then removed immediately after completion, for use in the next area. In this way, the number of hoses can be minimized.	Hoses Attached	Sprinklers Restored
	180	___/___	___/___
	178	___/___	___/___
	181	___/___	___/___
	036 (DWG. 1X4DB174-3)	___/___	___/___
2.	Connect/Disconnect temporary hoses at Fire Hose Stations and Fire Hydrants.	Connected ___/___	Disconnected ___/___

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
FLUSHING MODIFICATIONS Section 6.31 Diesel Generator Bldg.		
1. Attach hoses to the fittings of the following sprinklers and connect to waste. NOTE: These hoses may be installed just prior to flushing in the designated area, and then removed immediately after completion, for use in the next area. In this way, the number of hoses can be minimized.	Hoses Attached	Sprinklers Reatored
Preaction sprinklers downstream of the following isolation valves.		
153	/	/
147	/	/

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.32 Fuel Handling Bldg.		
1.	Remove/Restore valve bonnets and install adapter with temporary line to waste. Temporary line to have in-line valve.	Valve Internals Removed	Valve Restored
	A-2301-292	/	/
	A-2301-103	/	/
	A-2301-074	/	/
	A-2301-298	/	/
2.	Attach hoses to the fittings of the following sprinklers and connect go waste.		
	NOTE:		
	These hoses may be installed just prior to flushing in the designated area, and then removed immediately after completion, for use in the next area. In this way, the number of hoses can be minimized.		

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.32 Fuel Handling Bldg. (Cont'd)		
	Preaction sprinkler valves downstream of the following isolation valves.	Hoses Attached	Sprinklers Restored to Original State
	145	/	/
	146	/	/
3.	Connect/Disconnect temporary hoses at Fire Hose Stations and Fire Hydrants.	Connected /	Disconnected /
	Section 6.35 Auxiliary Feedwater Pump House		
1.	Attach hoses to the fittings of the following sprinklers and connect to waste.		
	NOTE:		
	These hoses may be installed just prior to flushing in the designated area, and then removed immediately after completion, for use in the next area. In this way, the number of hoses can be minimized.		

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.35 Aux. Feedwater Pump House (Cont'd)		
		Hoses Attached	Sprinklers Restored to Original State
	152	/	/
	219	/	/
	149 (DWG. 1X4DB174-4)	/	/
2.	Connect/Disconnect temporary hoses at Fire Hose Stations and Fire Hydrants.	Connected /	Disconnected /
	Section 6.36 Turbine Bldg.		
1.	Attach hoses to the fittings of the following sprinklers and connect to waste.		
	NOTE:		
	These hoses may be installed just prior to flushing in the designated area, and then removed immediately after completion, for use in the the next area. In this way, the number of hoses can be minimized.		

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
FLUSHING MODIFICATIONS		
Section 6.36 Turbine Bldg. (Cont'd)		
West pipe sprinklers downstream of the following isolation valves.	Hoses Attached	Sprinklers Restored to Original State
900	___/___	___/___
901	___/___	___/___
902	___/___	___/___
903	___/___	___/___
899	___/___	___/___
529	___/___	___/___
528	___/___	___/___
527	___/___	___/___
551	___/___	___/___
552	___/___	___/___
553	___/___	___/___
522	___/___	___/___
556	___/___	___/___
557	___/___	___/___

ATTACHMENT 10.3

TEMPORARY MODIFICATION STATUS

	MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
	FLUSHING MODIFICATIONS		
	Section 6.36 Turbine Bldg. (Cont'd)		
		Hoses Attached	Sprinklers Restored to Original State
	558	___/___	___/___
	540	___/___	___/___
	541	___/___	___/___
	542	___/___	___/___
	543	___/___	___/___
	544	___/___	___/___
	545 (DWG. 1X4DB173)	___/___	___/___
2.	Remove/Restore valve bonnets and install adapter with temporary line to waste. Temporary line to have an in-line valve	Internals Removed	Valves Restored
	513	___/___	___/___
	516 (DWG. 1X4DB173)	___/___	___/___

ATTACHMENT 10.3

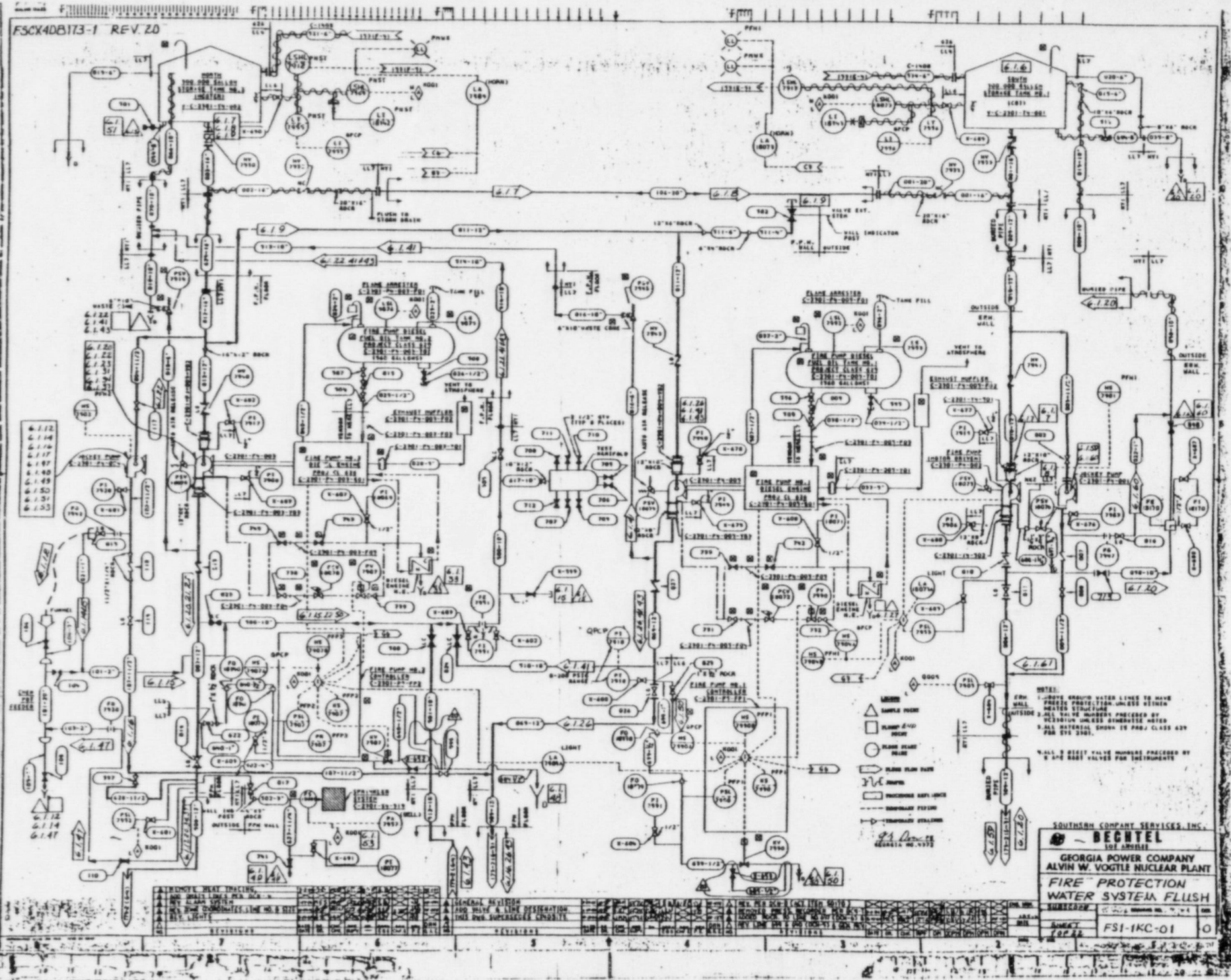
TEMPORARY MODIFICATION STATUS

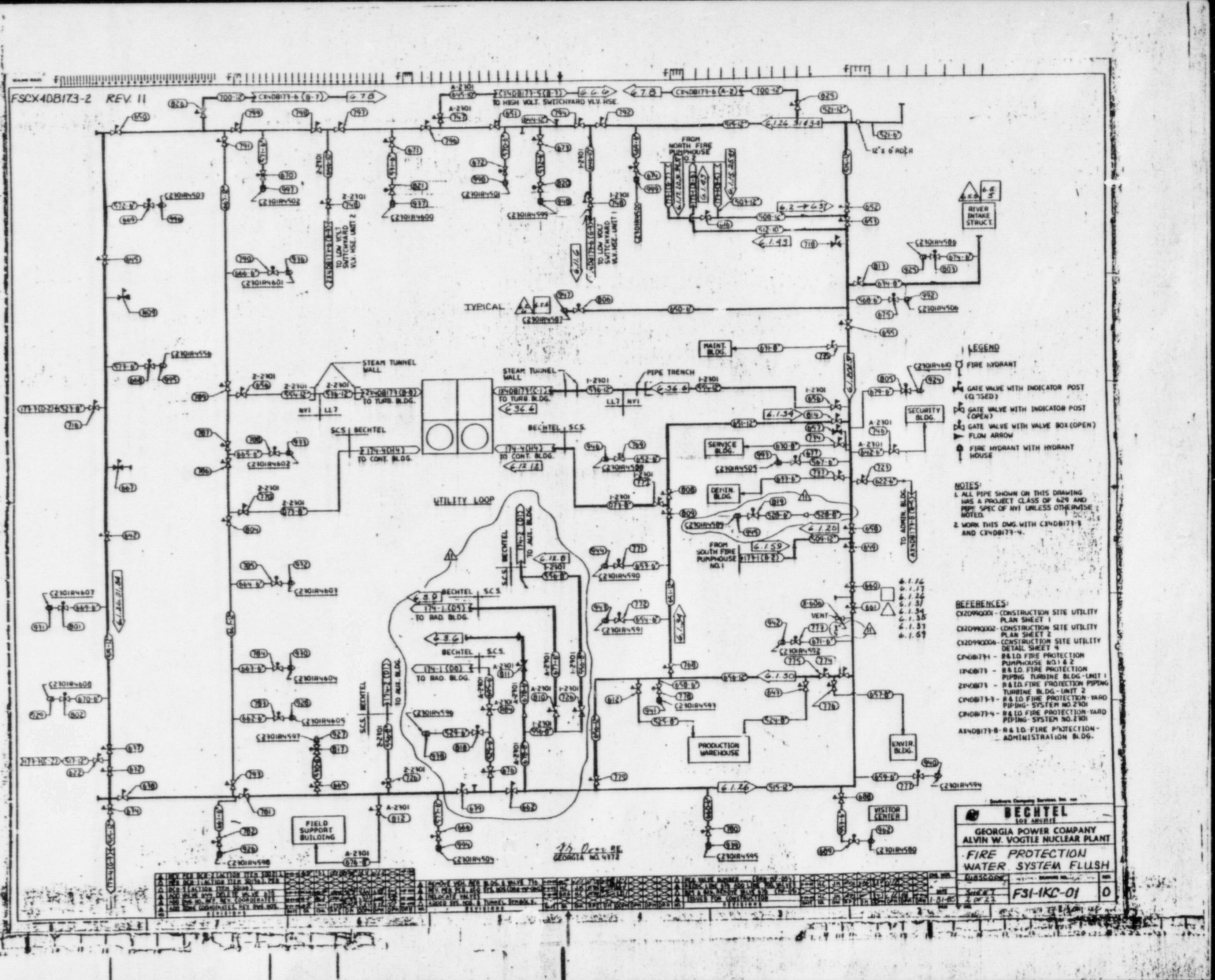
MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
FLUSHING MODIFICATIONS		
Section 6.36 Turbine Bldg. (Cont'd)		
3. Remove/Restore valve bonnets and install adapter with temporary line to waste. Temporary line to have in-line valve. Only in the event that the deluge system is already installed, is it necessary to plug the line downstream of these valves.	Internals Removed	Valves Restored
523	____/____	____/____
524 (DWG. 1X4DB173)	____/____	____/____
4. Attach air hose connection to adapter on removed bonnet of valve 685.		
(DWG. 1X4DB173, D-8)	Hose Installed	Hose Removed
Line 680-4"	____/____	____/____
5. Connect/Disconnect temporary hoses at Fire Hose Stations and Fire Hydrants.	Connected ____/____	Disconnected ____/____

