Wisconsin Electric
POWER COMPANY

Point Beach Nuclear Plant
6610 Nuclear Rd., Two Rivers, WI 54241

(414) 755-2321

PBL 94-0257

August 15, 1994

Document Control Desk
U. S. NUCLEAR REGULATORY COMMISSION
Mail Station P1-137
Washington, DC 20555

Gentlemen:

DOCKET NO. 50-301
INSERVICE INSPECTION PROGRAM FOR THE THIRD INTERVAL
POINT BEACH NUCLEAR PLANT UNIT 2

Your letter dated July 19, 1994 from Allen G. Hansen requested response to several questions relating to the staff's review of the Point Beach Nuclear Plant, Unit 2, Third 10-Year Interval Inservice Inspection Program Plan. The following is a summary of the questions asked and our responses.

A. Address the degree of compliance with augmented examinations that have been established by the NRC when added assurance of structural reliability is deemed necessary. Examples of documents that address augmented examinations based on licensee commitments are listed below.

(1) Branch Technical Position MEB 3-1, "High Energy Fluid Systems, Protection Against Postulated Piping Failures in Fluid Systems Outside Containment;" and

RESPONSE Branch Technical Position MEB 3-1 is discussed in the Basis For ASME Section XI Classification Boundaries. The main steam system references MEB 3-1 in Basis 3, paragraph 1.6.2 (see isometrics ISI-PRI-2246 and ISI-PRI-2248). The feedwater system references MEB 3-1 in Basis 3, paragraph 1.8.2 (see isometric ISI-PRI-2249 and ISI-PRI-2251).

(2) Regulatory Guide 1.150, Ultrasonic Testing of Reactor Vessel Welds During Preservice and Inservice Examinations.

RESPONSE Regulatory Guide 1.150 is discussed in Section 4 of the Unit 2, Third Interval Long Term Plan, paragraph 2.4. The requirements of this Reg Guide were adhered to in the second 10-year interval and will be followed in the third 10-year interval.

9408260103 940815
PDR ADOCK 05000301
Q PDR

A047
1/1

Discuss these and any other augmented examinations that may have been incorporated in the Point Beach Nuclear Plant, Unit 2, Third 10-Year Interval Inservice Inspection (ISI) Program Plan, Revision 0.

RESPONSE Section 4 of the Unit 2, Third Interval Long Term Plan is dedicated to addressing the augmented examinations committed to by the Point Beach Nuclear Plant. Refer to this section for discussion of other augmented examinations performed.

B. The Code of Federal Regulations, Part 10, 50.55a(g) (6) (ii) (A), requires that all licensees must augment their reactor vessel examinations by implementing once, during the inservice inspection interval in effect on September 8, 1992, the examination requirements for reactor vessel shell welds specified in Item B1.10 of Examination Category B-A of the 1989 code. In addition, all previously granted relief for Item B1.10, Examination Category B-A, for the interval in effect on September 8, 1992, is revoked by the new regulation. For licensees with fewer than 40 months remaining in the interval on the effective date, deferral of the augmented examination is permissible with the conditions stated in the regulations.

Based on the effective date of the subject regulation and the December 1992 starting date of the third 10-year interval of the Point Beach Nuclear Plant, Unit 2, please provide the staff with the projected schedule for this augmented examination and a technical discussion describing how it will be implemented at Point Beach Nuclear Plant, Unit 2, during the third interval. Describe the intended approach and any specialized techniques or equipment that will be used to complete the required augmented examinations.

RESPONSE The requirements of 10 CFR 50.55a(g)(6)(ii)(A) were met during the 10 year vessel examination in the second interval. The required examinations were performed in 1988 during U2R14 which was the seventh outage of the second interval. The next scheduled examination of the reactor vessel shell welds is scheduled for 1998 during U2R24, outage six of the third interval. The augmented inspection requirements of 10 CFR 50.55a(g)(6)(ii)(A) will be performed in conjunction with this examination. Section 4, paragraph 2.8 of the Unit 2, Third Interval Long Term Plan, discusses implementation of this augmented examination requirement.

The intended approach for conducting this examination is to use remotely operated UT equipment and perform this examination concurrent with the examination of the remaining vessel shell welds.

C. You have provided piping and instrumentation diagrams (P&IDs) for Code Class 1, Class 2, and Class 3 systems. Please provide isometric and component drawings that include examination area numbers and line numbers for all of the Code Class 1 and Class 2 piping welds, components, and supports. Please include a cross reference for the Inservice Examination Program line number to the P&ID line number. The requested isometric/component drawings, along with the itemized listing already provided, will permit the staff to review the extent to which ISI examinations meet the applicable Code requirements.

RESPONSE Provided are copies of the ISI isometrics, each drawing contains the cross reference P&ID line number associated with that particular drawing. This information was not complete on all the isometrics therefore, some of the information has been added in pen and ink. Those additions are being incorporated into the drawings as Drawing Chance Notices are issued against the drawings.

D. For Code Class 1 integral attachment welds to piping, pumps, and valves, the Code does not require examinations for the third and fourth interval when implementing Inspection Program B. Examination of integral attachments in Code Class 2 and 3 systems is required in the third and fourth interval. The recently approved ASME Code Case N-509 (approved November 25, 1992 by ASME), provides for continued inspection of Class 1 integral attachments for the life of the plant as well as readjustments in the sample inspection requirements for Code Class 2 and 3. Are you following the provisions of Code Case N-509? Describe your plans with respect to implementing this Code Case.

RESPONSE ASME Code Case N-509 has not been adopted by Point Beach Nuclear Plant for the Third Interval Long Term Plan. Point Beach Nuclear Plant is currently evaluating Code Case N-509. If we decide to utilize this code case, a revision to the long term plan will be submitted to the NRC for approval.

E. As permitted by 10 CFR 50.55a(2)(ii), you have elected to adopt the 74S75 Code to determine the extent of examinations for Code Class 1 piping (Examination Category B-J) in the third 10-year interval. The requirements for successive examinations for the third 10-year interval, however, must be in accordance with IWB-2420, "Successive Inspection," of the 1986 edition. It appears that you are implementing the successive examinations requirements of the 74S75 Code. Please provide a technical position for the continued implementation of the 74S75 scheduling philosophy.

RESPONSE All successive and additional examinations that result from implementation of the Third Interval Long Term Plan will be scheduled and performed in accordance with ASME Section XI, 1986 Edition, No Addenda, IWB-2420, "Successive Inspections," and IWB-2430, "Additional Examinations."

F. Verify that there are no additional requests for relief required at this time. If additional relief requests are required, you should submit them for staff review.

RESPONSE Four additional requests for relief have been submitted to staff for review since the original submittal date of the Point Beach Nuclear Plant, Unit 2, Third Interval Long Term Plan. We are currently awaiting review and approval of these relief requests.

RELIEF REQUEST NUMBER	CATEGORY	ITEM NUMBER	DESCRIPTION
RR-2-15	B-D B-A	B3.90 B3.100 B1.30	Reactor vessel - defer the nozzle exam to coincide with the vessel examination scheduled later in the interval.
RR-2-16			ASME Class 1, 2 and 3 bolting - alternate requirements to evaluate leakage at bolted connections detected during system pressure test (IWA-5250).
RR-2-17	C-A	C1.10	Steam Generator transition cone to shell circumferential weld - cancel the successive examination, flaw is not service induced and steam generator replacement is scheduled.
RR-2-18	B-J C-F-1 C-F-2	B9.12 B9.22 C5.12 C5.22 C5.42 C5.52 C5.62 C5.82	Longitudinal welds - adopt the requirements of Code Case N-524, Alternative Examination Requirements for Longitudinal Welds in Class 1 and 2 Piping.

As you requested a copy of this response was sent to:

Boyd W. Brown
EG&G Idaho, Inc.
INEL Research Center
2151 North Boulevard
PO Box 1625
Idaho Falls, Idaho 83415-2209

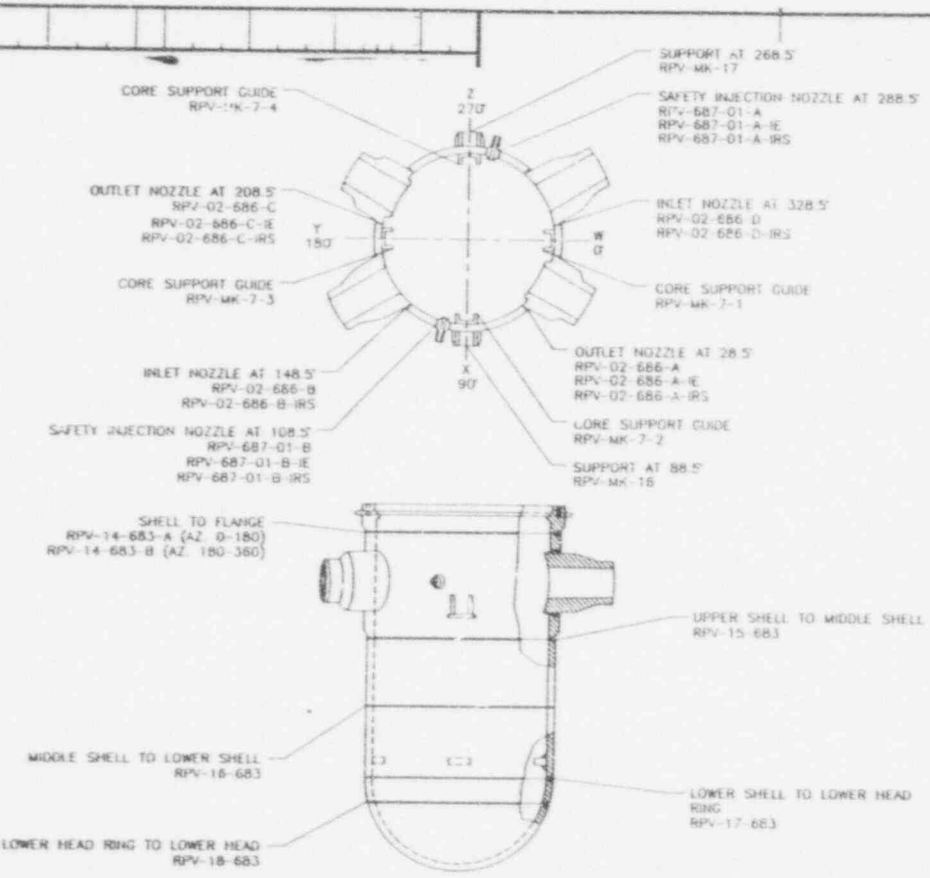
Should you have any questions or require additional information, please contact Mr. Jim Brander at Point Beach Nuclear Plant at (414)755-6432.

Sincerely,

G. J. Maxfield
Plant Manager

JBB/caw

Attachment



RPV-CORE SUPPORT
RPV-INST-PEN-01 THRU 36
RPV-INTERIOR
RPV-VENT

DRAWING NOTES

1. REFER TO ISI DATABASE FOR CALIBRATION STANDARDS.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: REACTOR VESSEL CAVITY
ELEV.: 8' TO 40'
HP AREA: 412

REFERENCE DRAWINGS

REF. DWG: CE 233-681, 233-682
REF. DWG: CE 233-683, 233-686
REF. DWG: CE 233-687, 233-688
REF. DWG: ARE CAD SYSTEMS 311

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG

COMPDIA	NOMTHICK	MATERIAL	CALSTD
		SA508 CL2	NOTE 1

REVISIONS

REV NO.	ZONE	PBSJ ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/06/93	INCORPORATED BATO MDS RLT. ISANS. #78-DWG-92-062	PPL	PPL	DJM	
1			02/26/92	REVISED PER WALKDOWN	KTG	WAB	JRB	

MICROFORM NO. 271347
CADFILE NO. PRI2101.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: 11.5
MOD.: NONE

DRAWN	KRH	10/18/90	APPRV'D		DATE
CHECKED	CTP	02/14/91	APPRV'D		
DRAFT'G	KTG	02/27/91	APPRV'D	GRS	10/01/91

WISCONSIN ELECTRIC

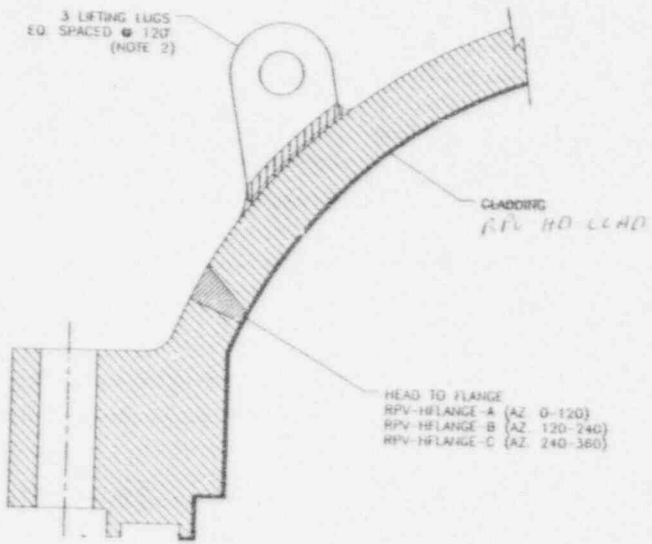
PRIMARY ISI ISOMETRIC
PBNP Unit 2
REACTOR PRESSURE VESSEL

DRAWING NO. ISI-PRI-2101

B | PB | 02 | MRCG | 199 | 001 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. '0' AZIMUTH IS AT THE ARROW LOCATION ON THE REACTOR VESSEL HEAD.
2. SEE ISI-PRI-2.03 FOR COMPONENT ID.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: HLDA
ELEV.: 21'
HP AREA: 403A

REFERENCE DRAWINGS

REF. ISO. N/A
REF. DWG.: CE 233-688

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATG °F	OPERATG PSIG

COMPO#	NOMTHICK	MATERIAL	CALSTD
		SA508 CL2	11-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/95	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			02/28/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271348
CADFILE NO. PRI2102.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.5
MOD.: NONE

DRAWN KRH	DATE 10/16/90	APPRV'D	DATE
CHECKED CTP	02/14/91	APPRV'D	
DRAFT'G KTG	03/22/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
REACTOR PRESSURE VESSEL
HEAD TO FLANGE WELD