ATTACHMENT 10.3

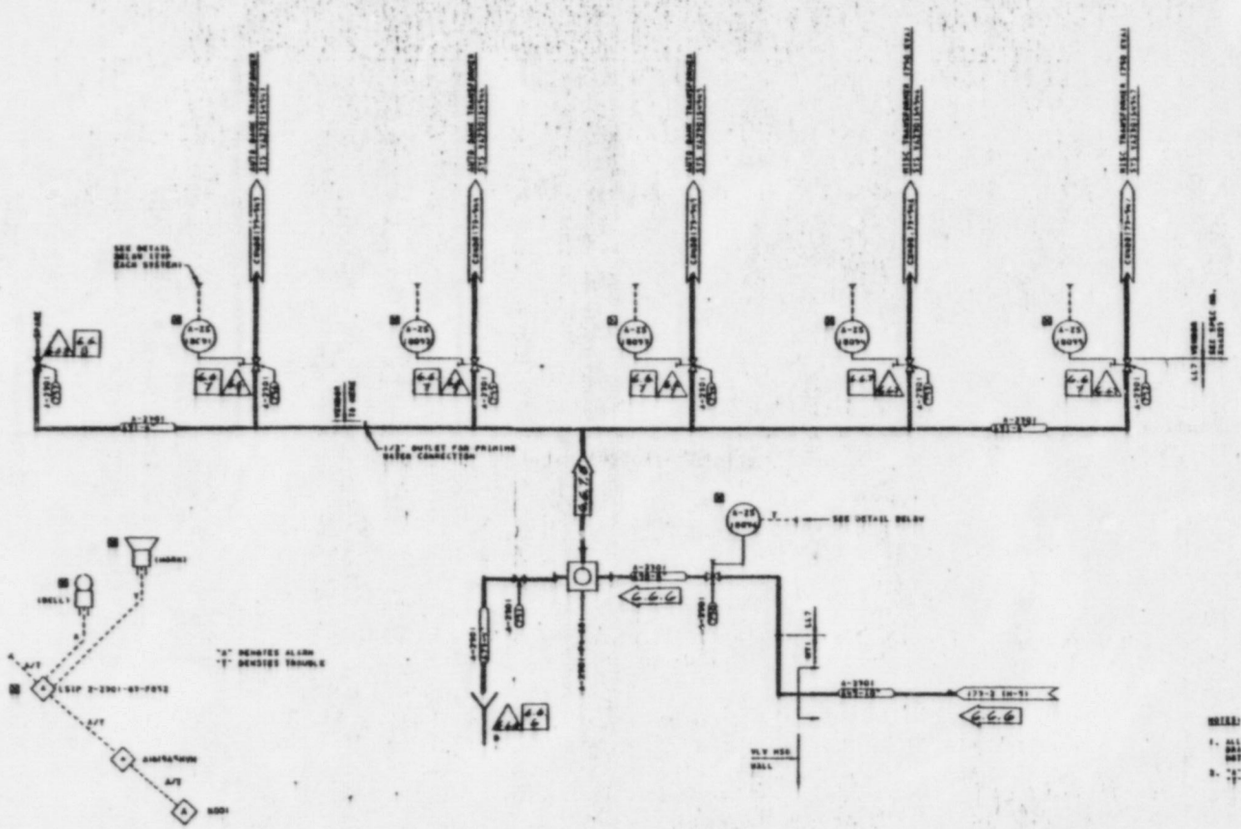
TEMPORARY MODIFICATION STATUS

MODIFICATION/RESTORATION	STATUS BEFORE FLUSHING	STATUS AFTER FLUSHING
TEMPORARY INSTRUMENTATION		
None Required		


FSCX4DB173-1 REV. 20
SOUTHERN COMPANY SERVICES, INC.
BECHTEL
SAN FRANCISCO
GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT
FIRE PROTECTION
WATER SYSTEM FLUSH
FS1-1KC-01
0


FSCX4DB173-2 REV. 11
LEGEND
FIRE HYDRANT
GATE VALVE WITH INDICATOR POST (CLOSED)
GATE VALVE WITH INDICATOR POST (OPEN)
GATE VALVE WITH VALVE BOX (OPEN)
FLOW ARROW
FIRE HYDRANT WITH HYDRANT HOUSE
NOTES:
1. ALL PIPE SHOWN ON THIS DRAWING HAS A PROJECT CLASS OF 629 AND PIPE SPEC OF NY1 UNLESS OTHERWISE NOTED.
2. WORK THIS DWG. WITH C2N4DB173-3 AND C2N4DB173-4.
REFERENCES:
C12099D001 - CONSTRUCTION SITE UTILITY PLAN SHEET 1
C12099D002 - CONSTRUCTION SITE UTILITY PLAN SHEET 2
C12099D006 - CONSTRUCTION SITE UTILITY DETAIL SHEET 4
C2N4DB171 - P&I.D. FIRE PROTECTION PUMPHOUSE NO.1 & 2
1N4DB173 - P&I.D. FIRE PROTECTION PIPING TURBINE BLDG.-UNIT 1
2N4DB173 - P&I.D. FIRE PROTECTION PIPING TURBINE BLDG.-UNIT 2
C2N4DB173-3 - P&I.D. FIRE PROTECTION-YARD PIPING-SYSTEM NO.2101
C2N4DB173-4 - P&I.D. FIRE PROTECTION-YARD PIPING-SYSTEM NO.2100
A2N4DB173-B - P&I.D. FIRE PROTECTION-ADMINISTRATION BLDG.
UTILITY LOOP
TYPICAL
STEAM TUNNEL WALL
PIPE TRENCH
TO TURB. BLDG.
TO CONT. BLDG.
TO AUX. BLDG.
TO RAD. BLDG.
FROM NORTH FIRE PUMPHOUSE NO.2
FROM SOUTH FIRE PUMPHOUSE NO.1
TO HIGH VOLT. SWITCHYARD VLV. HSE.
TO LOW VOLT SWITCHYARD VLV. HSE. UNIT 1
TO LOW VOLT SWITCHYARD VLV. HSE. UNIT 2
RIVER INTAKE STRUCT.
MAINT. BLDG.
SECURITY BLDG.
SERVICE BLDG.
DEFEN. BLDG.
ADMIN. BLDG.
ENVIR. BLDG.
PRODUCTION WAREHOUSE
VISITOR CENTER
FIELD SUPPORT BUILDING
VENT
BECHTEL
GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT
FIRE PROTECTION WATER SYSTEM FLUSH
F31-1KC-01
0
SHEET 2 OF 22

FSCX4D8173-5 REV. 4



ANNUNCIATION DETAIL
(TYPICAL EACH SYSTEM)

HIGH VOLTAGE SWITCHYARD
VALVEHOUSE NO. 1

P.E. DOAR P.E.
GEORGIA NO. 6972

SOUTHERN COMPANY SERVICES, INC.

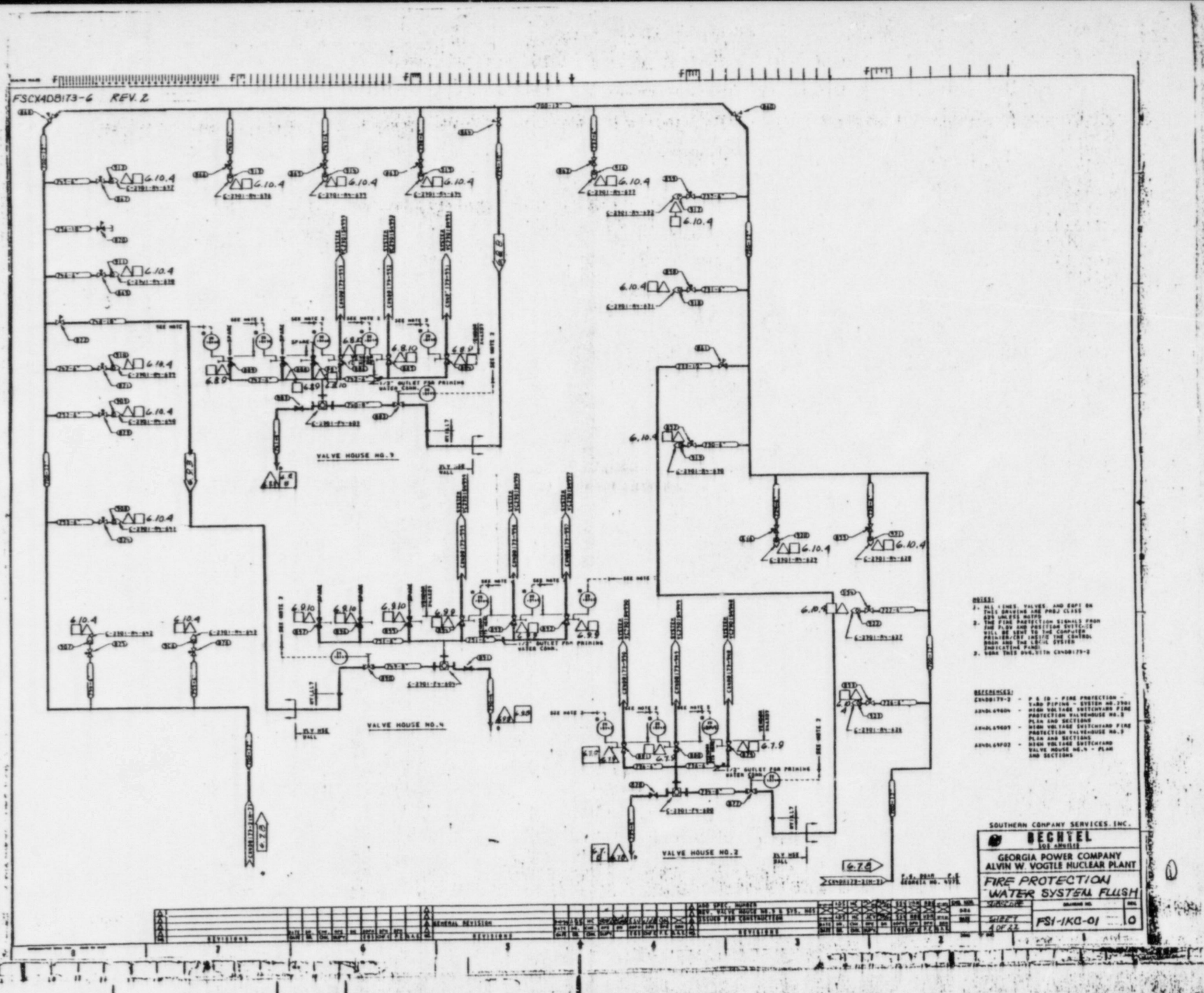
BECHTEL
LOS ANGELES

GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT

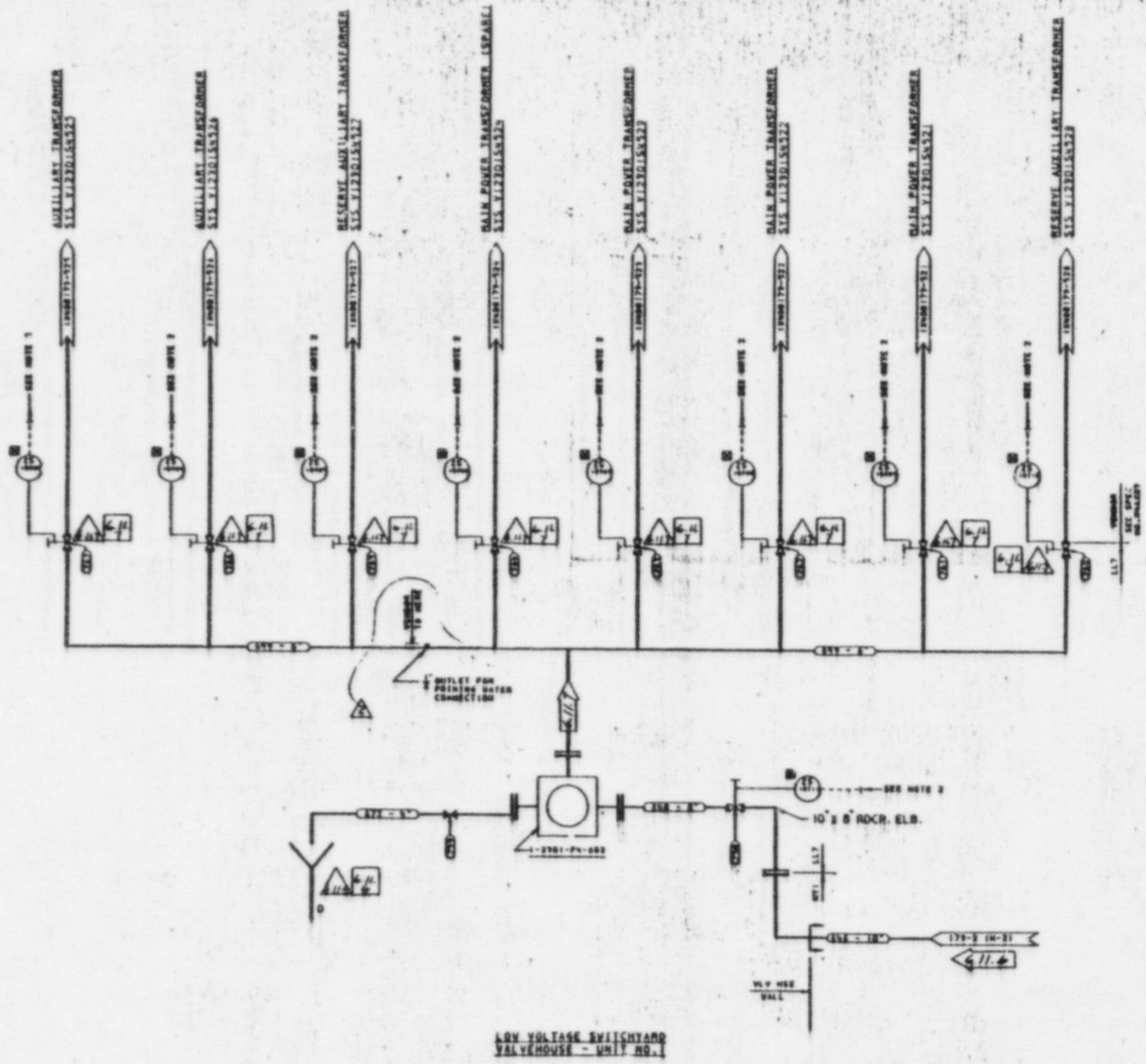
FIRE PROTECTION
WATER SYSTEM FLUSH

DRAWING NO. FS1-1KC-01 REV. 0

SHEET 3 OF 22


FSCX4DB1T3-6 REV. 2
VALVE HOUSE NO. 1
VALVE HOUSE NO. 4
VALVE HOUSE NO. 3
SOUTHERN COMPANY SERVICES, INC.
BECHTEL
SAN FRANCISCO
GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT
FIRE PROTECTION WATER SYSTEM FLUSH
FSI-1KC-01
0

FSIX4DB173-6 REV. 2



NOTES:

1. ALL LINES, VALVES & EQUIP. ON THIS DRAWING ARE PROJ CLASS 439 UNLESS NOTED.
2. THE FIRE PROTECTION SIGNALS FROM THE FLOW AND POSITION SWITCHES WILL BE SENT TO THE COMPUTER PRINTER/CRT INSIDE THE CONTROL ROOM AND THE LOCAL SYSTEM INDICATING PANEL.

REFERENCES:

SKV-5906 - LOW VOLTAGE SWITCHYARD - FIRE PROT PIPING - GEN ARRG T - PLAN
1X4DL67409 - LOW VOLTAGE SWITCHYARD - FIRE PROT VALVE HOUSE - UNIT NO. 1 - PLAN & SECTIONS

REVISIONS
REPOSITIONED DWG. ADDED ALARMS, PRESS SWITCHES, NOTE 2 & SYS REV.
ISSUED FOR CONSTRUCTION
GEN. REV. AND 1/2" OUT PER DCN-1

SOUTHERN COMPANY SERVICES, INC.

BECHTEL
LOS ANGELES

GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT

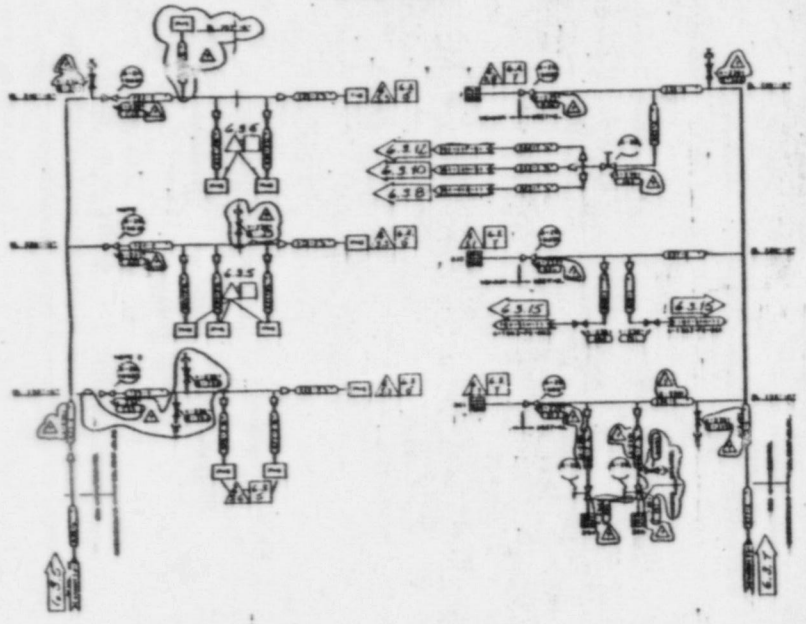
FIRE PROTECTION
WATER SYSTEM FLUSH

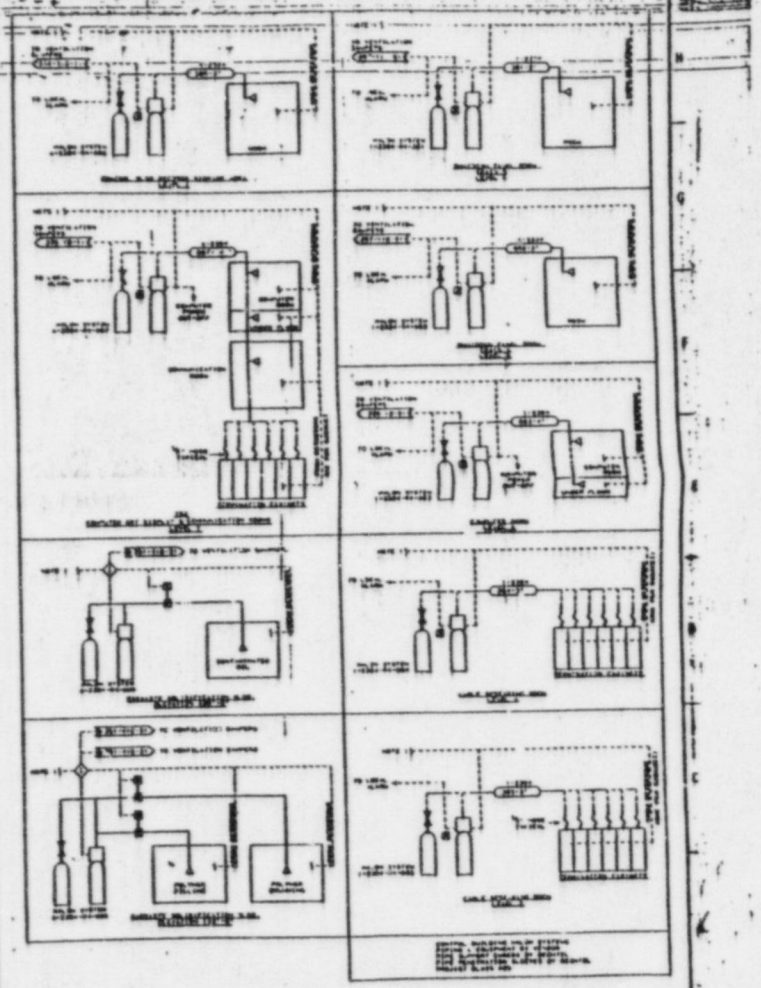
SHEET 5 of 22

FS1-1KC-01 0

(5)

F31X4DB174-1 REV. T





BECHTEL

GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT
FIRE PROTECTION
WATER SYSTEM FLUSH

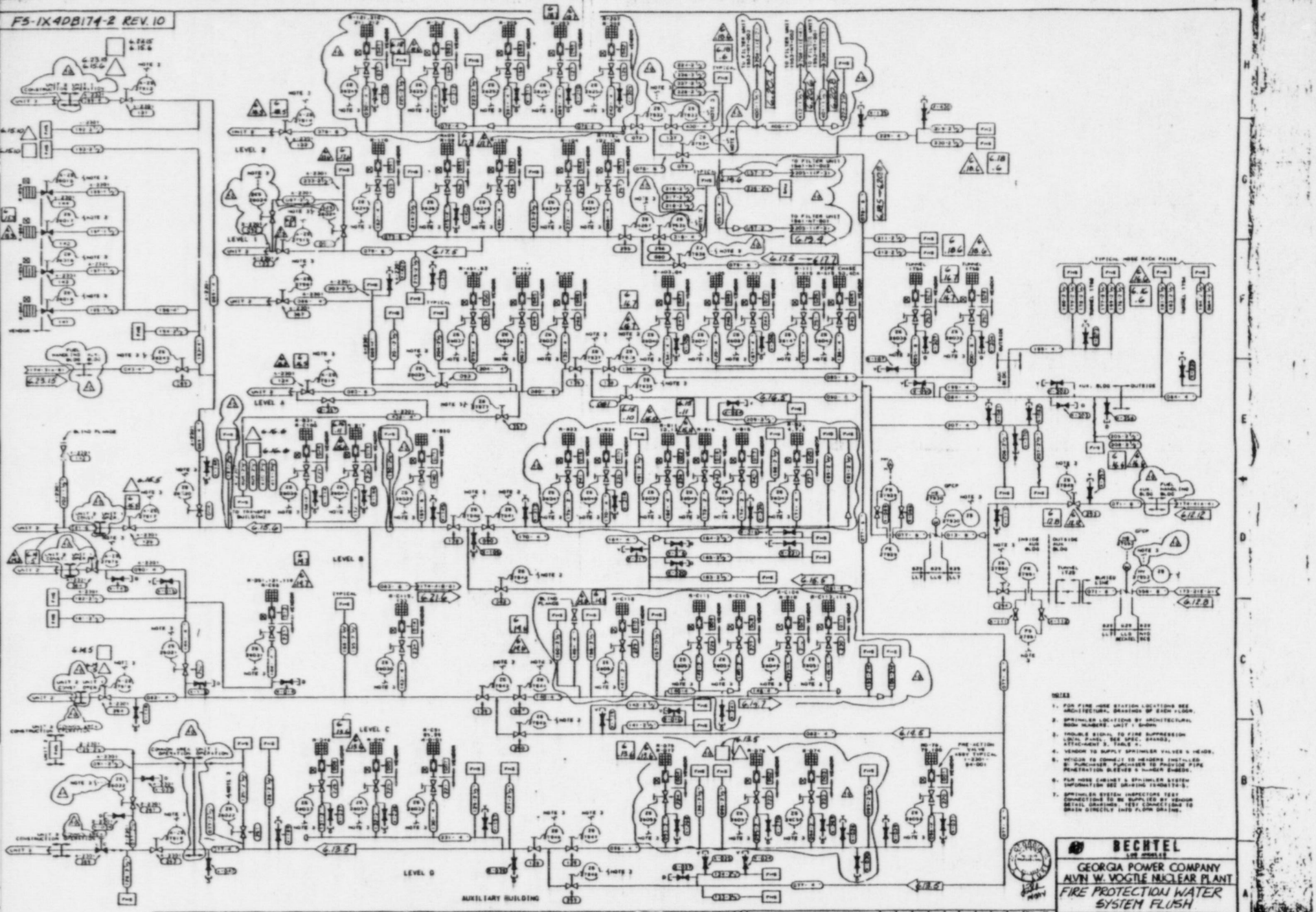
DRAWING NO. FS1-1KC-01 REV. 0

I CERTIFY THAT THE SPACE CONTAINED ON THIS FRAME WAS MADE IN THE NORMAL AND REGULAR COURSE OF BUSINESS OF THE DATE STATED BELOW AND THAT IT IS AN ACCURATE REPRODUCTION OF THE DOCUMENT DIRECTED TO BE PHOTOGRAPHED.