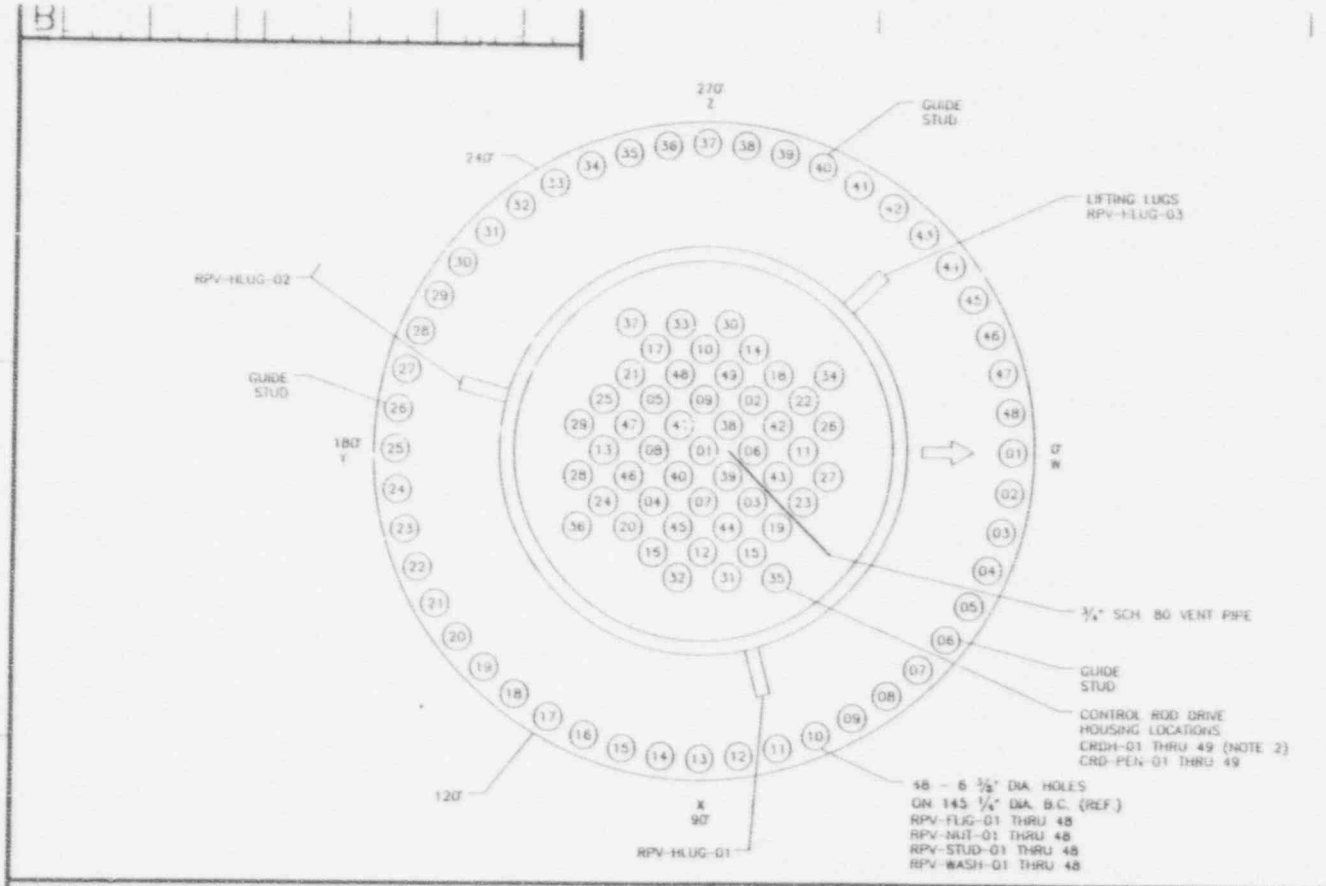
DRAWING NO. ISI-PRI-2102

B | PB | 02 | MRCG | 1990022

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. LOCATIONS FOR TESTING AS FOLLOWS:
   CRDH-01 THRU 49
   HLDA EL. 21'
   CRD-PEN-01 THRU 49
   HLDA EL. 21'
   RPV-FLG-01 THRU 48
   REACTOR CAVITY
   RPV-NUT-01 THRU 48
   GENERAL AREA EL. 66'
   RPV-STUD-01 THRU 48
   GENERAL AREA EL. 66'
   RPV-WASH-01 THRU 48
   GENERAL AREA EL. 66'
2. SEE ISI-PRI-2111 FOR CONTROL ROD DRIVE HOUSING DETAIL.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: SEE DRAWING NOTES
ELEV.: SEE DRAWING NOTES
HP AREA: 403A, 412, 401

REFERENCE DRAWINGS

REF. DWG.: CE 233-682

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG

COMPCDA	NOMTHICK	MATERIAL	CALSTD
			21-PTB

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS RLT. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			02/26/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271349
CADFILE NO. PRI2103.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.5
MOD.: NONE

DRAWN KRH	DATE 10/15/90	APPRV'D	DATE
CHECKED CTP	02/14/91	APPRV'D	
DRAFTG KTG	02/27/91	APPRV'D CTS	10/21/91

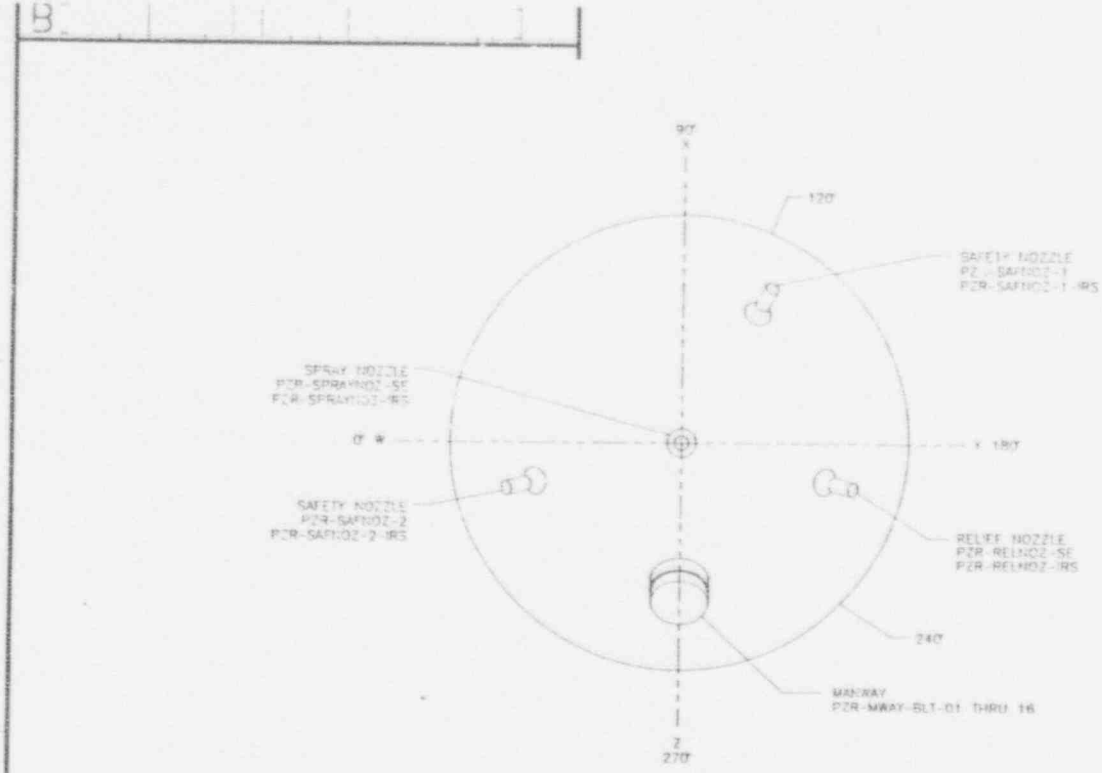
WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
REACTOR PRESSURE VESSEL BOLTING AND CONTROL ROD DRIVE HOUSINGS
DRAWING NO. ISI-PRI-2103

B | PB | 02 | MRCL | 199 | 002 | 02

SCALE None RELEASE DATE

4 3 2 1



DRAWING NOTES

1. ALL COMPONENTS ON THIS DRAWING ARE INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: PRESSURIZER CUBICLE
ELEV.: TOP OF PRESSURIZER EL. 75'
HP AREA: 40B

REFERENCE DRAWINGS

REF. ISO: WEST. 718J531

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG

COMPDIA	NOMTHICK	MATERIAL	CALSTD
		A182 TP316	36-PTB
		A182 TP316	37-PTB
		SA216 WCC	39-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/06/93	INCORPORATED INTO FDS RLT. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			05/28/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271350
CADFILE NO. PRI2104.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.5
1000: NONE

DRAWN KRH	DATE 10/18/90	APPRV'D	DATE
CHECKED CTP	02/14/91	APPRV'D	
DRAFT'G KTG	02/27/91	APPRV'D CTS	10/01/91

WISCONSIN ELECTRIC

FSE

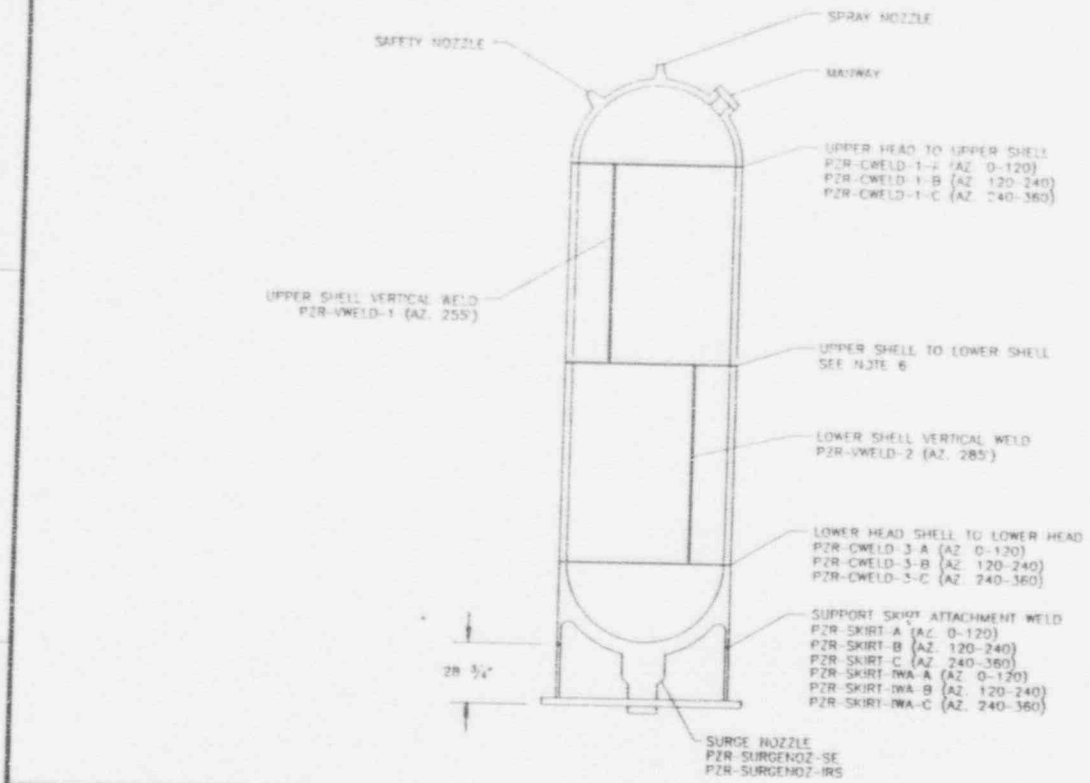
PRIMARY ISI ISOMETRIC
PBNP Unit 2
PRESSURIZER
UPPER HEAD

DRAWING NO. ISI-PRI-2104

B | PB | 02 | MRCL | 199 | 003 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. HEATER PENETRATION LOCATED IN LOWER HEAD.
2. INSTRUMENT PENETRATIONS LOCATED ON SIDE OF VESSEL.
3. REFER TO ISI DATABASE FOR CALIBRATION STANDARDS.
4. "0" AZIMUTH IS AT Y AXIS OF WESTINGHOUSE DRAWING 675J675.
5. ALL COMPONENTS ON THIS DRAWING ARE INSULATED.
6. WELD IS NOT TO BE EXAMINED SINCE IT IS NOT IN THE ISI PROGRAM. WELD IS SHOWN FOR INFORMATION ONLY.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: PRESSURIZER CUBICLE
ELEV.: 46' TO 75'
HP AREA: 408

REFERENCE DRAWINGS

REF. DWG: WEST. 681J261
REF. DWG: WEST. 4417D15
REF. DWG: WEST. 681J252
REF. DWG: WEST. 675J675

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
	680	2485		

COMPDA	NOMTHICK	MATERIAL	CALSTD
		SA516 GR 60	19-PTB
		SA533 GR. B	38-PTB
			NOTE 3

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	
1			02/28/92	REVISED PER WALKDOWN	KTC	WAB	JBB	

MICROFORM NO. 271351
CADFILE NO. PRI2105.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.5
MOD.: NONE

DRAWN KRH	DATE 10/18/90	APPRV'D	DATE
CHECKED CTP	02/14/91	APPRV'D	
DRAFT'S KTC	02/27/91	APPRV'D PTS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
PRESSURIZER
T-1

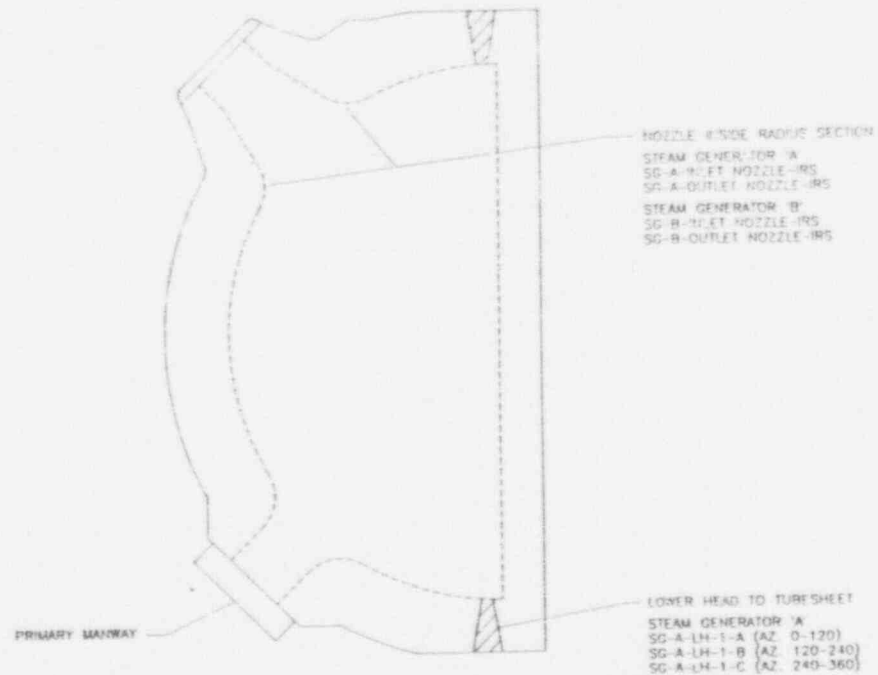
DRAWING NO. ISI-PRI-2105

B | PB | 02 | MRCG | 199 | 003 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



1. '0' AZIMUTH IS AT THE COLD LEG MANWAY CENTERLINE.
2. REFER TO ISI DATABASE FOR CALIBRATION STANDARDS FOR THE INSIDE RADIUS SECTIONS.
3. ALL COMPONENTS ON THIS DRAWING ARE INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: A & B S/G CUBICLE
ELEV.: MANWAY PLATFORM
HP AREA: 406, 410

REFERENCE DRAWINGS

REF. DWG.: WEST. 679J442

DESIGN DATA

PIPE CLASS	DESIGN T	DESIGN PSIG	OPERATING T	OPERATING PSIG

COMPDIA	NOMTHICK	MATERIAL	CALSTD
		SA216 WCC	40-PTB
			NOTE 2

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO PDS REV. TRAN'L. PPB-DWC-92-082	PPL	PPL	DJM	
1			02/26/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271352
CADFILE NO. PRI2106.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.5
MOD.: NONE

DRAWN KRH	DATE 10/16/90	APPRV'D	DATE
CHECKED CTP	02/14/91	APPRV'D	
DRAFT'G KTG	02/28/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

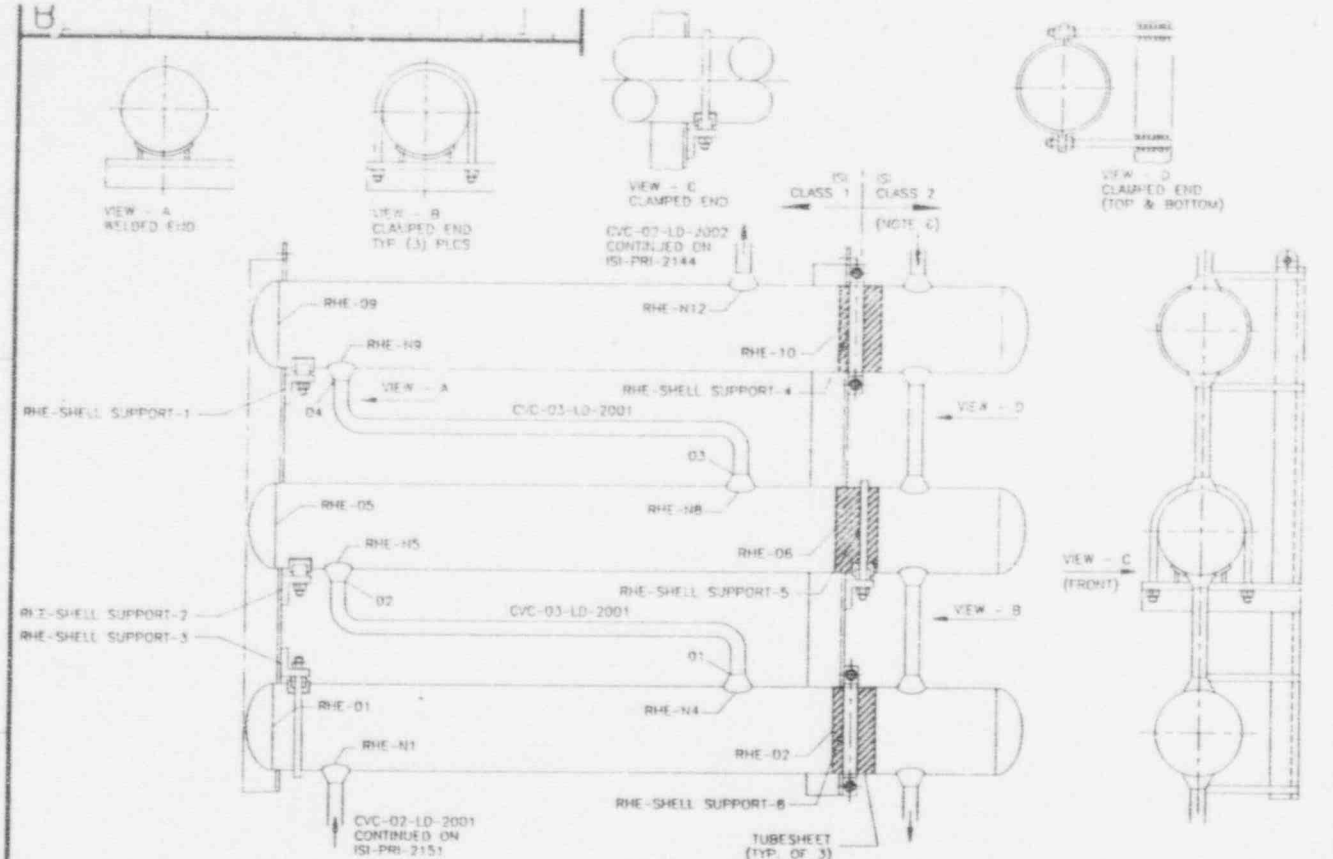
PRIMARY ISI ISOMETRIC
PBNP Unit 2
STEAM GENERATOR
LOWER HEAD

DRAWING NO. ISI-PRI-2106

B | PB | 02 | MRCG | 108001 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ISI CLASS 1/CLASS 2 BREAK IS AT TUBESHEET.
2. EXCHANGER SPEC. SHEET: AH-RG503
3. TYPE: SHELL & U-TUBE
4. APPROX. DRY WT.: 4639 LBS.
5. APPROX. FLOODED WT.: 5451 LBS
6. FOR CLASS 2 PORTION OF REGENERATIVE HEAT EXCHANGER SEE ISI-PRI-2203.
7. ALL COMPONENTS ON THIS DRAWING ARE INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: REGEN HX CUBICLE
ELEV.: 21'
HP AREA: 403E

REFERENCE DRAWINGS

REF. DWG.: SEKTRY A04195-A01-2 & A104
REF. PIPING SPEC: SA3

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SHELL	650	2485		
TUBE	650	2735		

COMPDIA	NOMTHICK	MATERIAL	CALSTD
8.000	0.812	A376 TP304	17-PTB

REVISIONS

REV NO.	ZONE	PROJ ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	
1			02/26/92	REVISED PER WALKDOWN	KTG	WAS	JBB	

MICROFORM NO. 271353
CADFILE NO. PRI2107.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.5
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	KRH	10/15/90		
CHECKED	CTP	02/14/91		
DRAFTS	KTG	02/26/91	GTS	10/01/91

WISCONSIN ELECTRIC

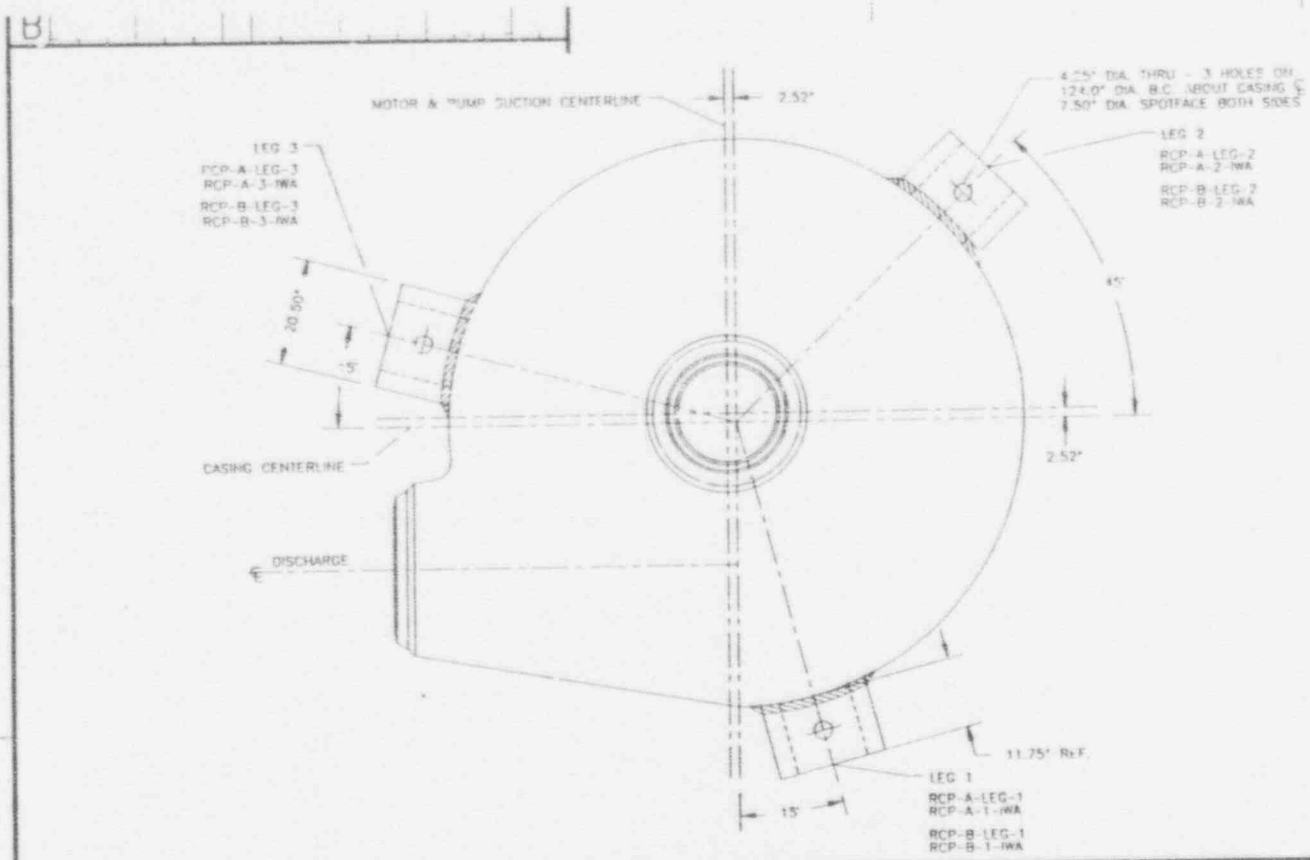
PRIMARY ISI ISOMETRIC
PBNP Unit 2
REGENERATIVE HEAT
EXCHANGER HX-2

DRAWING NO. ISI-PRI-2107

B | PB | 02MRCG | 108 | 00202

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ALL COMPONENTS ON THIS DRAWING ARE INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: A & B RCP CUBICLE
ELEV.: 30'
HP AREA: 406, 410

REFERENCE DRAWINGS

REF. DWG.: WEST. 618J740

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG

COMPDIA	NOMTHICK	MATERIAL	CALSTD

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS. REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			02/26/92	REVISED PER WALKDOWN	KTC	WAB	JBB	

MICROFORM NO. 271354
CADFILE NO. PRI2108.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.5
MOC.: NONE

DRAWN KRH	DATE 10/18/90	APPRV'D	DATE
CHECKED CTP	02/14/91	APPRV'D	
DRAFT'G KTC	02/28/91	APPRV'D GMS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
REACTOR COOLANT PUMP SUPPORTS
BOTTOM VIEW

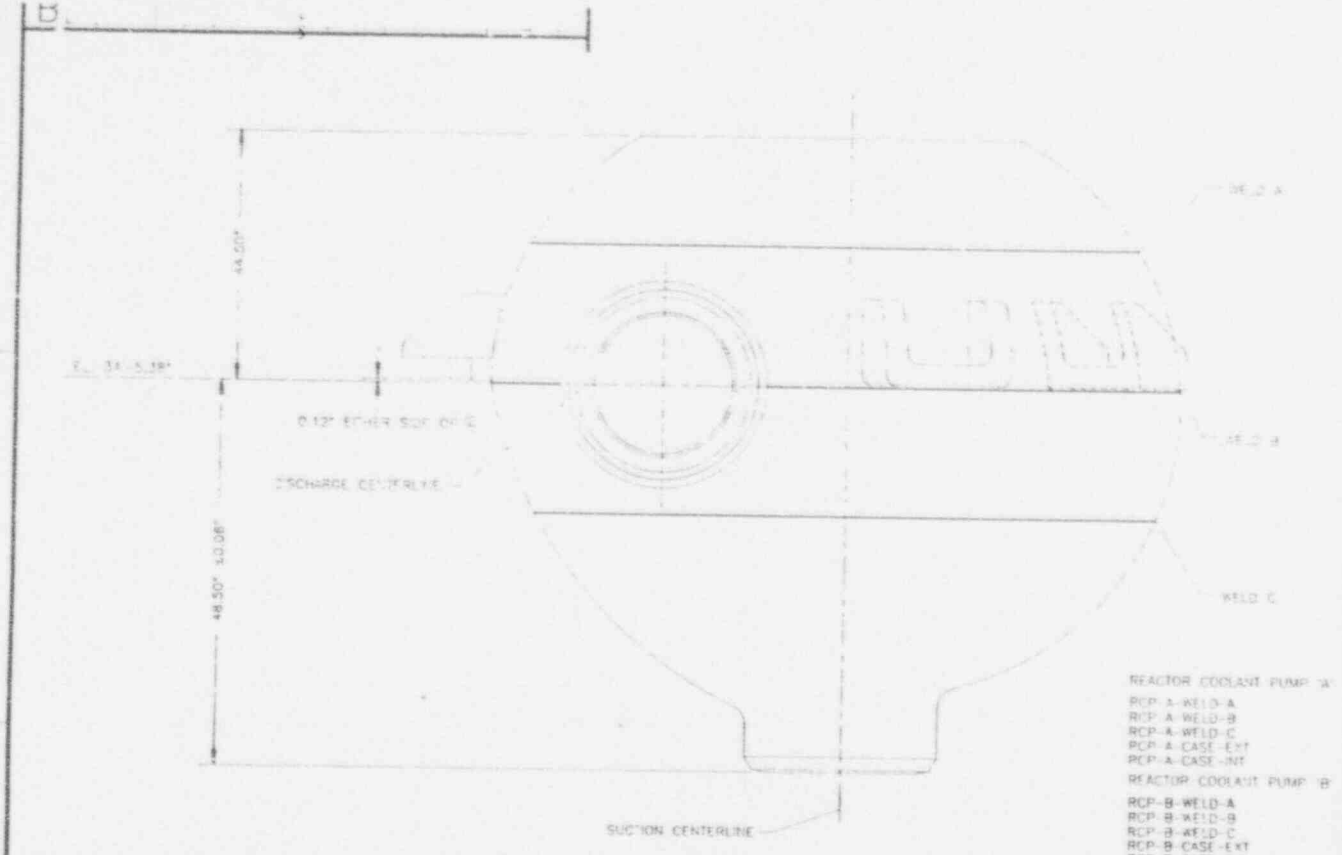
DRAWING NO. ISI-PRI-2108

B | PB | 02 | MRCG | 195 | 001 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