2-24-82
DATE

16X

FS-1X4DB174-2 REV. 10



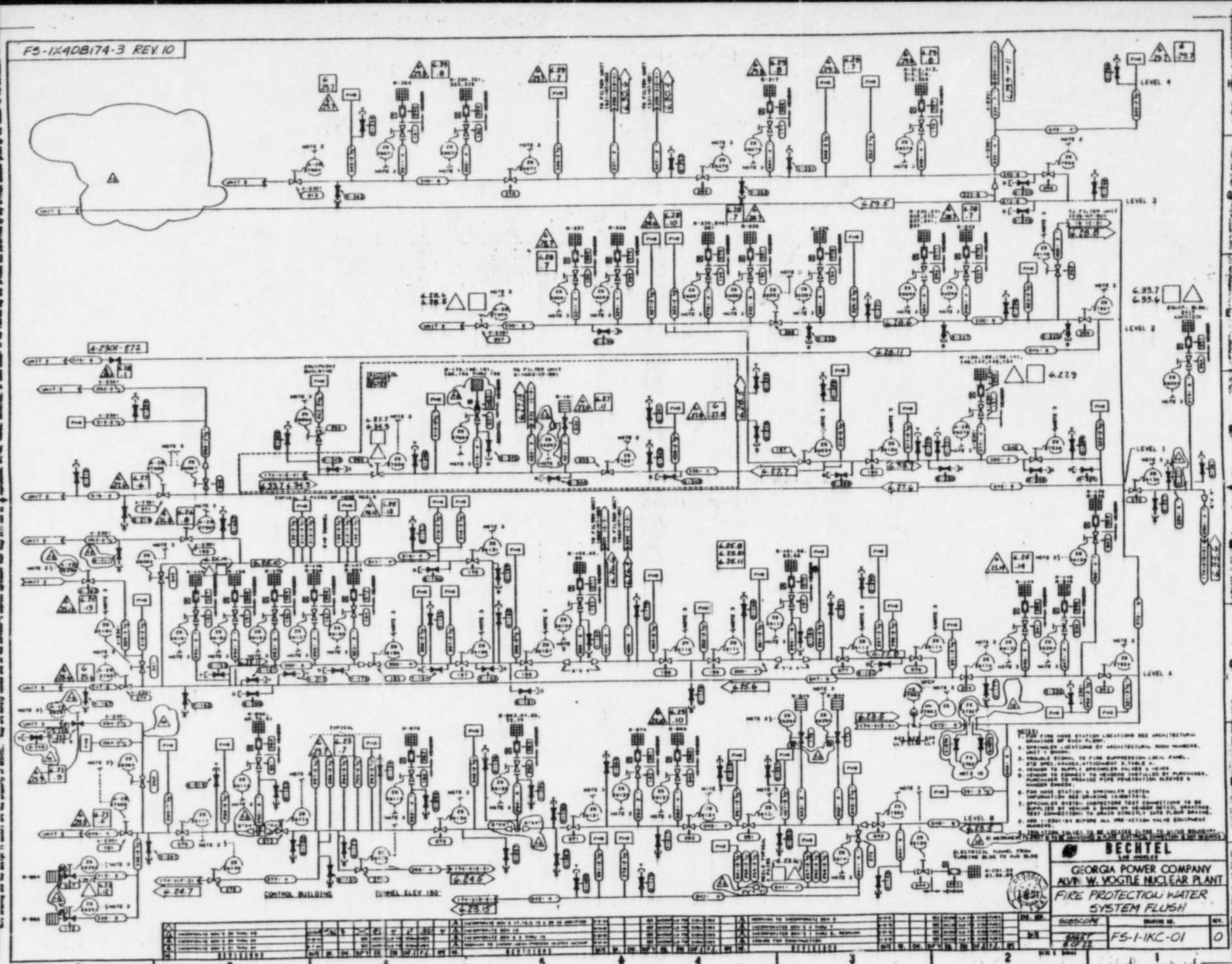
BECHTEL
SAN FRANCISCO

GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT
FIRE PROTECTION WATER SYSTEM FLUSH

SUBSCOPE | DRAWING NO. FS-1-1KC-01 | REV. 0
SHEET 1 OF 2

8 7 6 5 4 3 2 1
H G F E D C B A

FS-1X4DB174-3 REV. 10



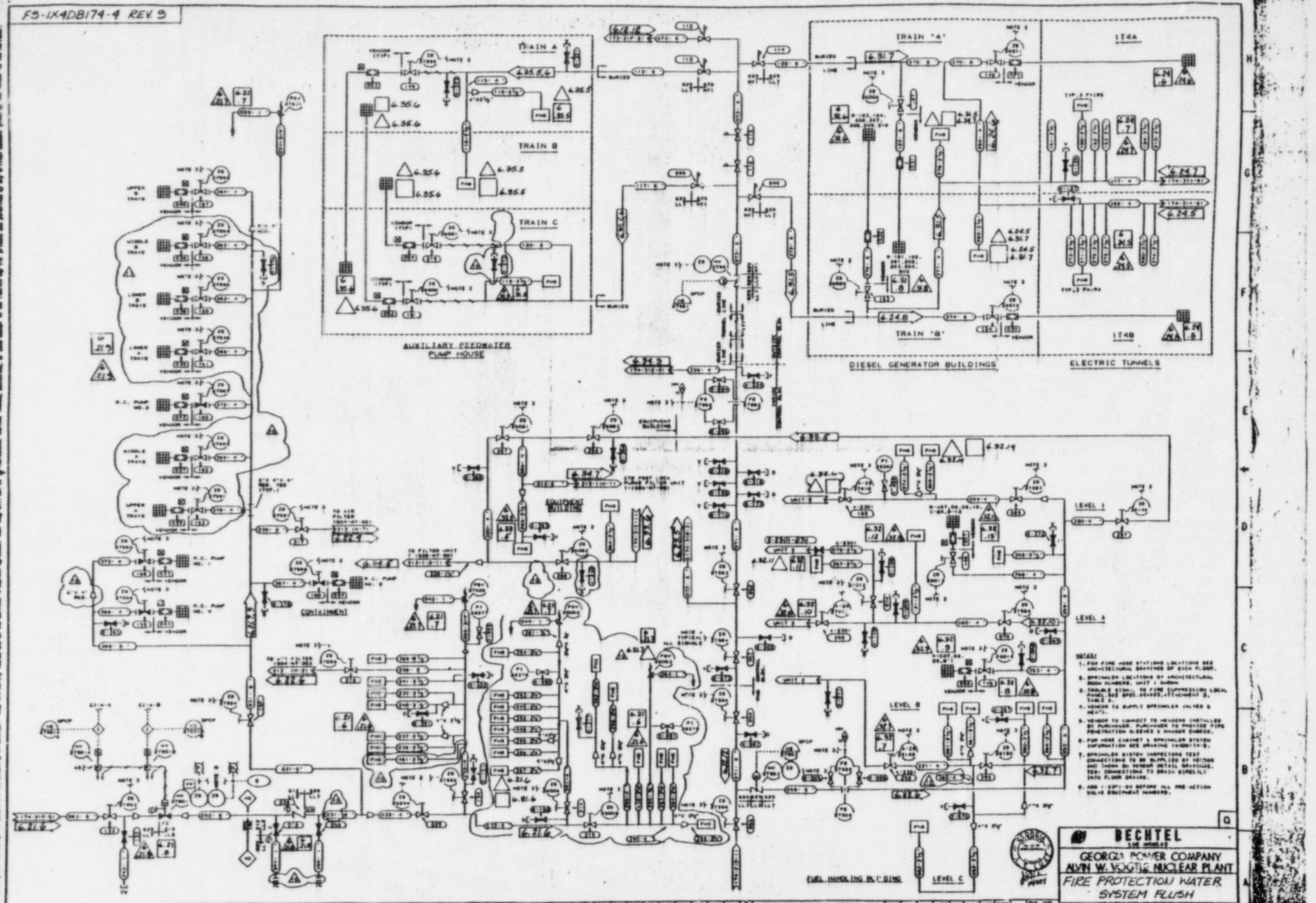
BECHTEL
SAN FRANCISCO

GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT

FIRE PROTECTION WATER SYSTEM FLUSH

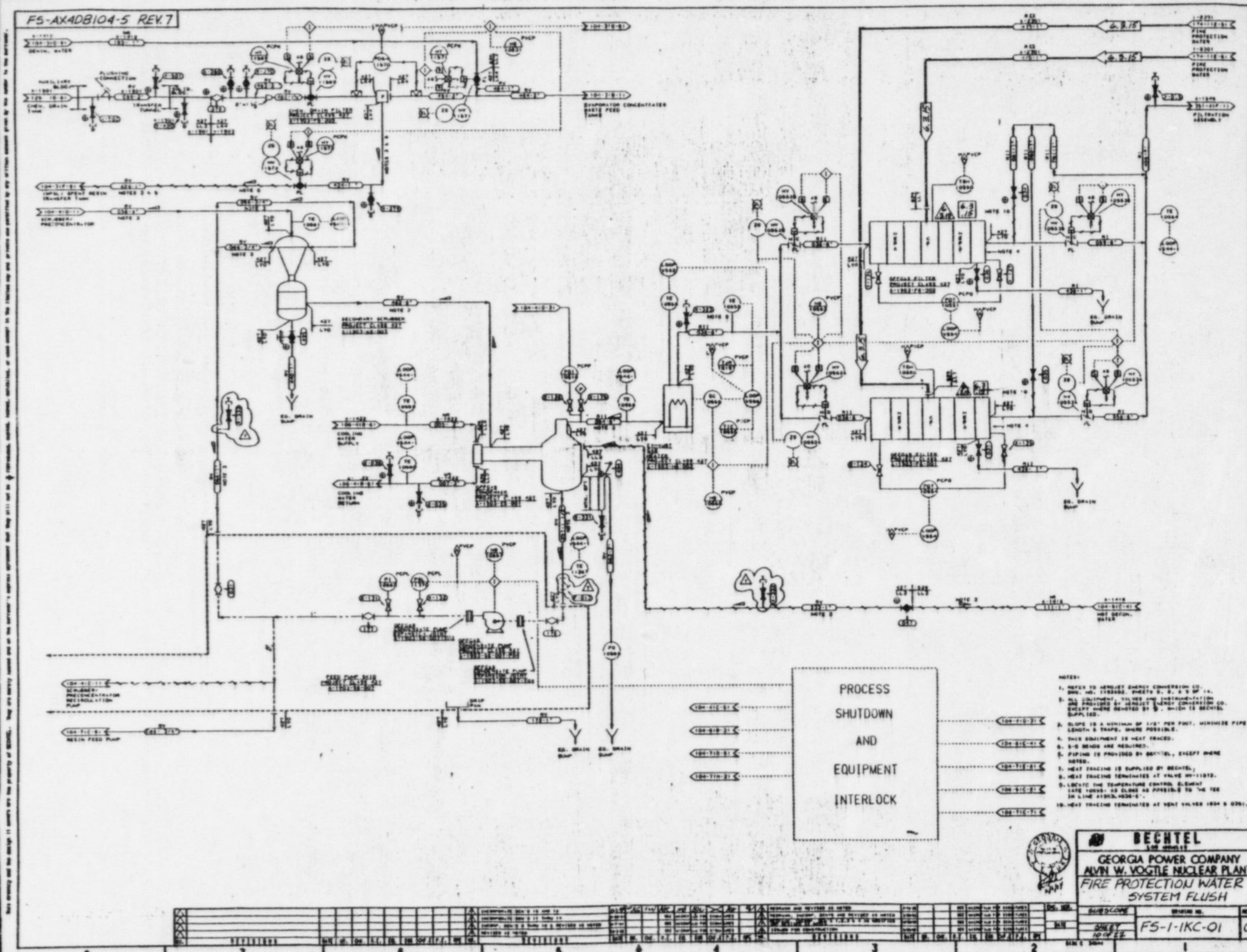
SUBSCRIPT	DRAWING NO.	REV.
UNIT 1 OF 2	FS-1-1KC-01	0

FS-1X4DB174-4 REV 9



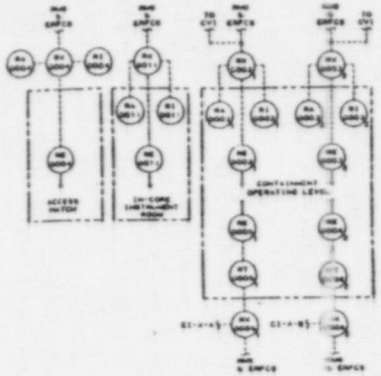
BECHTEL
GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT
FIRE PROTECTION WATER SYSTEM FLUSH

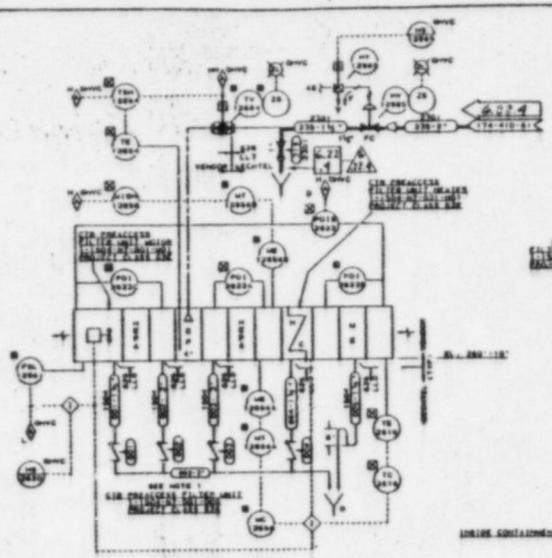
SHEET SCOPE | DRAWING NO. FS-1-1KC-01 | REV. 0