REACTOR COOLANT PUMP 'A'
RCP-A-WELD-A
RCP-A-WELD-B
RCP-A-WELD-C
RCP-A-CASE-EXT
RCP-A-CASE-INT

REACTOR COOLANT PUMP 'B'
RCP-B-WELD-A
RCP-B-WELD-B
RCP-B-WELD-C
RCP-B-CASE-EXT
RCP-B-CASE-INT

DRAWING NOTES

1. ALL DIMENSIONS OF WELDS SHALL BE VERIFIED.

LOCATION

BLDG. CONTAINMENT
FROM AXIAL 4 & 5 REF. CURVE
AT EL. 30'
AT AREA SEE AXC

REFERENCE DRAWINGS

REF. DWG. (WEST) 33D493
REF. DWG. (WEST) 8183F40

DESIGN DATA

PIPE CLASS	DESIGN T	DESIGN PSIG	OPERATING T	OPERATING PSIG

COMPDA	NOMTHICK	MATERIAL	CALSTD

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-062	P-L	PPL	DJN	
1			02/28/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271355
CADFILE NO. PRI2109.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: X
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	KRH	10/18/90		
CHECKED	CTP	02/11/91	APPRV'D	
DRFT'G	KTG	02/28/91	APPRV'D	10/01/91

WISCONSIN ELECTRIC

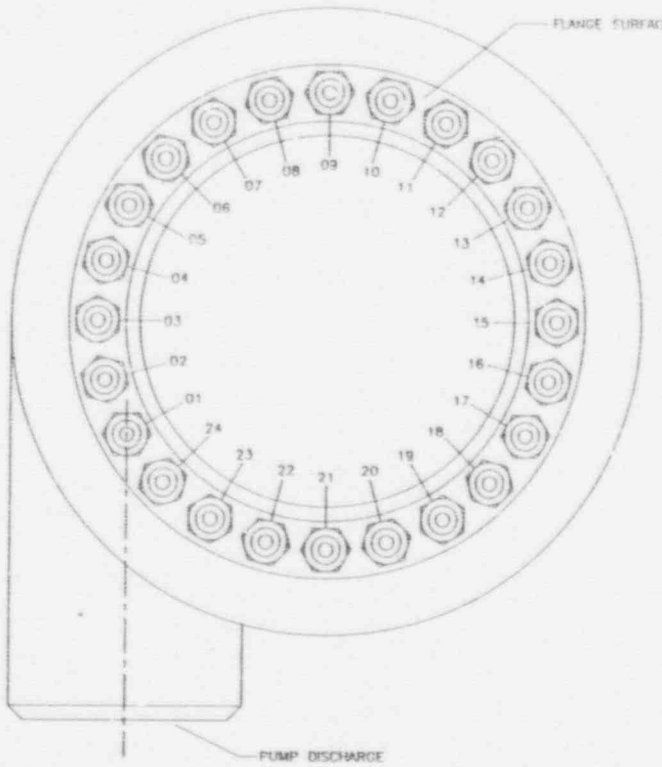
PRIMARY ISI ISOMETRIC
PBNP Unit 2
REACTOR COOLANT PUMP
CASING WELDS

DRAWING NO. ISI-PR-2109

B PB 02MRCG195002 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



1. ALL COMPONENTS C.I. THIS DRAWING ARE INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: A & B RCP CUBICLE
ELEV.: 35'
HP AREA: 405, 416

REFERENCE DRAWINGS

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG

COMPCDA	NOMTHICK	MATERIAL	CALSTD
			9-PTB
			53 (78

REACTOR COOLANT PUMP 'A'
RCP-A-BLT-01 THRU 24
RCP-A-SLBLT-01 THRU 18 (NOT SHOWN)

REACTOR COOLANT PUMP 'B'
RCP-B-BLT-01 THRU 24
RCP-B-SLBLT-01 THRU 18 (NOT SHOWN)

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	ECL'D
2			03/08/93	INCORPORATED SHTD PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			02/28/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 2/1356
CADFILE NO. PRI2110.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.5
MOD.: NONE

DRAWN KFH	DATE 10/18/90	APPRV'D	DATE
CHECKED CTP	02/14/91	APPRV'D	
DRAFT'G KTG	02/28/91	APPRV'D GBS	10/31/91

WISCONSIN ELECTRIC

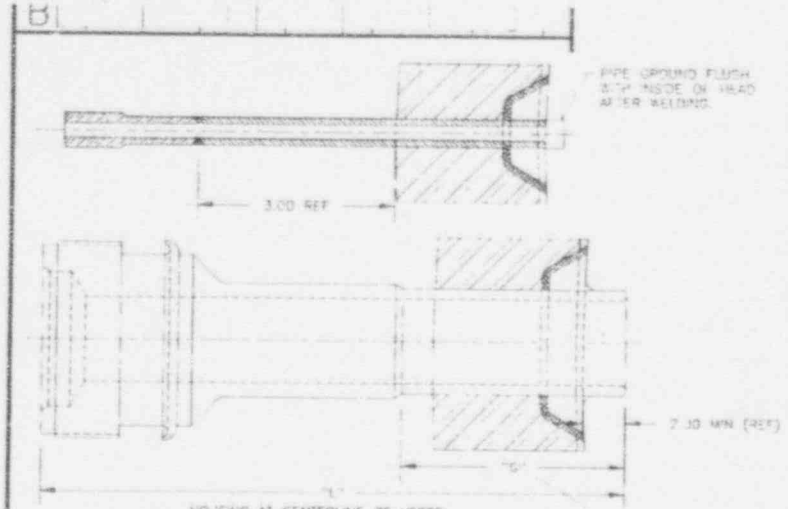
PRIMARY ISI ISOMETRIC
PBNP Unit 2
REACTOR COOLANT PUMP
FLANGE AND BOLTING OUTLINE

DRAWING NO. ISI-PRI-2110

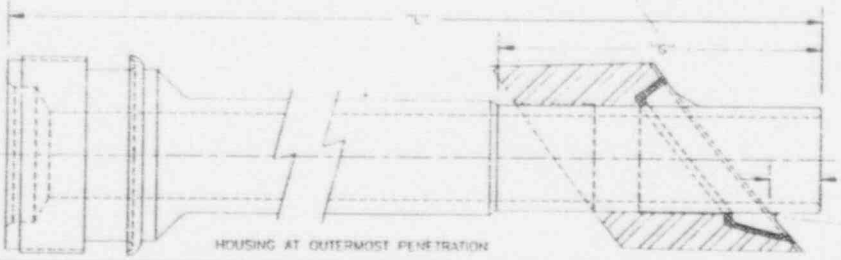
B | PB | 02 | MRCG | 195 | 003 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



O.D. OF EACH CONTROL ROD MECHANISM HOUSING SHALL BE GROUND FOR THIS LENGTH AT ASSEMBLY TO .0005 TO .001'S DIAMETRICAL INTERFERENCE FIT WITH THE MATING HEAD PENETRATION. GROUND SURFACE TO HAVE 32M FINISH.



RADII SHOWN ON OPPOSITE SIDE MAY BLEND INTO A SINGLE 3/16" MIN RADIUS ON THIS SIDE WHERE APPLICABLE

NO	ASSY NO	L (REF)	R (REF)	NO	ASSY NO	L (REF)	R (REF)
01	693-01-01	3-1 13/16"	9 7/16"	26	693-07-26	3-4 31/32"	12 15/16"
02	693-02-02	3-4 3/16"	10 3/16"	27	693-07-27	3-4 31/32"	12 15/16"
03	692-02-03	3-4 3/16"	10 3/16"	28	693-07-28	3-4 31/32"	12 15/16"
04	693-02-04	3-4 3/16"	10 3/16"	29	693-07-29	3-4 31/32"	12 15/16"
05	692-02-05	3-4 3/16"	10 3/16"	30	693-07-30	3-4 31/32"	12 15/16"
06	693-03-06	3-4 3/16"	9 15/16"	31	693-07-31	3-4 31/32"	12 15/16"
07	692-03-07	3-4 3/16"	9 15/16"	32	693-07-32	3-4 31/32"	12 15/16"
08	693-03-08	3-4 3/16"	9 15/16"	33	693-07-33	3-4 31/32"	12 15/16"
09	692-03-09	3-4 3/16"	9 15/16"	34	693-08-34	3-3 1/16"	14 1/16"
10	693-04-10	3-10 29/32"	11 15/16"	35	693-08-35	3-3 1/16"	14 1/16"
11	693-04-11	3-10 29/32"	11 15/16"	36	693-08-36	3-3 1/16"	14 1/16"
12	693-04-12	3-10 29/32"	11 15/16"	37	693-09-37	3-3 1/16"	9 1/16"
13	692-04-13	3-10 29/32"	11 15/16"	38	693-09-38	3-3 1/16"	9 1/16"
14	693-05-14	3-1 13/16"	12	39	693-09-39	3-3 1/16"	9 1/16"
15	693-05-15	3-1 13/16"	12	40	693-09-40	3-3 1/16"	9 1/16"
16	692-05-16	3-1 13/16"	12	41	693-09-41	3-3 1/16"	9 1/16"
17	693-05-17	3-1 13/16"	12	42	693-10-42	3-7 13/32"	10 3/16"
18	693-06-18	3-11 3/16"	11 15/16"	43	693-10-43	3-7 13/32"	10 3/16"
19	693-06-19	3-11 3/16"	11 15/16"	44	693-10-44	3-7 13/32"	10 3/16"
20	693-06-20	3-11 3/16"	11 15/16"	45	693-10-45	3-7 13/32"	10 3/16"
21	693-06-21	3-11 3/16"	11 15/16"	46	693-10-46	3-7 13/32"	10 3/16"
22	693-05-22	3-1 13/16"	12	47	693-10-47	3-7 13/32"	10 3/16"
23	693-05-23	3-1 13/16"	12	48	693-10-48	3-7 13/32"	10 3/16"
24	693-05-24	3-1 13/16"	12	49	693-10-49	3-7 13/32"	10 3/16"
25	693-05-25	3-1 13/16"	12				

DRAWING NOTES

LOCATION

BLDG: CONTAINMENT
ROOM/AREA: R-23A
ELEV: 21'
HP AREA: 403A

REFERENCE DRAWINGS

REF. ISO: N/A
REF. DWG: CE 233-890

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG

COMPDNA	NOMTHICK	MATERIAL	CALSTD

REVISIONS

REV NO.	ZONE	PB01 ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	INT'L
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	
1			02/28/93	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271357
CADFILE NO. PRI2111.DWG

VENDOR: WISCONSIN ELECTRIC
T.E.I.: 11.5
MOD.: NONE

DRAWN KBH	DATE 10/18/90	APPRV'D	DATE
CHECKED CTP	02/14/91	APPRV'D	
DRAFT'G KTG	02/28/91	APPRV'D GPS	10/01/91

WISCONSIN ELECTRIC

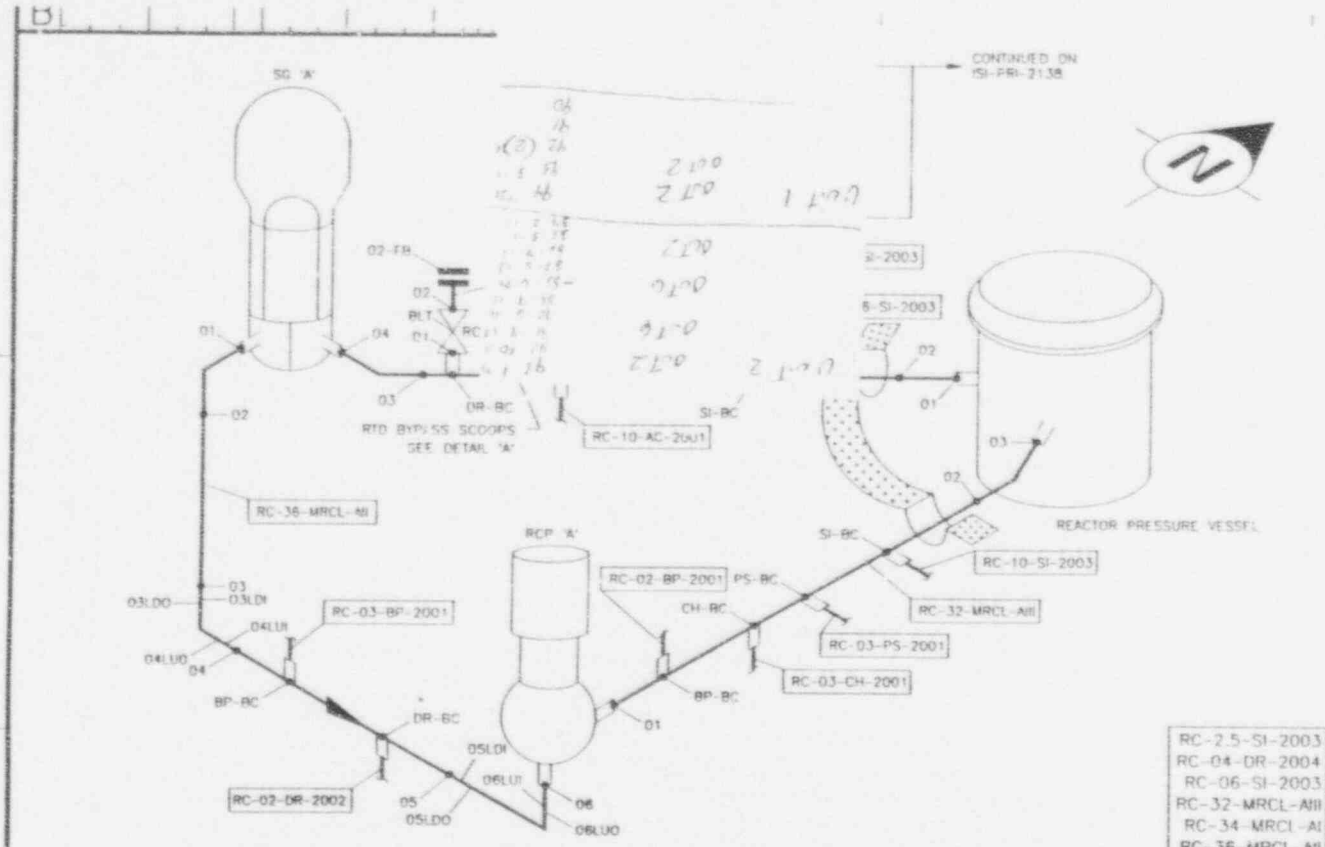
PRIMARY ISI ISOMETRIC
PBNP Unit 2
CONTROL ROD DRIVE
HOUSING DETAIL

DRAWING NO. ISI-PRI-2111

B | PB | 02 | MRCG | 199004 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