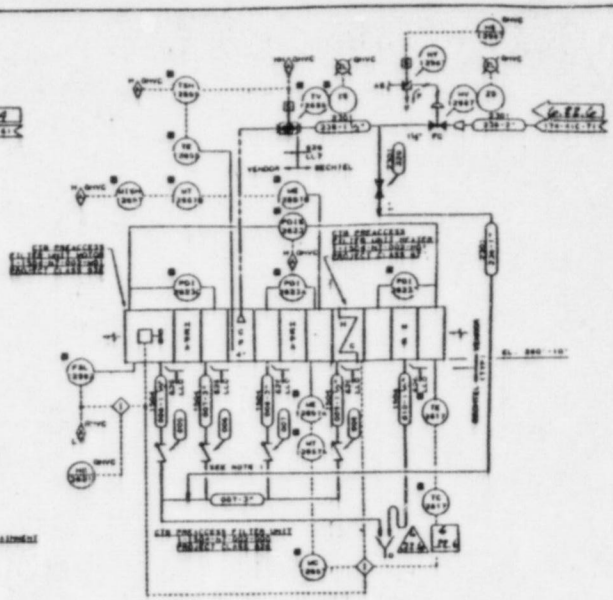


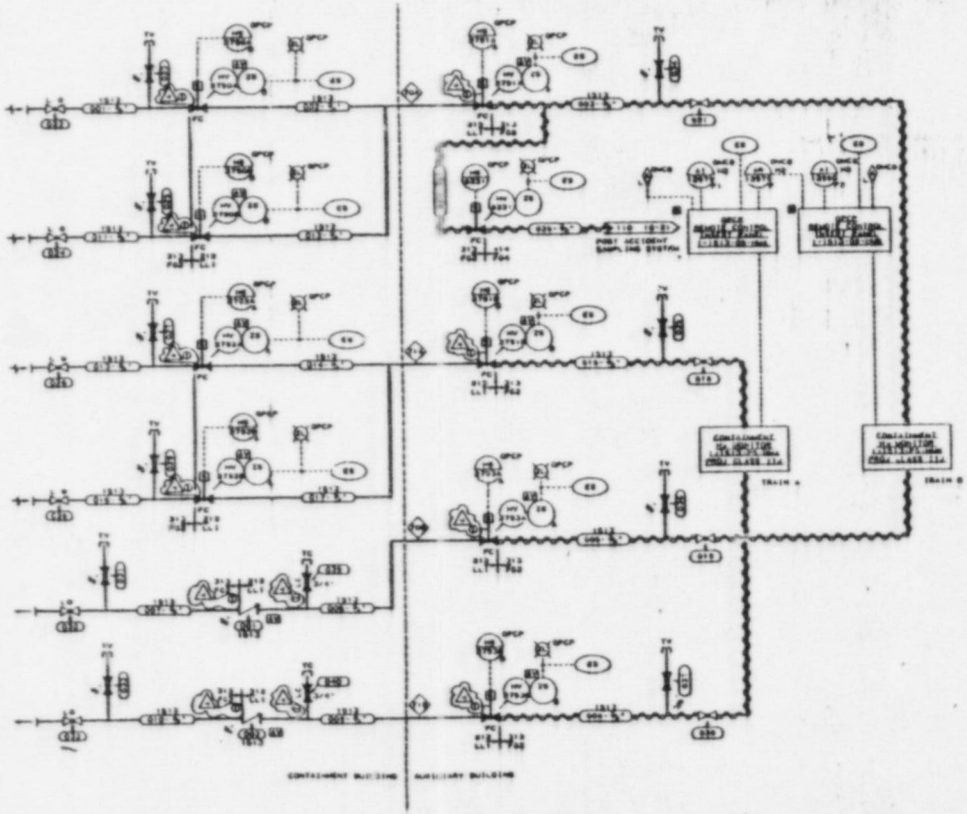
F5-AX4DB104-5 REV.7
PROCESS
SHUTDOWN
AND
EQUIPMENT
INTERLOCK
BECHTEL
GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT
FIRE PROTECTION WATER
SYSTEM FLUSH
F5-1-1KC-01
0

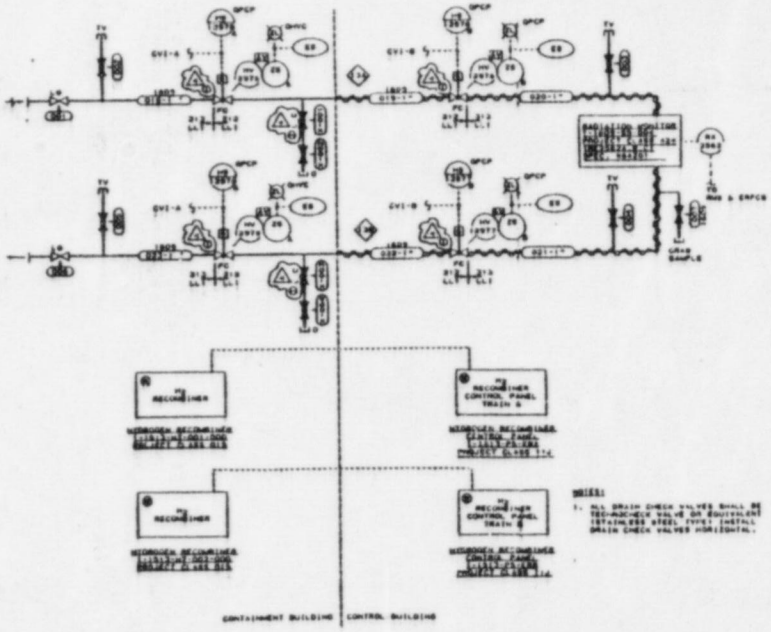
FS-1X4DB213-2 REV. 4











NOTES:

1. ALL DRAIN CHECK VALVES SHALL BE TECHNICHECK VALVE OR EQUIVALENT (STAINLESS STEEL TYPE) INSTALL DRAIN CHECK VALVES HORIZONTAL.

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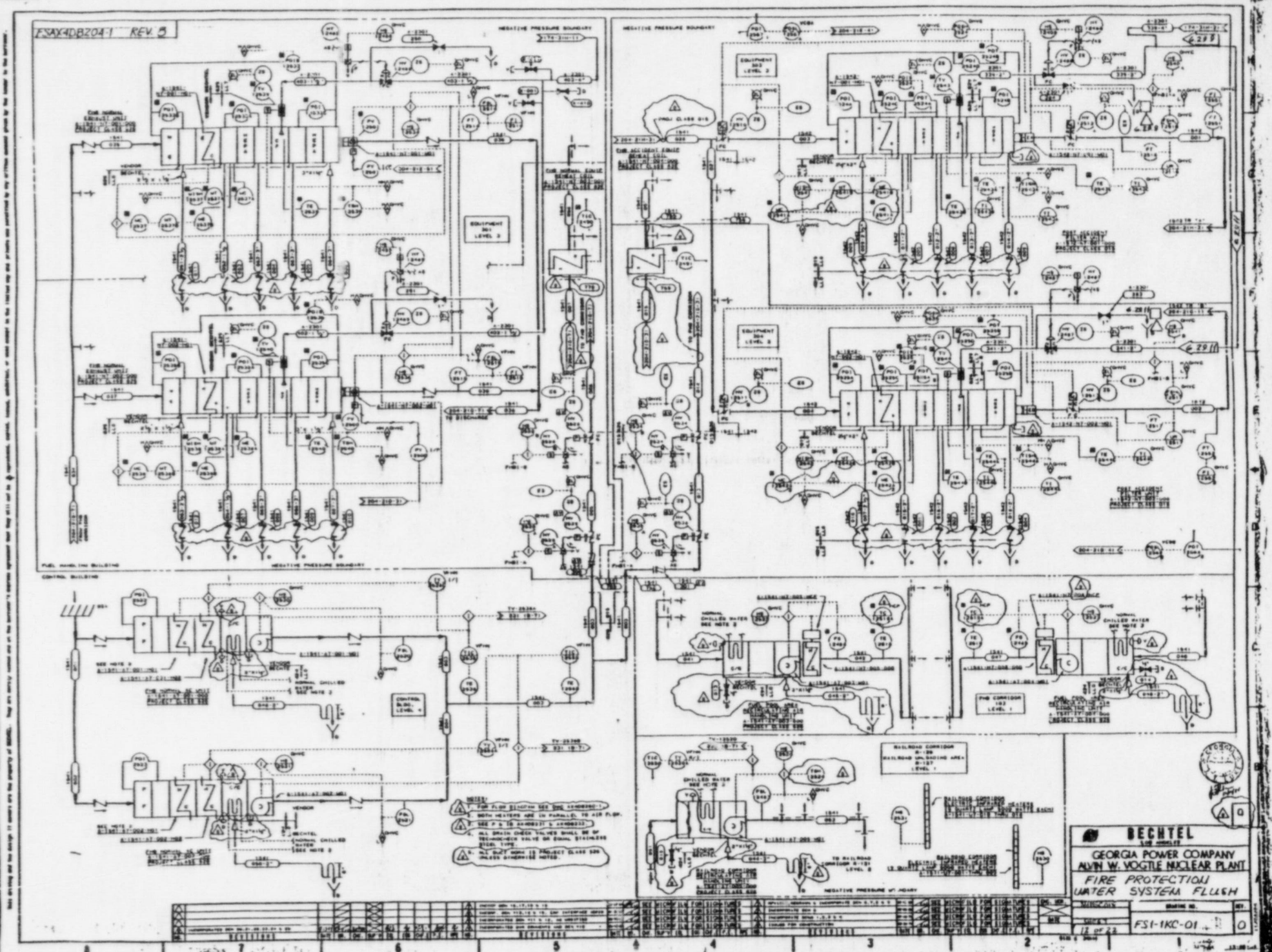
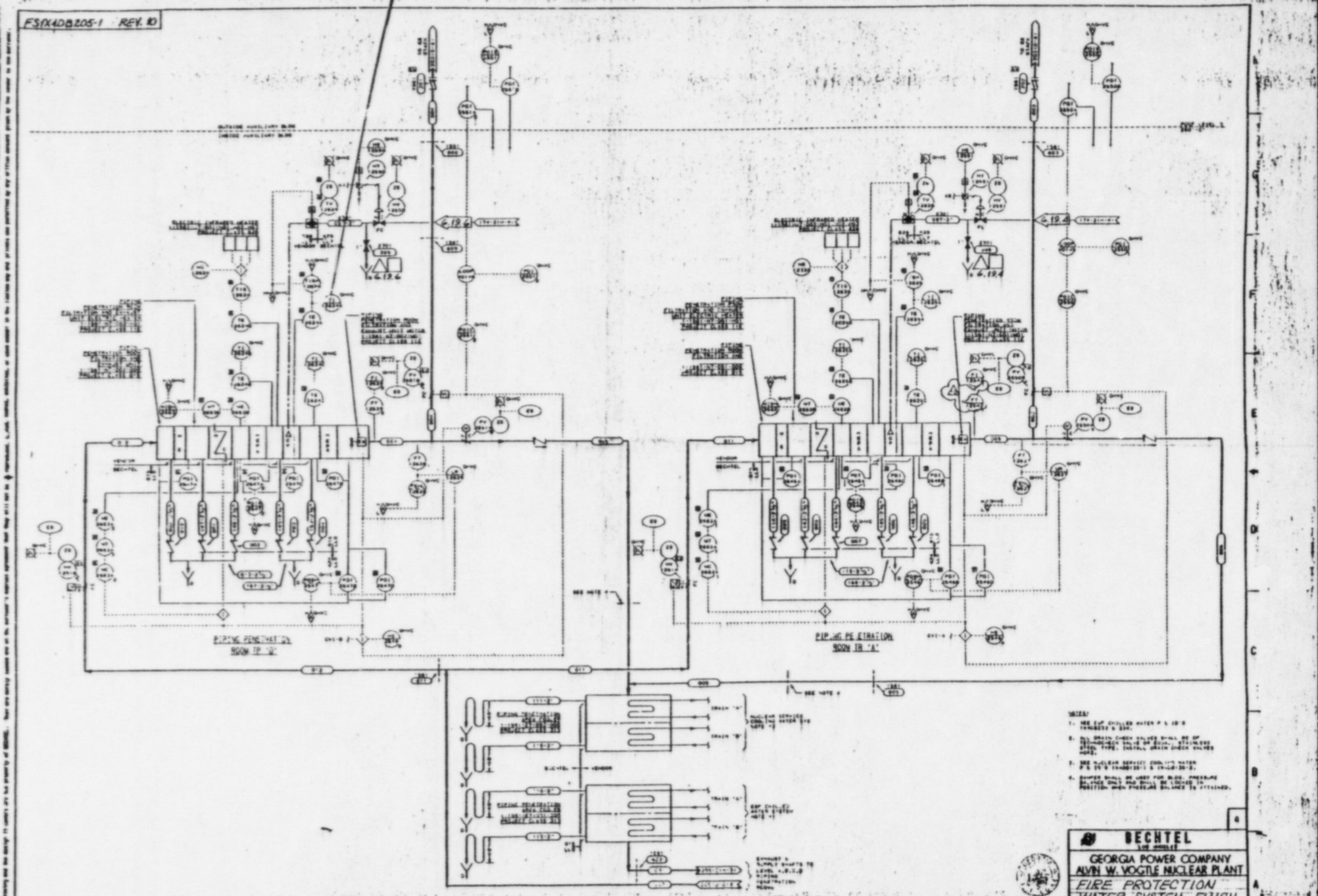
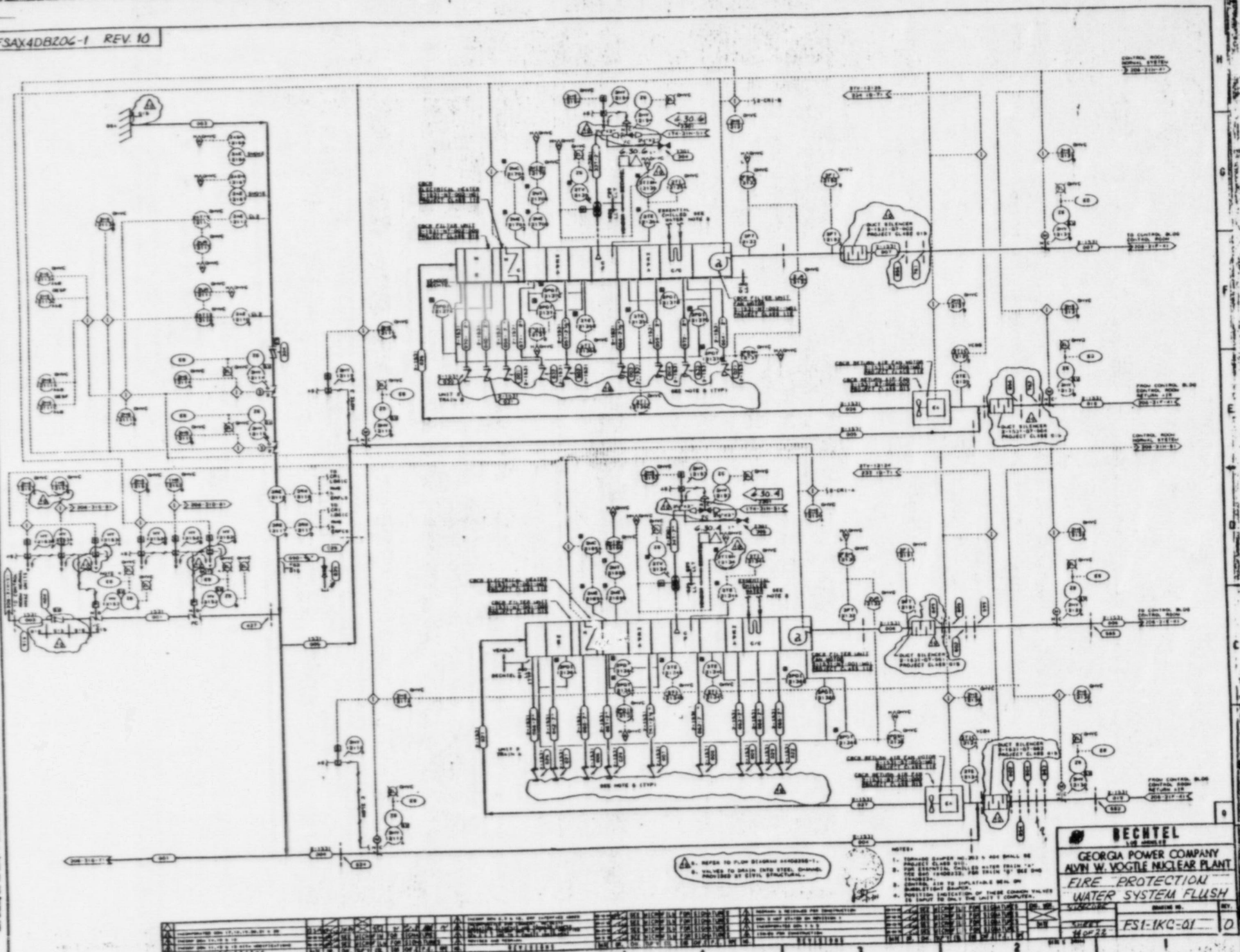
ALVIN W. VOGTLE NUCLEAR PLANT
FIRE PROTECTION WATER SYSTEM FLUSH