all piping on this drawing is insulated

LOCATION

B'DG.: CONTAINMENT
ROOM/AREA: LOOP A
ELEV.: 25' TO 34'
HP AREA: 405, 407

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-258
REF. P&ID: 541F445, SH. 1
REF. P&ID: 541F445, SH. 2

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC-2501R-X				

COMP DIA	NOM THICK	MATERIAL	CAL STD
32.000	3.000	A376 TP316	7-PTB
34.000	3.000	A376 TP316	7-PTB
36.000	3.000	A376 TP316	7-PTB

REVISIONS

REV NO.	ZONE	PROJ ID	DATE	DESCRIPTION	DRAWN	CHK'D	APPR'D	REL'D
2			05/08/93	INCORPORATED INTO PDS RET. TRANS. #PB-DWC-92-062	PPL	PPL	DJN	
1			05/27/92	REVISED PER WALKDOWN	KTG	WAB	JSB	

MICROFORM NO. 271358
CADFILE NO. PRI2120.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.5
MOD.: NONE

DRAWN KTG	DATE 11/22/90	APPR'D	DATE
CHECKED CTP	02/21/91	APPR'D	
DRAFT'G KTG	02/28/91	APPR'D GJS	10/01/91

WISCONSIN ELECTRIC

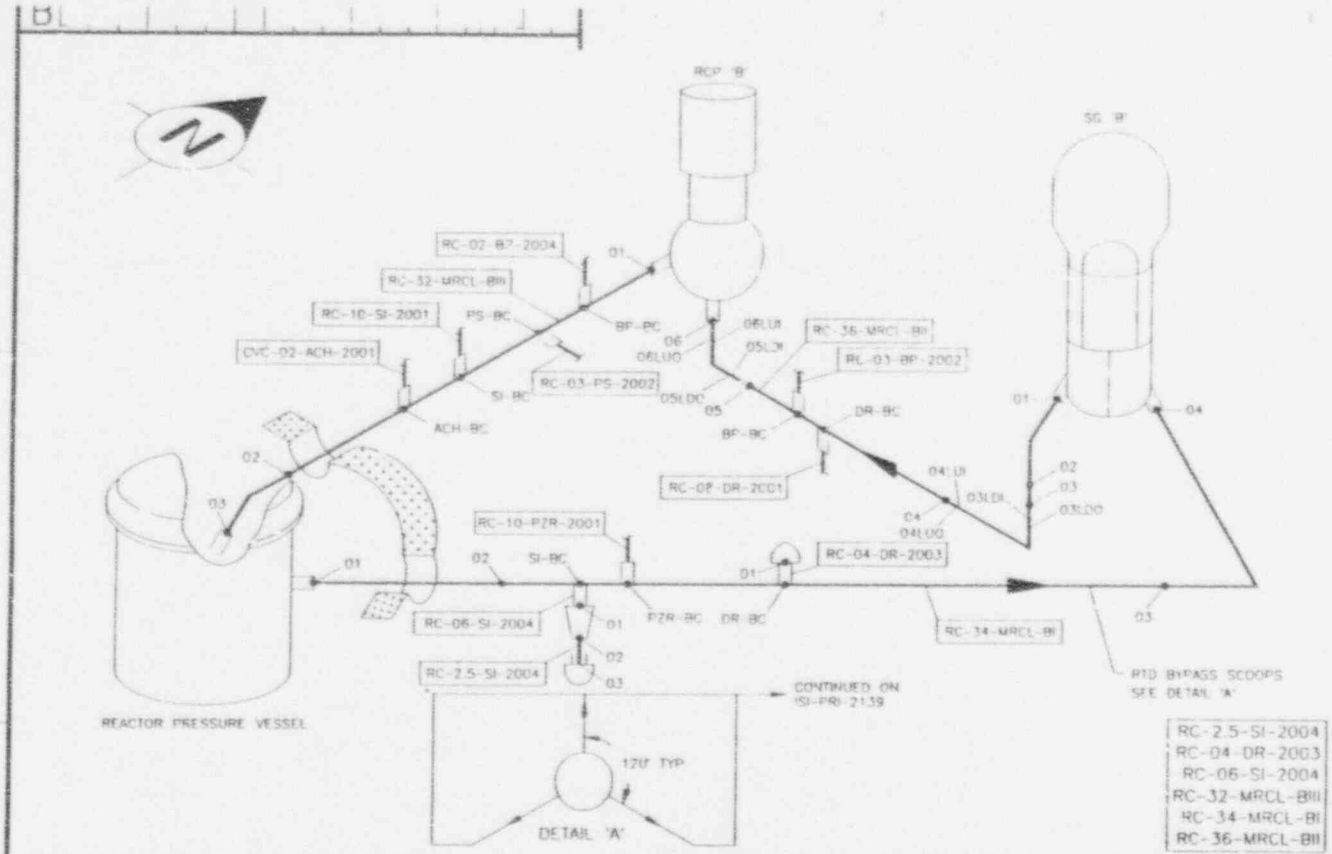
PRIMARY ISI ISOMETRIC
PBNP Unit 2
MAIN REACTOR
COOLANT LOOP 'A'

DRAWING NO. ISI-PRI-2120

B | PB | 02 | MRCL | 183 | 009 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



All piping on this drawing is insulated

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: LOOP 'B'
ELEV.: 25' TO 34'
HP AREA: 409, 411

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-25B
REF. P&ID: 541F445, SH. 1
REF. P&ID: 541F445, SH. 2

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC-250IR-Y				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
32.000	3.000	A376 TP316	7-PTB
34.000	3.000	A376 TP316	7-PTB
36.000	3.000	A376 TP316	7-PTB

RC-2.5-SI-2004
RC-04-DR-2003
RC-06-SI-2004
RC-32-MRCL-BIII
RC-34-MRCL-BI
RC-36-MRCL-BII

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-93-002	PPL	PPL	DJM	
1			03/27/93	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271359
CADFILE NO. PRI2121.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.5
MOD.: NONE

DRAWN KTG	DATE 11/27/90	APPRV'D	DATE
CHECKED CTP	03/04/91	APPRV'D	
DRAFTG KTG	03/27/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
MAIN REACTOR
COOLANT LOOP 'B'

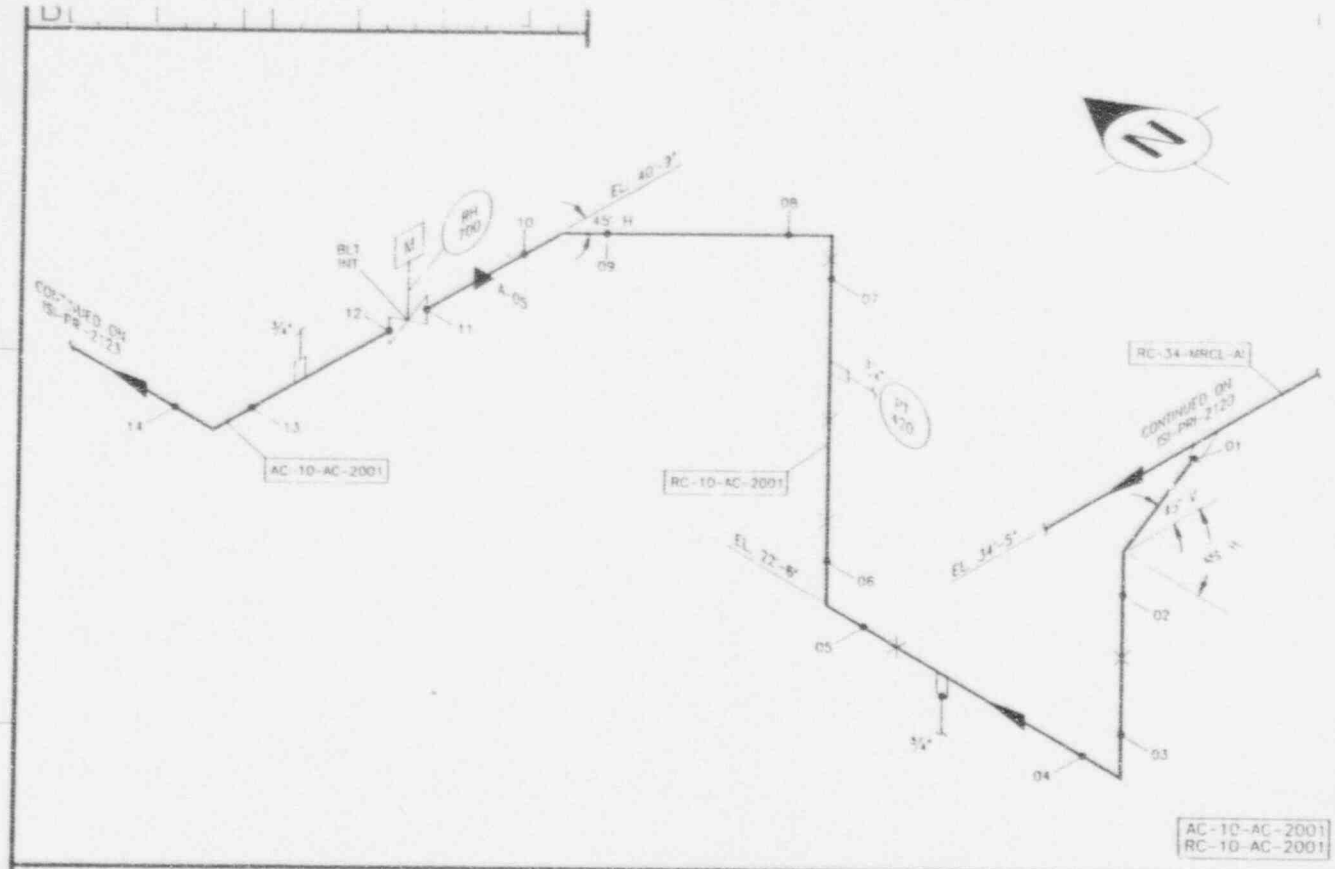
DRAWING NO. ISI-PRI-2121

B PB 02 MRCL 183 010 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: LOOP A
ELEV.: 21' TO 41'
HP AREA: 40F

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-246
REF. P&ID: 5613F445 SH1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC25C-6-16				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
10.000	1.000	A376 TP316	15-P1B

AC-10-AC-2001
RC-10-AC-2001

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	PEL'D
2			05/08/95	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	
1			05/27/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271360
CADFILE NO. PRI2122.DWG

VENDOR: WISCONSIN ELECTRIC
T.I.I.: 12.3.3
MOD.: NONE

DRAWN DLJ	DATE 11/15/90	APPRV'D	DATE
CHECKED CTP	03/04/91	APPRV'D	
DRAFTG KTG	03/27/91	APPRV'D GPS	10/01/91

WISCONSIN ELECTRIC

TSE

PRIMARY ISI ISOMETRIC
PBNP Unit 2
RESIDUAL HEAT REMOVAL
SUCTION FROM LOOP 'A'