SHEET	DRAWING NO.	REV.
SHEET 11 OF 22	FS-1-1KC-01	0


FSAX4DB204-1 REV. 5
BECHTEL
GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT
FIRE PROTECTION
WATER SYSTEM FLUSH
FS1-1KC-01
0


FSIX4DB205-1 REV. 10
PIPING PENETRATION ROOM TP '2'
PIPING PENETRATION ROOM TR 'A'
BECHTEL
GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT
FIRE PROTECTION WATER SYSTEM FLUSH
FS1-1KC-01
0

FSAR4DB20G-1 REV. 10



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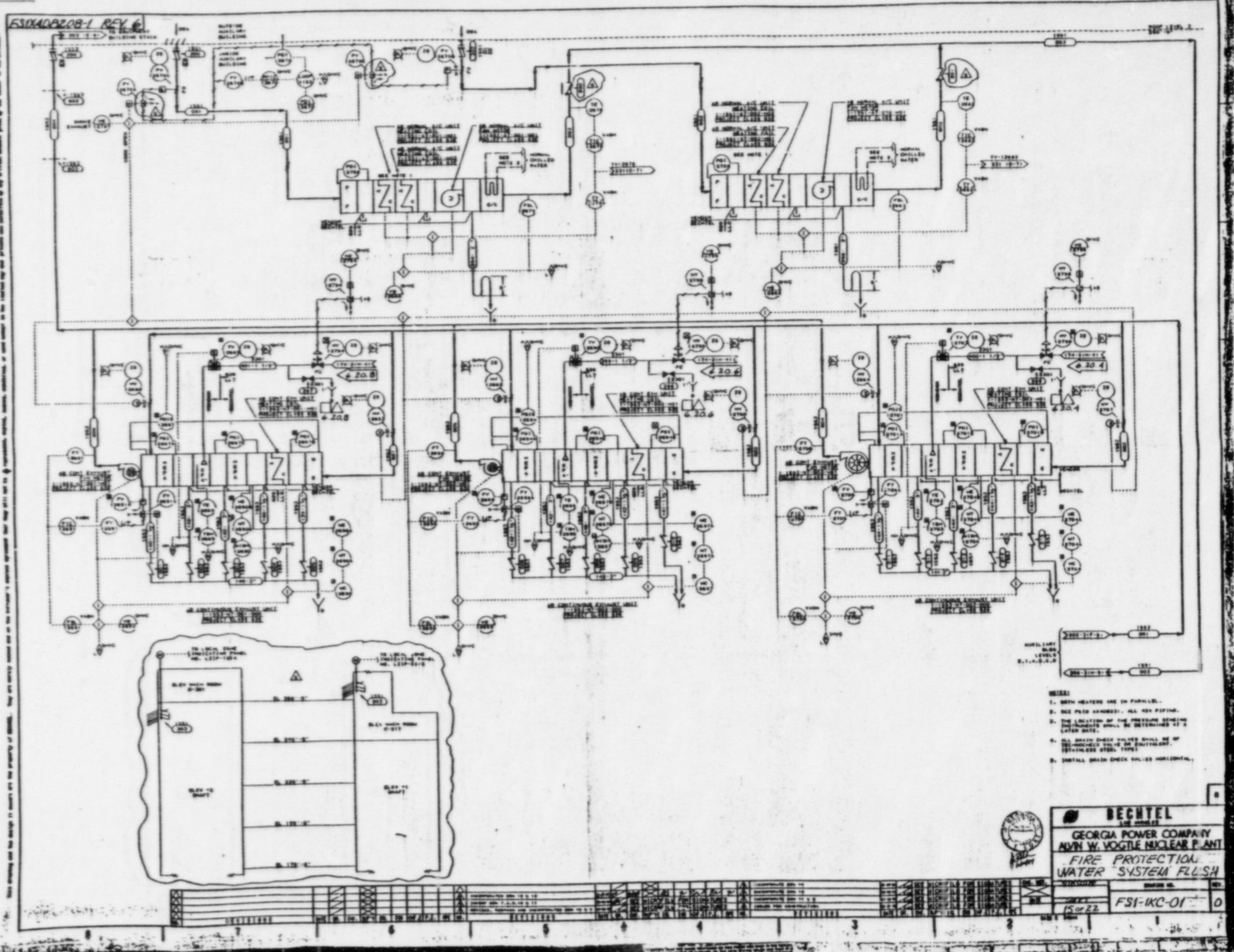
GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT

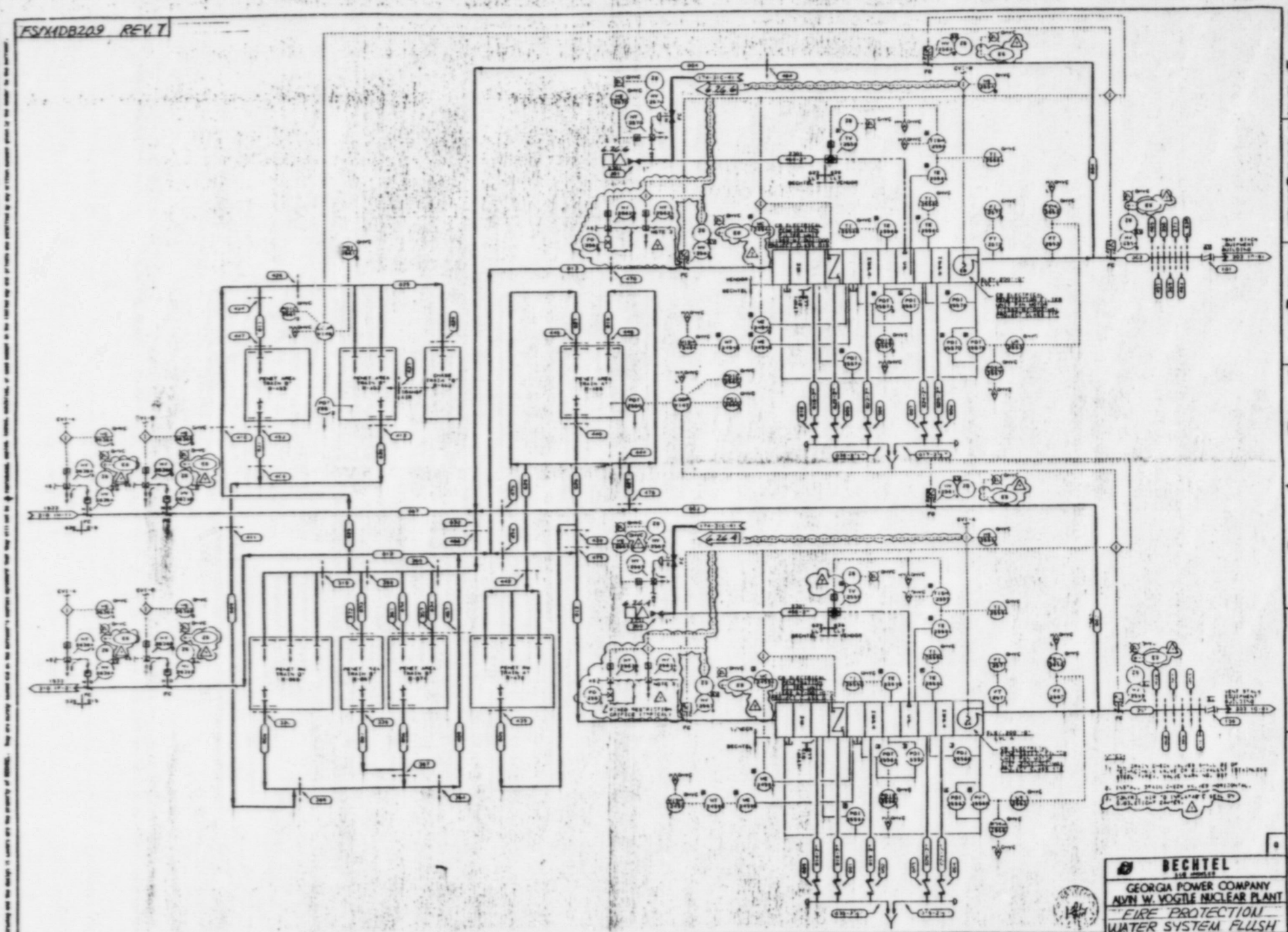
FIRE PROTECTION
WATER SYSTEM FLUSH

DRAWING NO. FS1-1KC-01 REV. 0

SHEET 10 OF 22


F31XAD8208-1 REV 6
NOTES:
1. BOTH HEATERS ARE IN PARALLEL.
BECHTEL
GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT
FIRE PROTECTION
WATER SYSTEM FLUSH
15 of 22
FS1-1KC-01
0