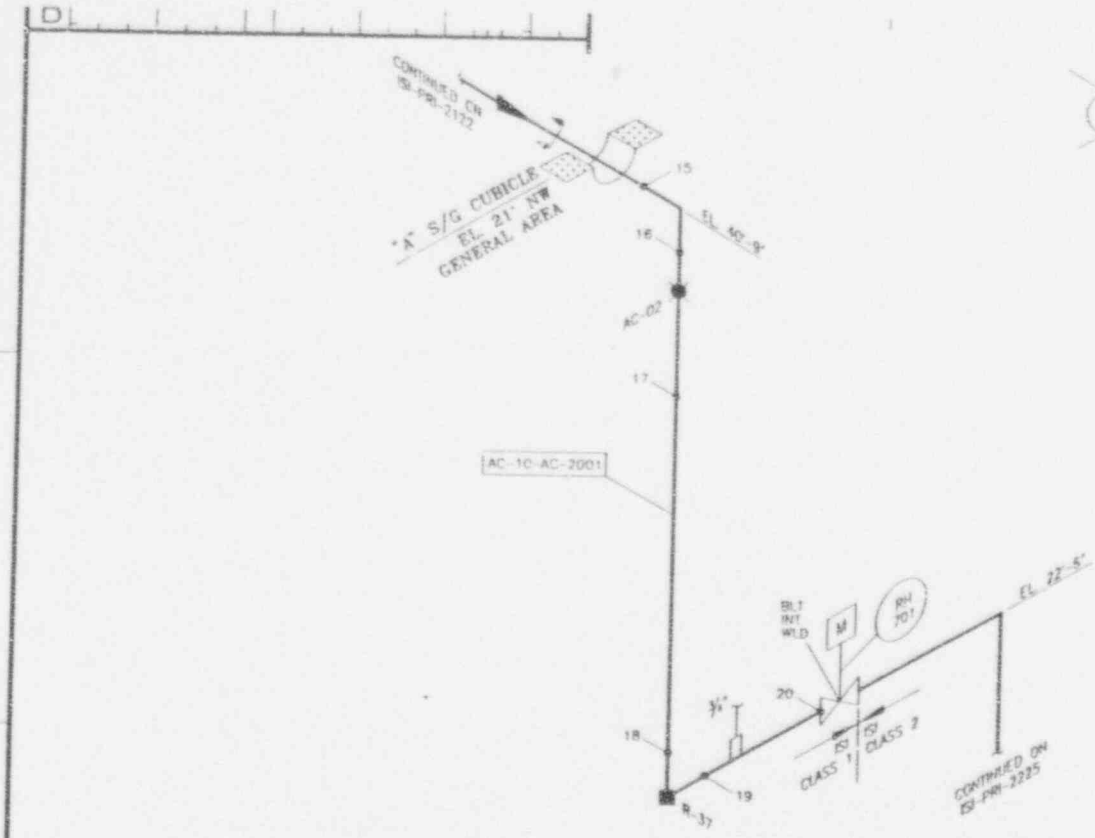
DRAWING NO. ISI-PRI-2122

B | PB | 02 | MRHL | 183 | 002 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



AC-10-AC-2001

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: GENERAL AREA/RLDA
ELEV.: 21' TO 41'
HP AREA: 408

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-248
REF. P&ID: 5110E029, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN T	DESIGN PSIG	OPERATING T	OPERATING PSIG
AC-2501R-01				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
10.000	1.000	A376 TP316	15-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REV. TRANS. #PB-DWG-92-082	PPL	PPL	DJN	
1			03/27/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271361
CADFILE NO. PRI2123.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.3.3
MOD.: NONE

DRAWN DLJ	DATE 11/16/90	APPRV'D	DATE
CHECKED CTP	03/18/91	APPRV'D	
DRAFT'D KTG	03/28/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
RESIDUAL HEAT REMOVAL
SUCTION HEADER

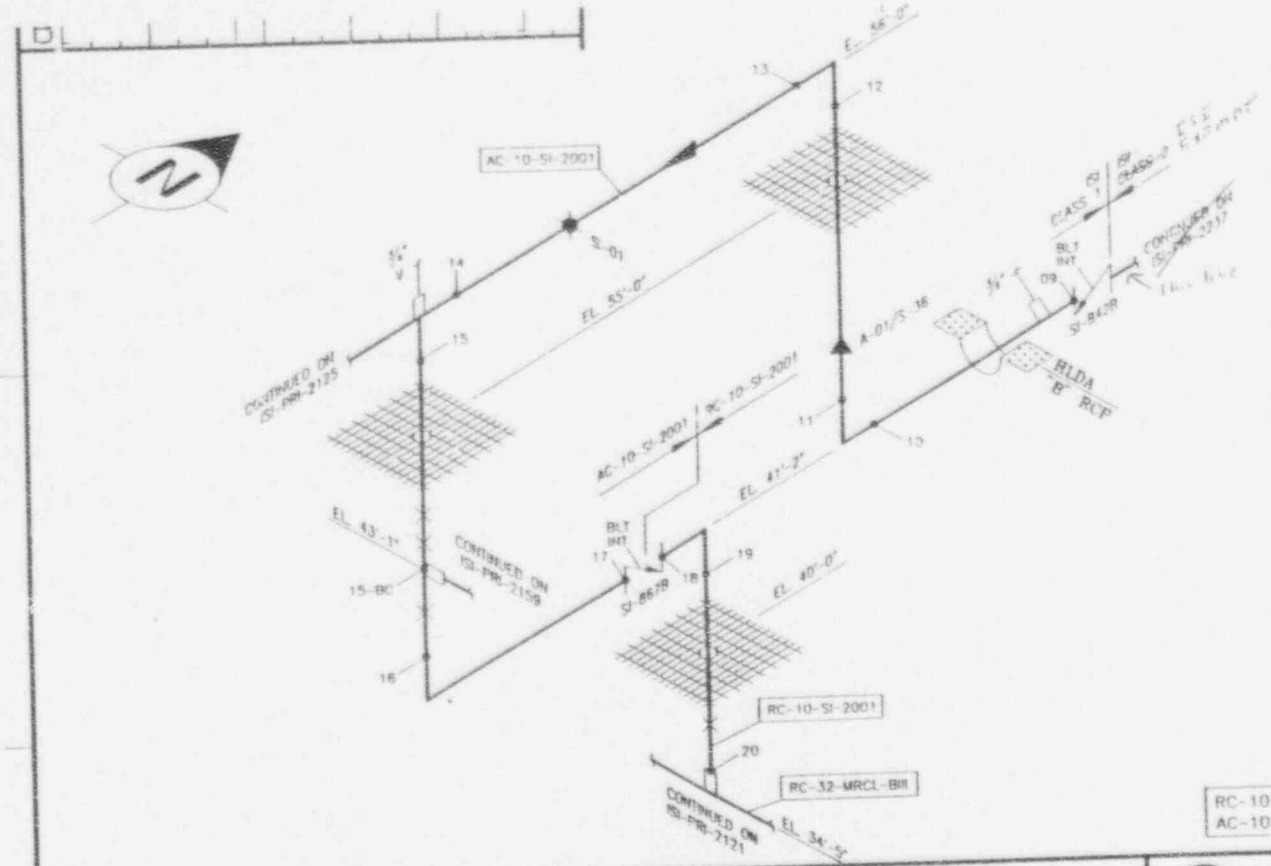
DRAWING NO. ISI-PRI-2123

B | PB | 02 | MRHL | 183 | 003 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG: CONTAINMENT
ROOM/AREA: HLDA/"B" RCP
ELEV.: 36' TO 56'
HP AREA: 4TB

REFERENCE DRAWINGS

REF. ISO: B-...TEL P-237
REF. P&ID: 110E035, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SE-2.5ER-C1				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
10.000	1.000	A376 TP316	15-PTB

RC-10-SI-2001
AC-10-SI-2001

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-93-062	FPL	FPL	DJM	
1			05/27/92	REVISED PER WALKDOWN	KTC	WAB	JRB	

MICROFORM NO. 271362
CADFILE NO. PRI2124.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: 12.4
MOD.: NONE

DRAWN DLJ	DATE 12/22/90	APPRV'D	DATE
CHECKED CTP	03/04/91	APPRV'D	
DRAFT'G KTC	03/28/91	APPRV'D GPS	10/01/91

WISCONSIN ELECTRIC

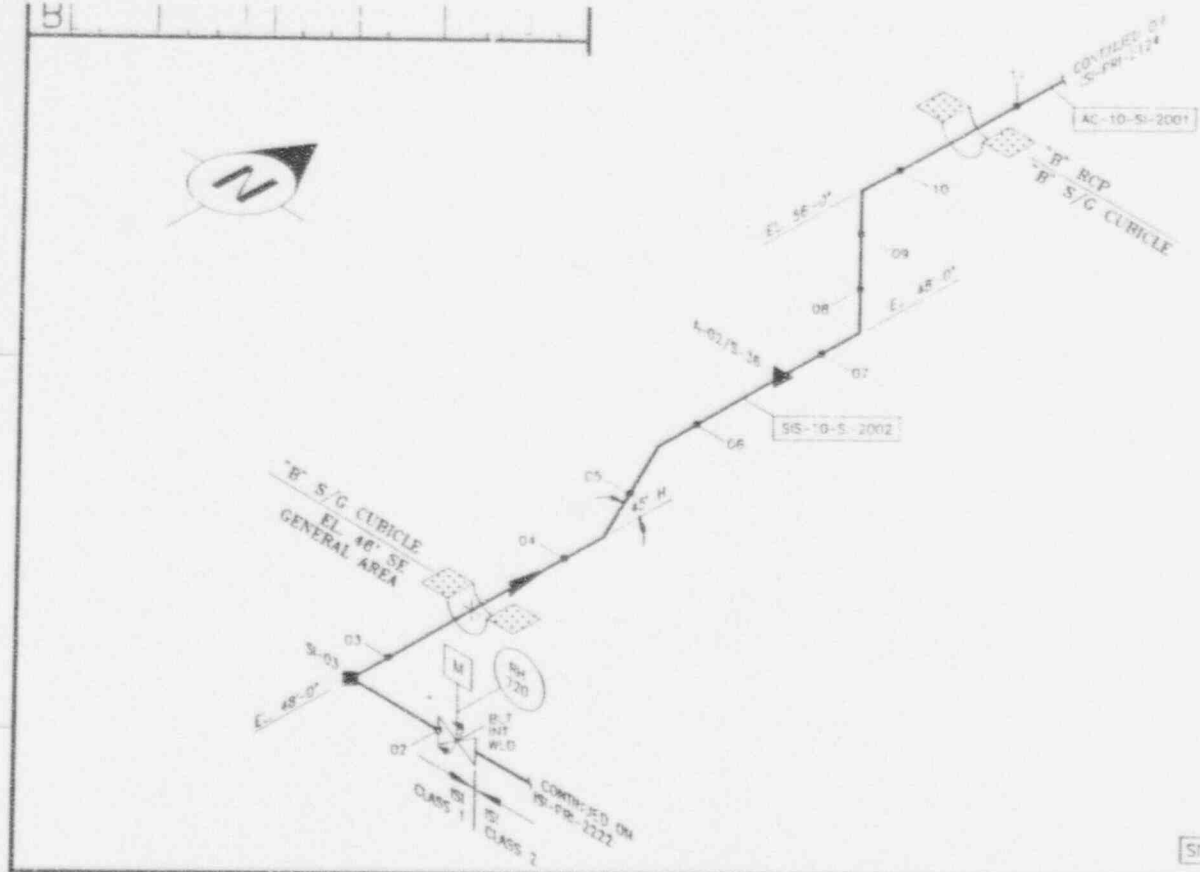
PRIMARY ISI ISOMETRIC
PBNP Unit 2
LOOP 'B'
INJECTION

DRAWING NO. ISI-PRI-2124

B | PB | 02 | MSIL | 183007 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG: CONTAINMENT
ROOM/AREA: "B" S/G CUBICLE/GEN. AREA
ELEV.: 44'
HP AREA: 410

REFERENCE DRAWINGS

REF. ISO. (RECNTEL P-237
REF. P&ID: 11PE03A, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SE-2304-S-G				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
10.000	1.000	A316 TP316	15-PTB

REVISIONS

REV NO.	ZONE	PROJ. NO.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO FDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			03/27/92	REVISED PER WALKDOWN	KTG	WAB	JRB	

MICROFORM NO. 271363
CADFILE NO. PRI2125.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.E.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	BLJ	11/11/90		
CHECKED	CTP	03/04/91	APPRV'D	
DRAFTG	KTG	03/29/91	APPRV'D	10/01/91

WISCONSIN ELECTRIC

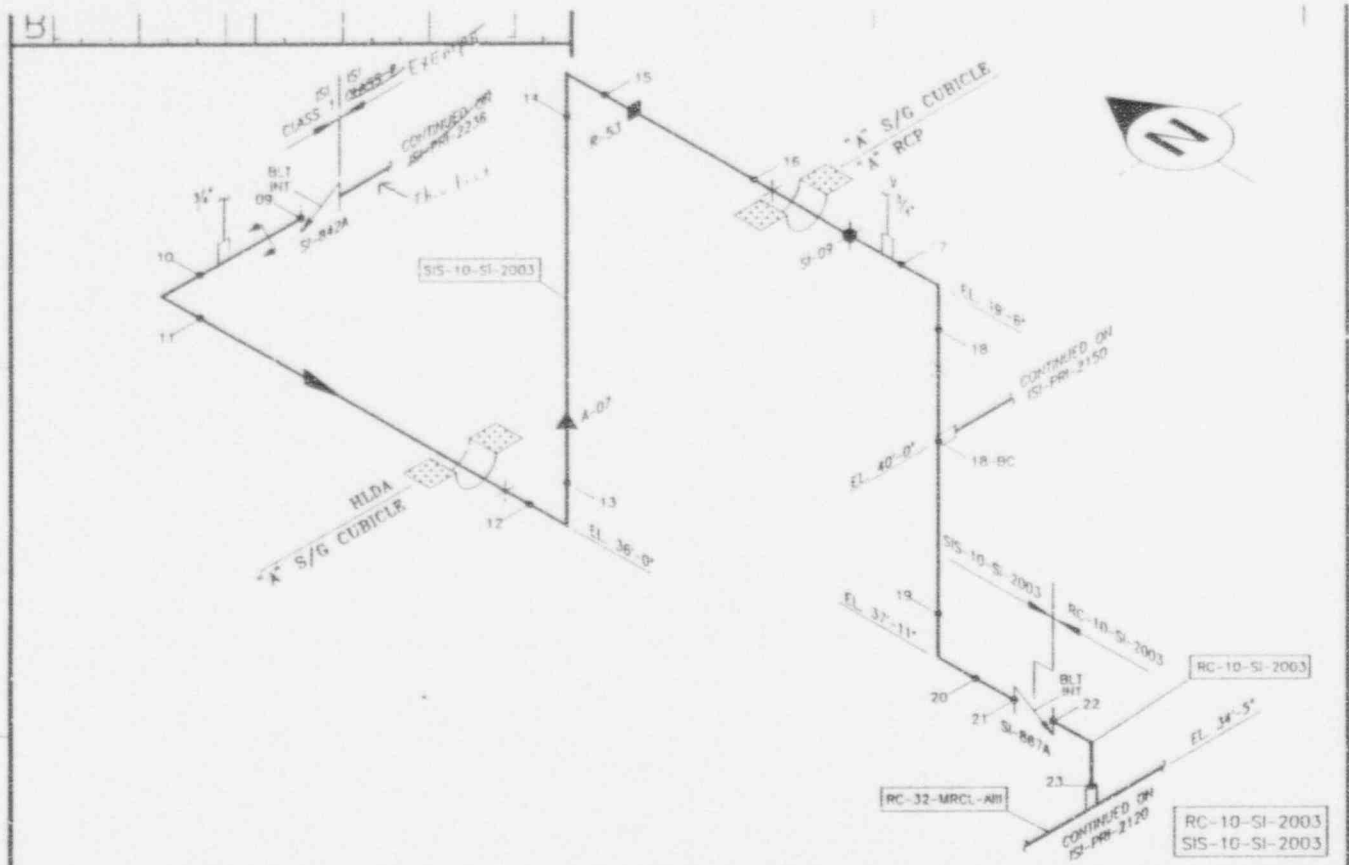
PRIMARY ISI ISOMETRIC
PBNP Unit 2
RESIDUAL HEAT REMOVAL
TO LOOP "B"

DRAWING NO. ISI-PRI-2125

B | PB | 02 | M | S | I | L | 1 | 8 | 3 | 0 | 0 | 8 | 0 | 2

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: HLDA/"A" S/G CUBICLE/"A" RCP
ELEV.: 21' TO 44'
HP AREA: 403A, 406, 405

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-237
REF. P&ID: 110E035, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SI 2604-01				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
10.000	1.000	A376 TP316	S1-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJW	
1			05/27/92	REVISED PER WALKDOWN	KTC	WAB	JRB	

MICROFORM NO. 271364
CADFILE NO. PRI2126.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	12/22/90		
CHECKED	CTP	03/04/91	APPRV'D	
DRAFT'G	KTR	03/29/91	APPRV'D GJS	10/01/91

WISCONSIN ELECTRIC

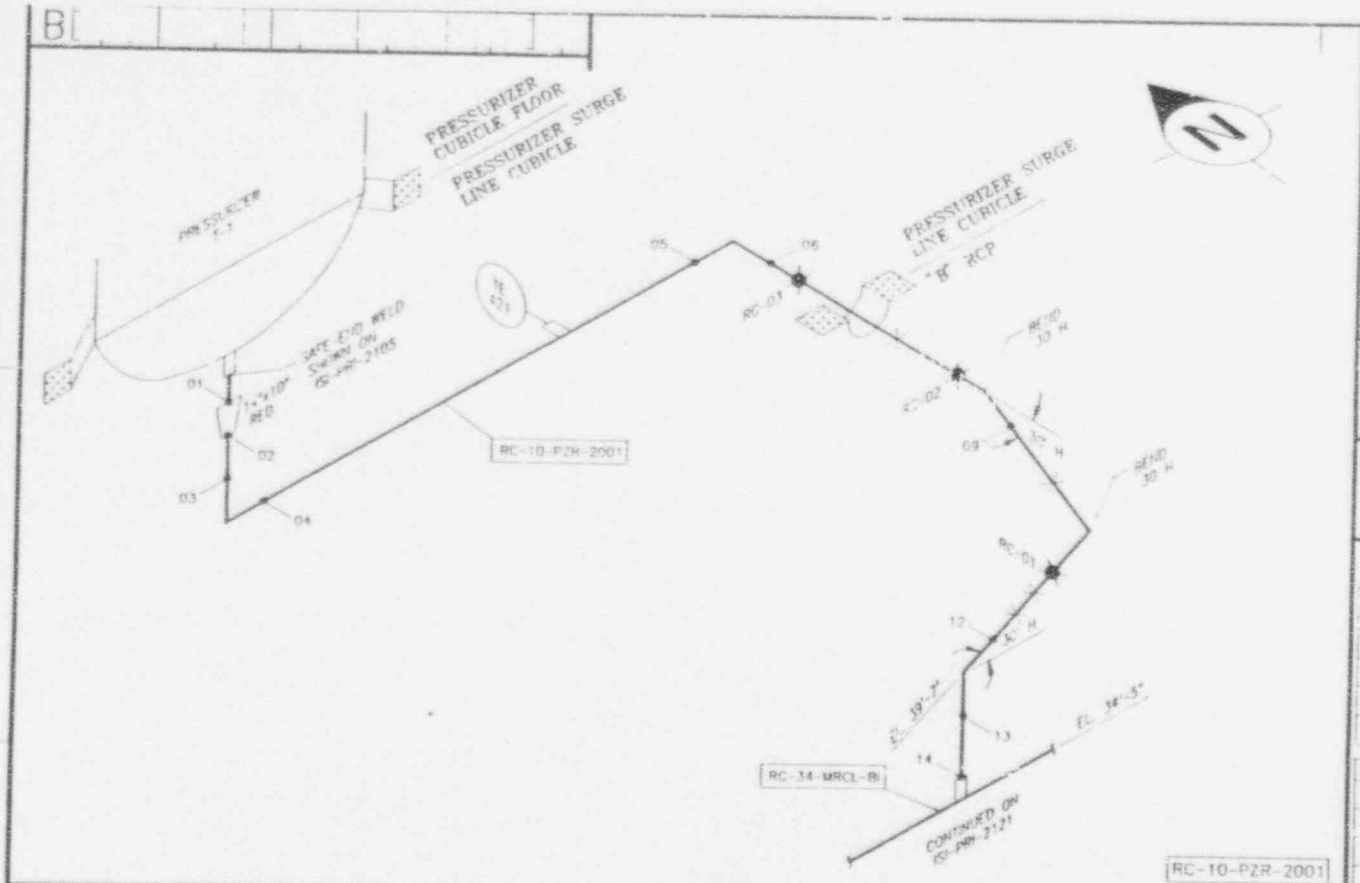
PRIMARY ISI ISOMETRIC
PBNP Unit 2
LOOP 'A'
INJECTION

DRAWING NO. ISI-PRI-2126

B | PB | 02 | MSIL | 183 | 009 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: "B" RCP/PZR SURGE LINE CUR
ELEV.: 26' TO 46'
HP AREA: 409, 408

REFERENCE DRAWINGS

REF. ISO: (ECHIE) P-245
REF. P&ID: 5414445 Sht 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC 2500#				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
10.000	1.000	A376 TP316	15-PTB

REVISIONS

REV NO.	ZONE	PROJ ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/95	INCORPORATED INTO PDS RLT. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	
1			03/27/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271365
CADFILE NO. PRI2127.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.5
MOD.: NONE

		DATE			DATE
DRAWN	DLJ	11/11/90	APPRV'D		
CHECKED	CTP	03/04/91	APPRV'D		
DRAFT'G	KTG	03/29/91	APPRV'D	GPS	10/01/91

WISCONSIN ELECTRIC

PSE

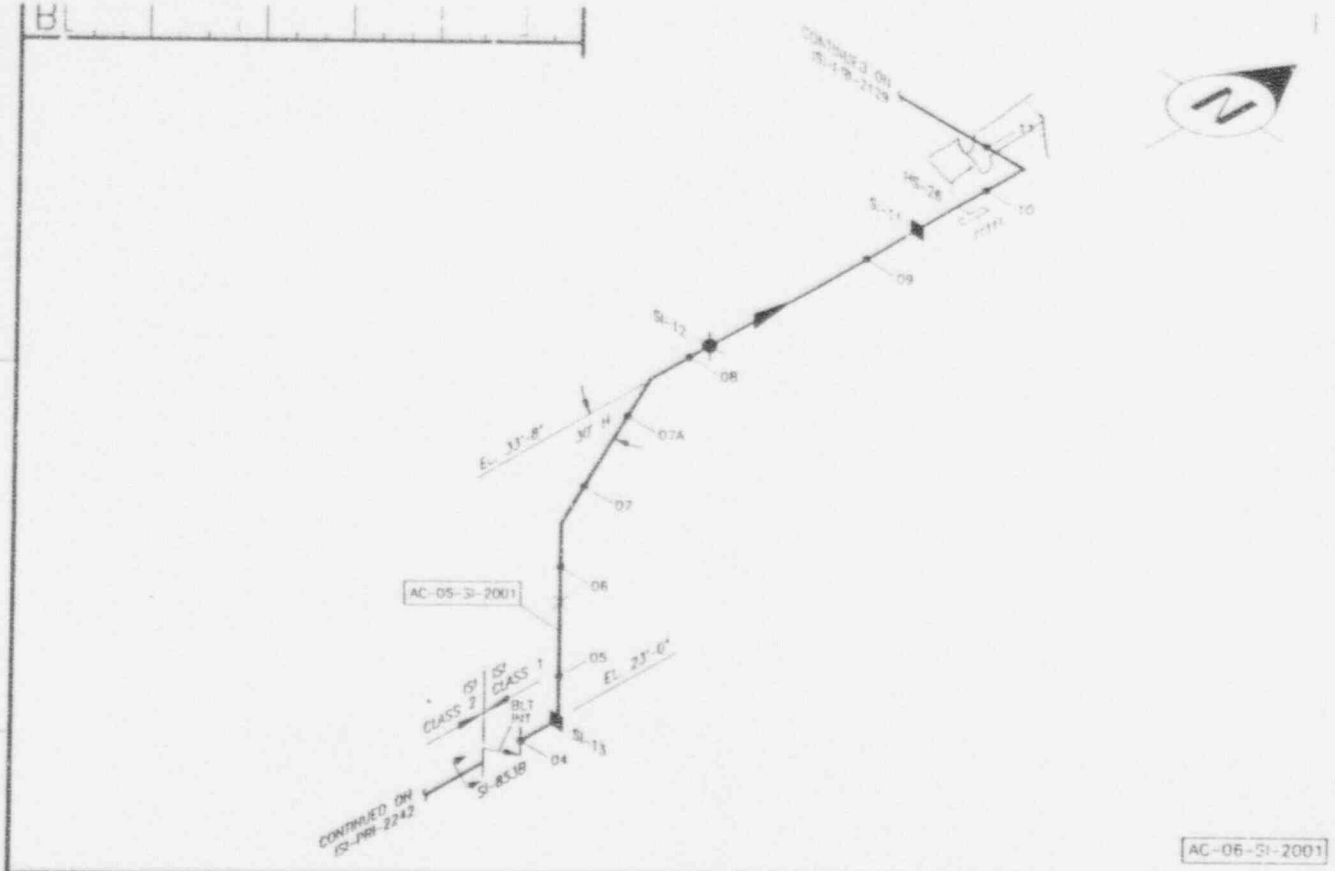
PRIMARY ISI ISOMETRIC
PBNP Unit 2
PRESSURIZER
SURGE LINE

DRAWING NO. ISI-PRI-2127

B | PB | 02 | MRCL | 183 | 011 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG.: CONTAINMENT
ROOM AREA: EL. 21' NE GENERAL AREA
ELEV.: 21' TO 35'
HP AREA: 403A

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-236
REF. P&ID: 110E035, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SE-25XXX-SS				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
6.000	0.562	A376 TP316	4-PTB

REVISIONS

REV NO.	ZONE	PBSI ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/95	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJH	
1			05/27/92	REVISED PER WALKDOWN	KTG	WAB	JRB	

MICROFORM NO. 271366
CADFILE NO. PRI2128.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	11/11/90		
CHECKED	CTP	03/05/91	APPRV'D	
DRAFT'G	KTG	03/29/91	APPRV'D GPS	10/11/91

WISCONSIN ELECTRIC

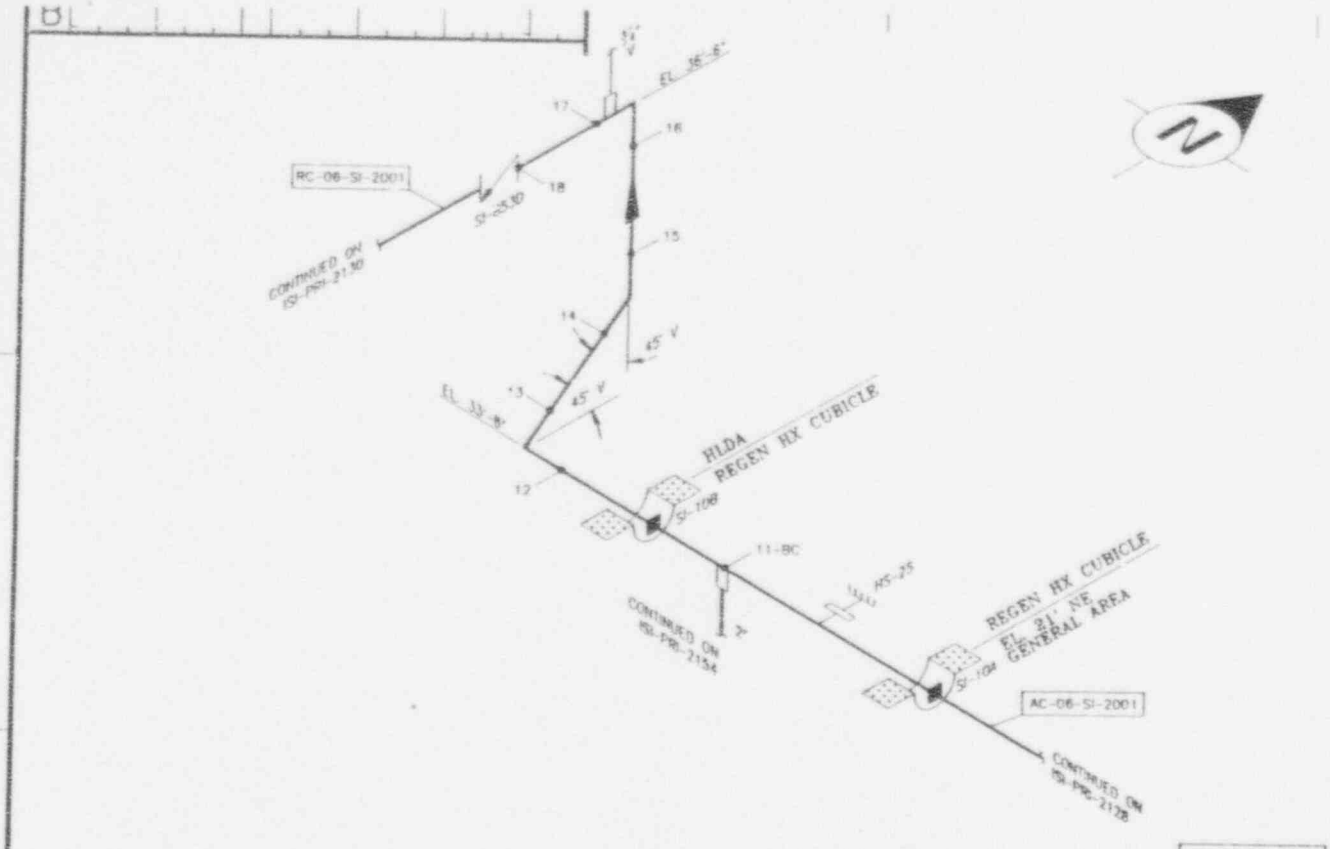
PRIMARY ISI ISOMETRIC
PBNP Unit 2
REACTOR VESSEL
INJECTION