FSYA1DB209 REV. T



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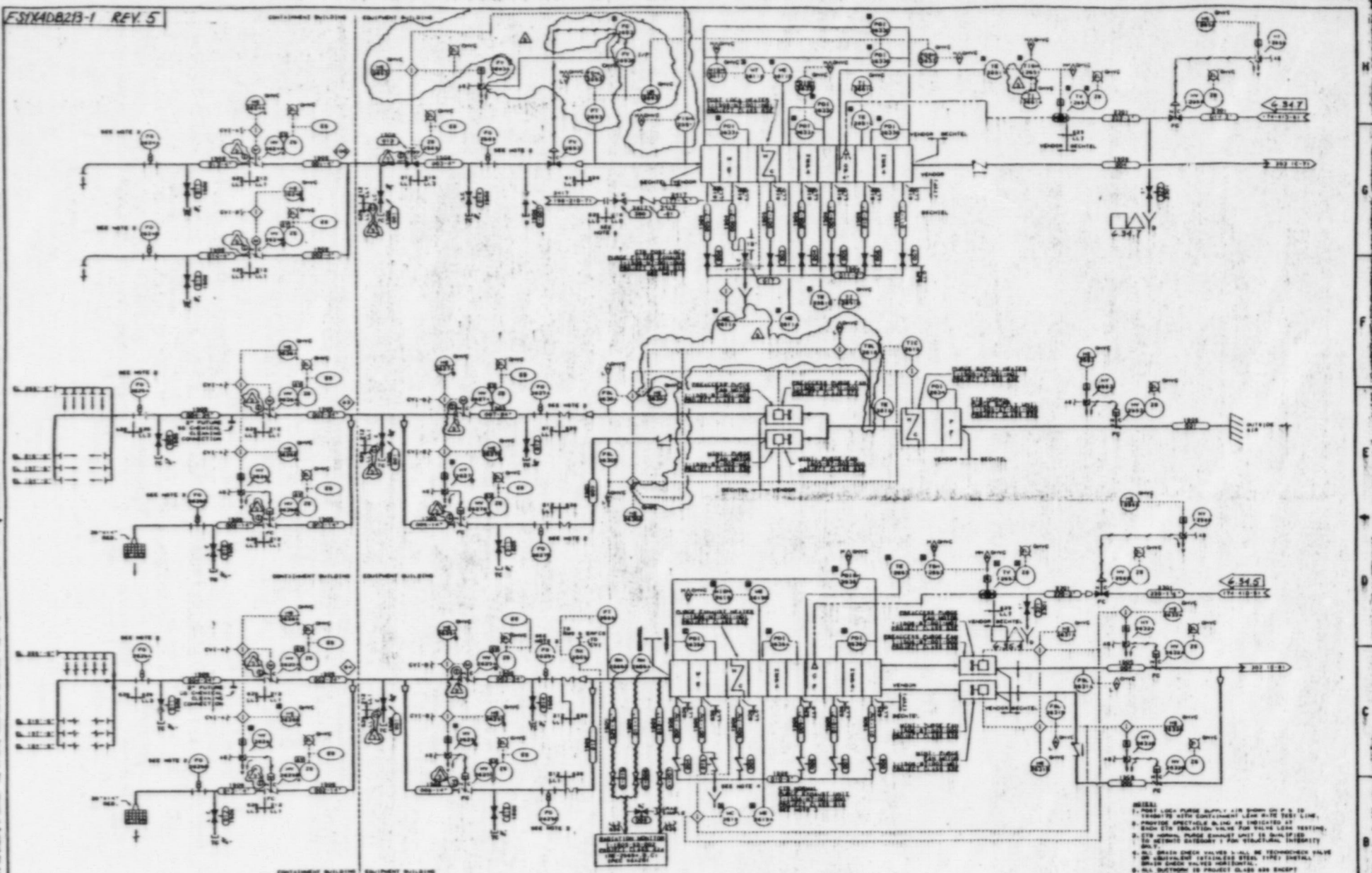
ALVIN W. VOGTLE NUCLEAR PLANT

FIRE PROTECTION
WATER SYSTEM FLUSH

FS1-1KC-01 0

F31X4DB213-1 REV. 5



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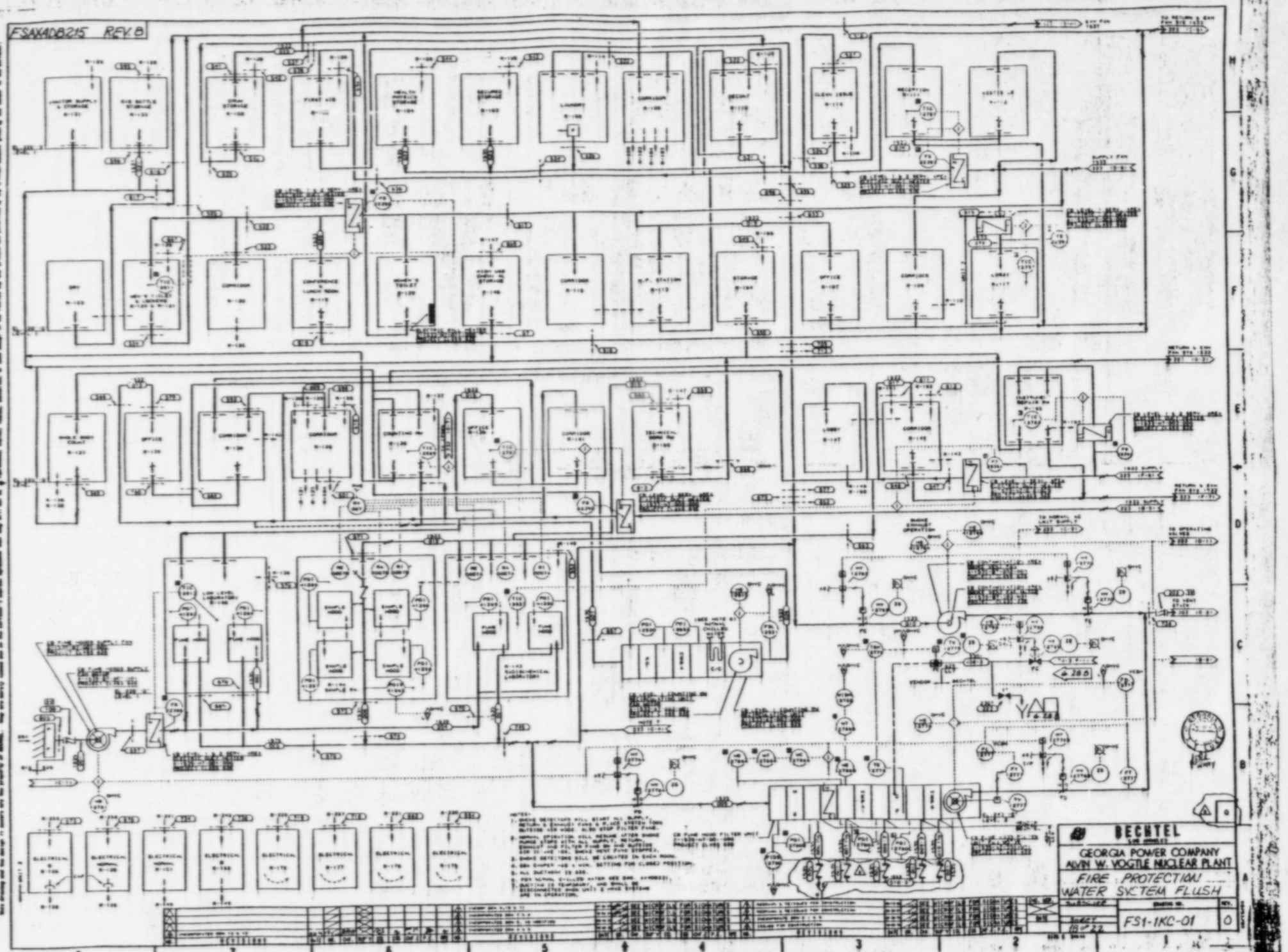
GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT
FIRE PROTECTION
WATER SYSTEM FLUSH

DRAWING NO. F31-1KC-01 REV. 0

FSAR ADB215 REV. 8



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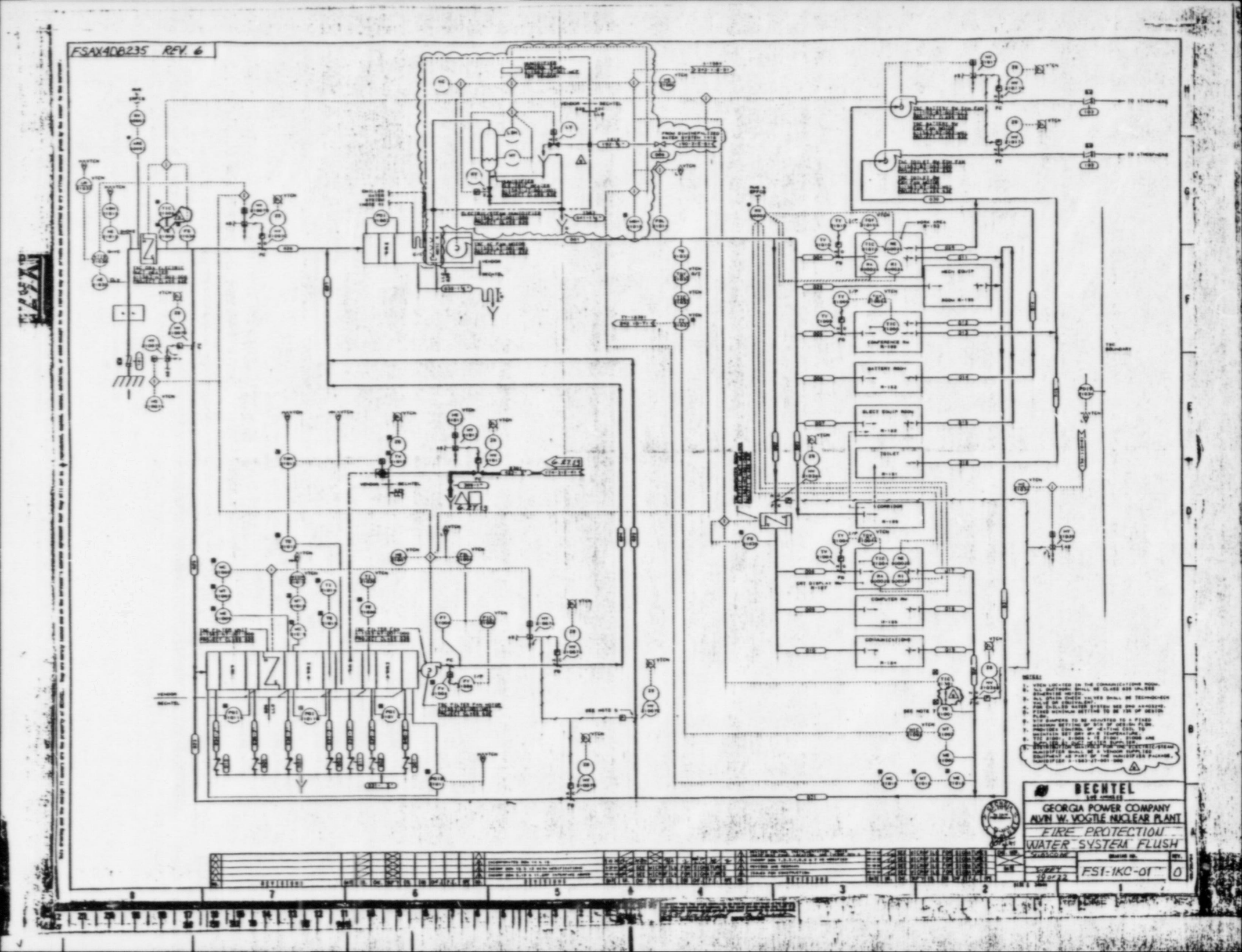
ALVIN W. VOGTLE NUCLEAR PLANT

FIRE PROTECTION WATER SYSTEM FLUSH

DRAWING NO. FS1-1KC-01 REV. 0

SHEET 16 OF 22

FSAX400235 REV. 6



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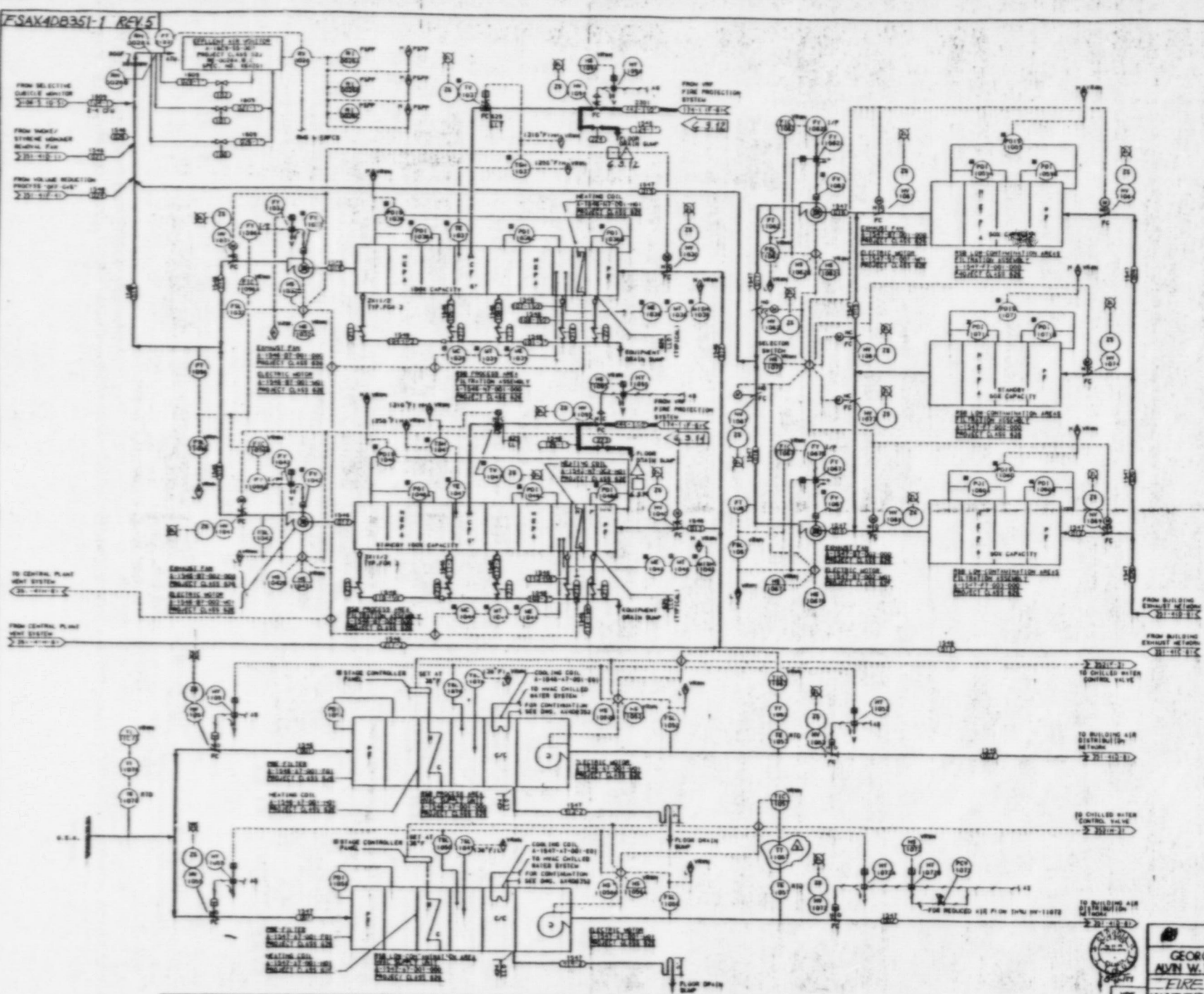
GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT

FIRE PROTECTION
WATER SYSTEM FLUSH

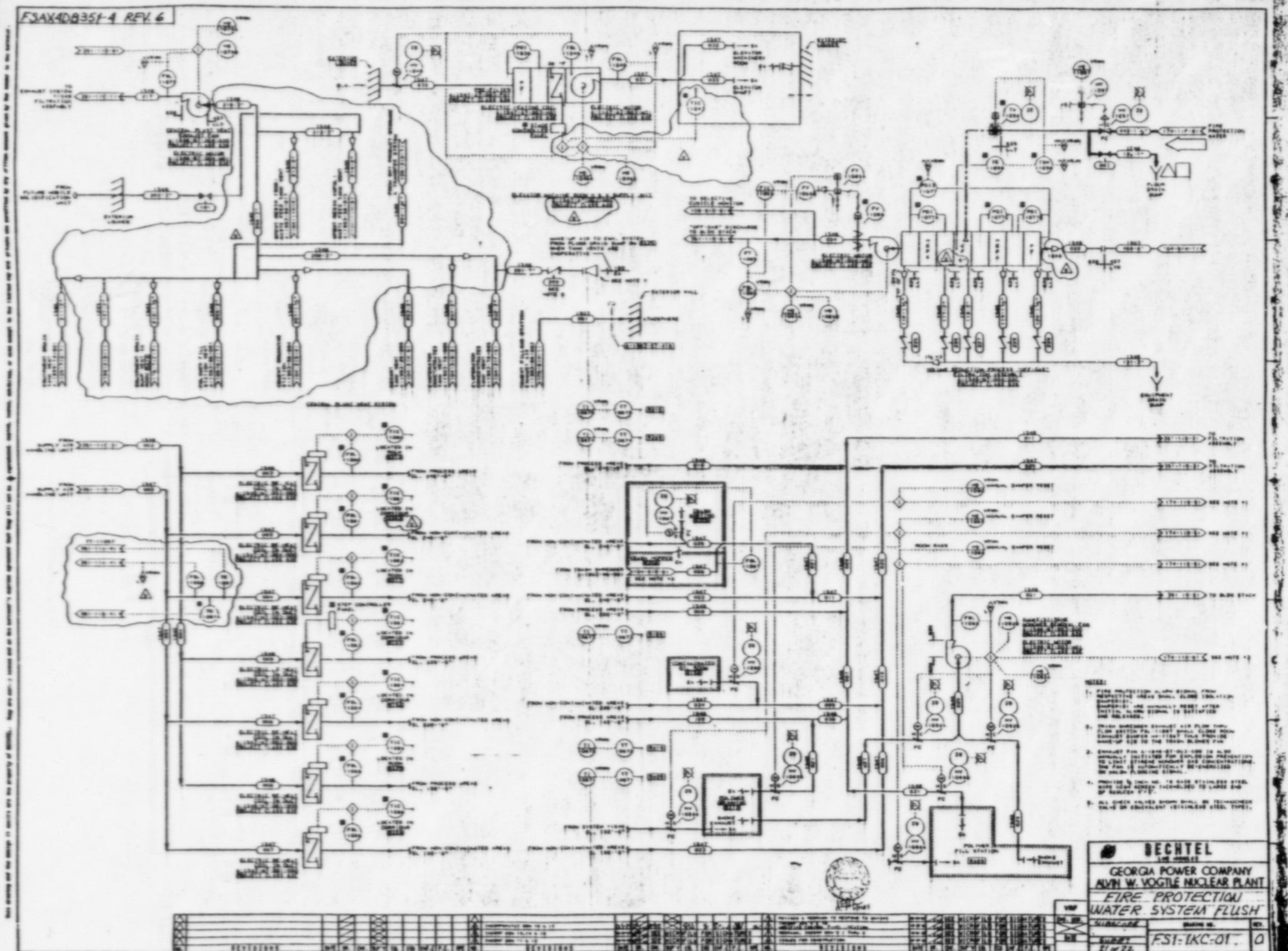
DRAWING NO. FS1-1KC-01 REV. 0

FSAX4DB351-1 REV 5



BECHTEL
GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT
FIRE PROTECTION WATER SYSTEM FLUSH
DRAWING NO. FS1-1KC-01 REV. 0

FSAR 40B351-4 REV. 6



BECHTEL

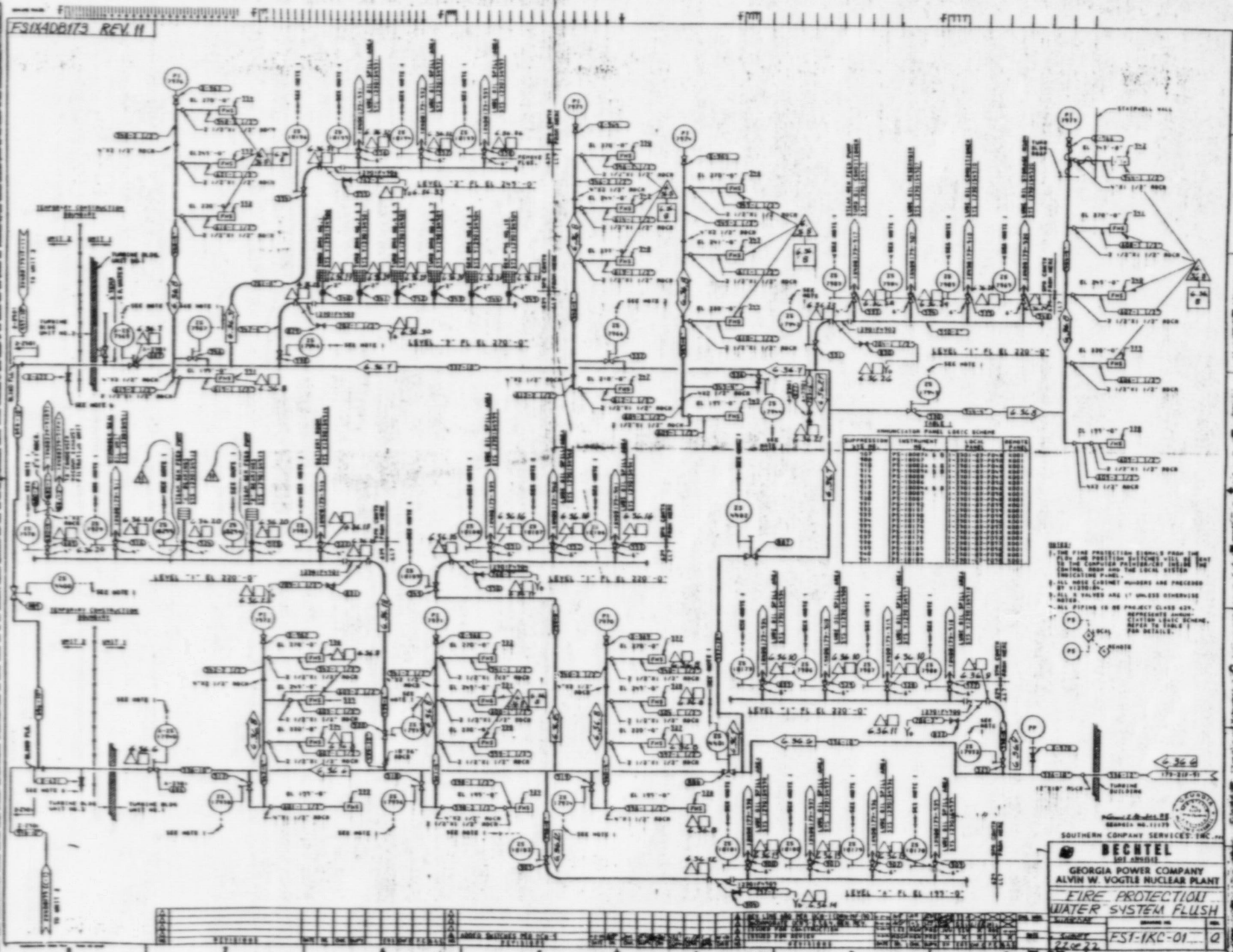
GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT

FIRE PROTECTION WATER SYSTEM FLUSH

DRAWING NO. FS1-1KC-01

REV. 0

FSIX4DB173 REV. 11



SOUTHERN COMPANY SERVICES, INC.

BECHTEL
SAN FRANCISCO

GEORGIA POWER COMPANY
ALVIN W. VOGTLE NUCLEAR PLANT

FIRE PROTECTION WATER SYSTEM FLUSH

DRAWING NO.	REV.
FS1-1KC-01	Q

SCALE: 22 of 22