DRAWING NO. ISI-PRI-2128

B | PB | 02 | MSIL | 183 | 010 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: HLDA, REG. HX CUB./GEN. AREA
ELEV.: 31' TO 44'
HP AREA: 403A, 403E, 403A

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-236
REF. P&ID: 110E035, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN T	DESIGN PSIG	OPERATING T	OPERATING PSIG
SEAMLESS 03				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
6.000	0.562	A376 TP316	4-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWC-92-062	PPL	PPL	S/M	
1			05/27/93	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271367
CADFILE NO. PRI2129.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	11/11/90		
CHECKED	CTP	03/05/91	APPRV'D	
DRAFT'D	KTG	03/29/91	APPRV'D	
			GRS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
REACTOR VESSEL
INJECTION

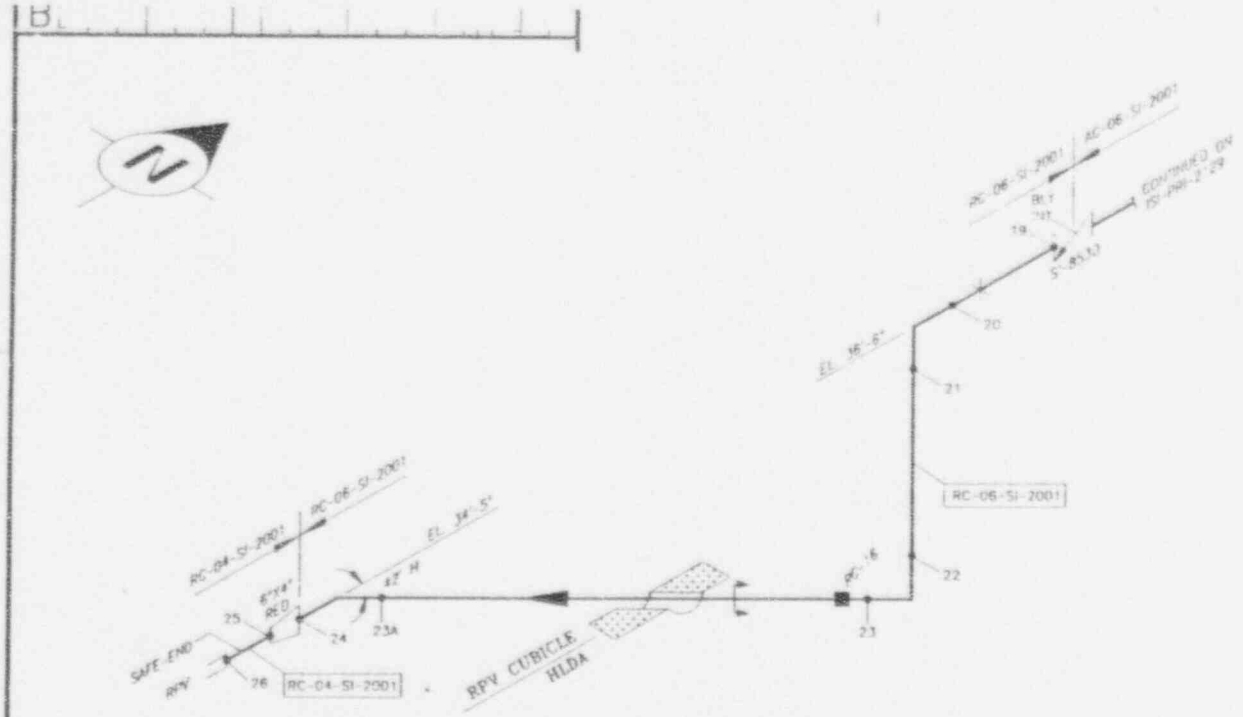
DRAWING NO. ISI-PRI-2129

B | PB | 02 | MSIL | 183 | 011 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



RC-04-SI-2001
RC-06-SI-2001

LOCATION

BLDG: CONTAINMENT
ROOM, AREA: HLDA RPV CUBICLE
ELEV.: 21' TO 44'
HP AREA: 403A, UNR

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-238
REF. P&ID: 110E035, SH. 1
REF. P&ID: 541F445, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC-2500-03				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
4.000	0.438	A376 TP316	6-PTB
6.000	0.562	A376 TP316	4-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	
1			03/27/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271368
CADFILE NO. PRI2130.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.L.: T2 4
MOD.: NONE

DRAWN PMJ	DATE 12/03/90	APPRV'D	DATE
CHECKED CTP	03/05/91	APPRV'D	
DRAFT'G KTG	03/22/91	APPRV'D GPS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
POINT BEACH NUCLEAR PLANT Unit 2
SIS PENETRATION
TO REACTOR

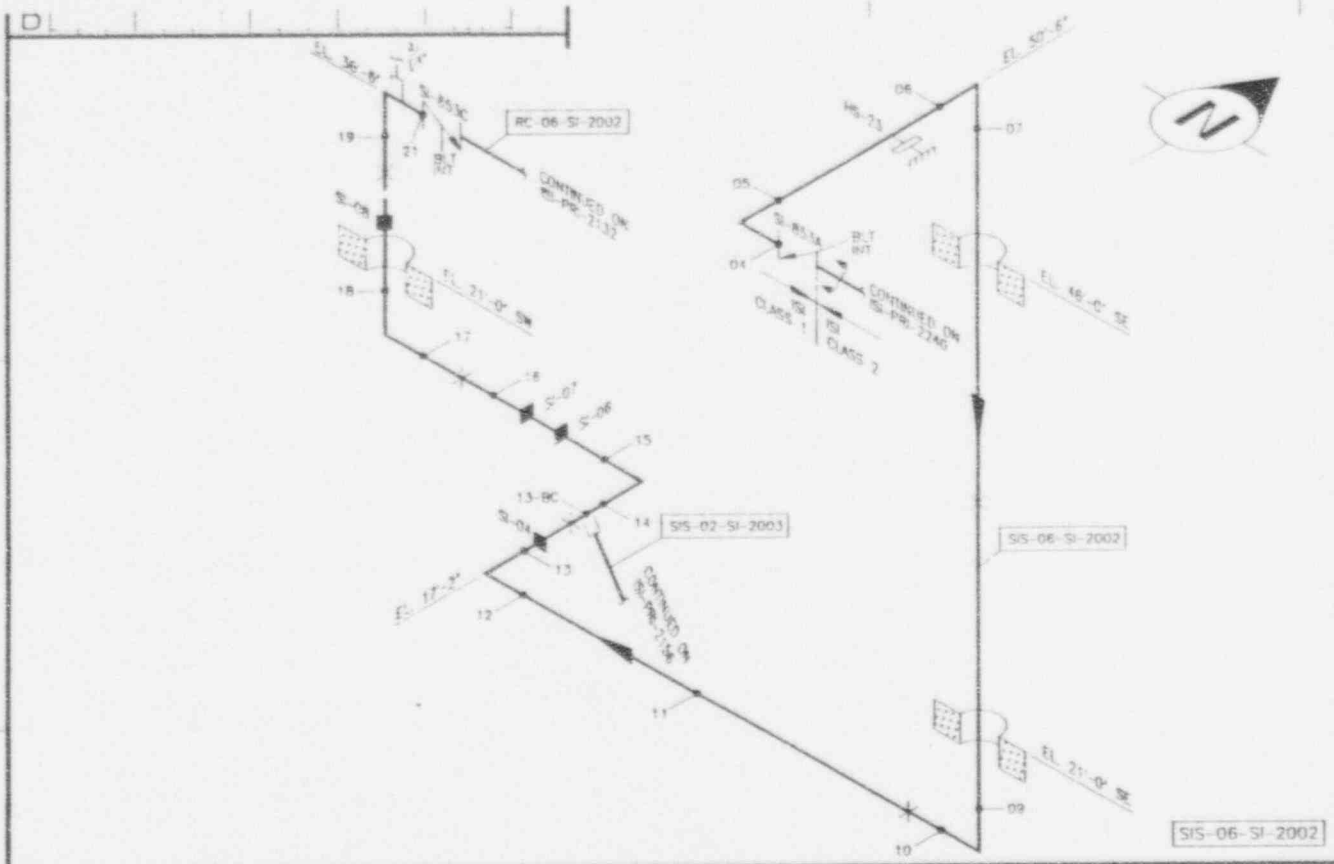
DRAWING NO. ISI-PRI-2130

B | PB | 02 | MSIL | 183 | 012 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG: CONTAINMENT
ROOM/AREA: EL. 8', 21', 46' GEN AREAS
ELEV: 16' TO 50'
HP AREA: 403C, 404C, 404B, 403B, 402B

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-218
REF. P&ID: 11DF035, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN		OPERATING	
	°F	PSIG	°F	PSIG
SA-376/A312 GR TP316				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
6.000	0.562	A376 TP316	4-PTB

REVISIONS

REV NO.	ZONE	PROJ ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO PDI RLT. TRANS. #PB-DPC-12-062	PPL	PPL	DJV	
1			05/27/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271369
CADFILE NO. PRI2131.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

DRAWN DLJ	DATE 11/16/90	APPRV'D	DATE
CHECKED CTP	03/05/91	APPRV'D	
DRAFT'G KTG	03/28/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

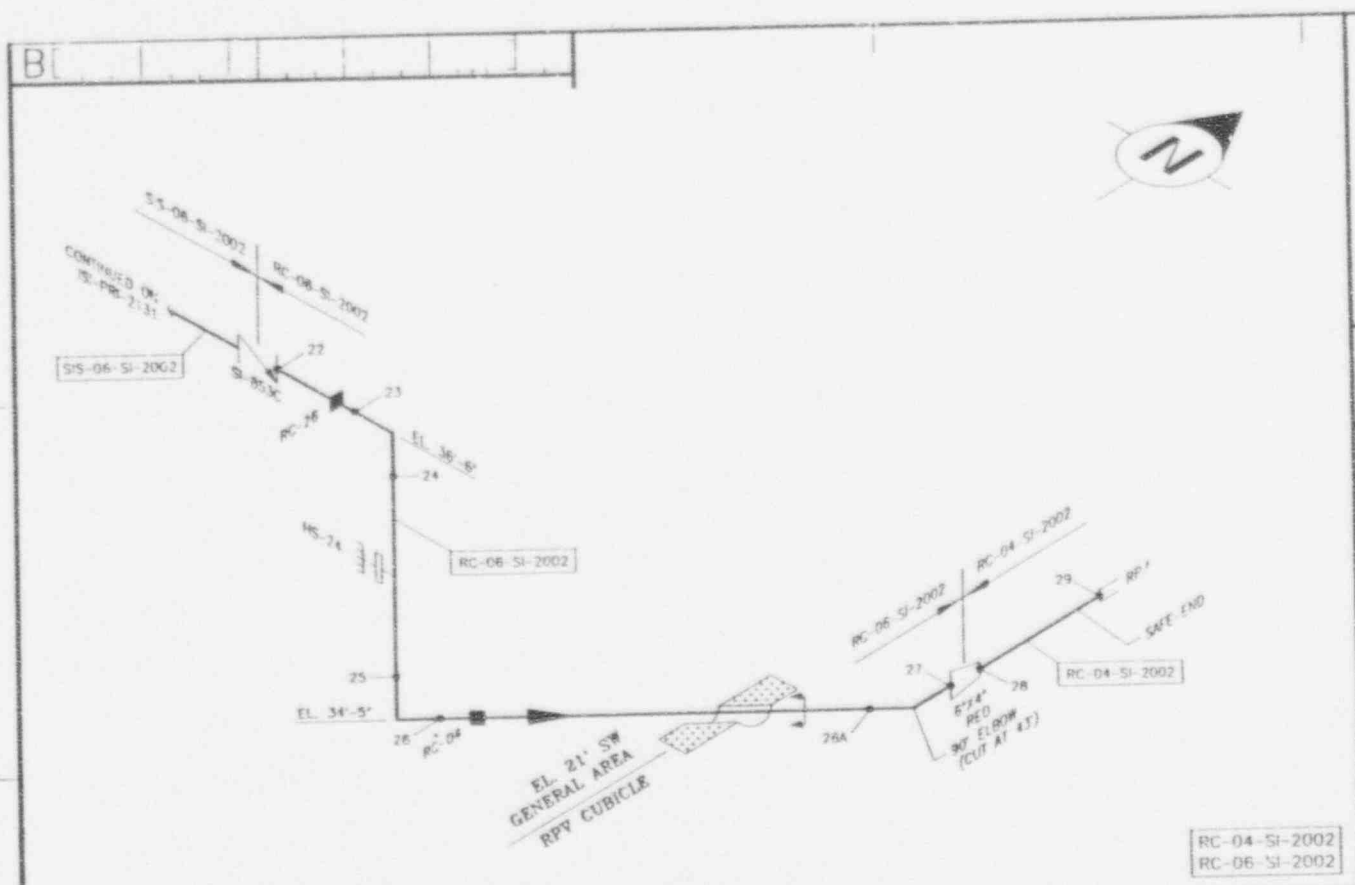
PRIMARY ISI ISOMETRIC
PBNP Unit 2
RESIDUAL HEAT REMOVAL
TO RPV

DRAWING NO. ISI-PRI-2131

B | PB | 02 | MS | IL | 183 | 013 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



RC-04-SI-2002
RC-06-SI-2002

DRAWING NOTES

LOCATION

BLDG: CONTAINMENT
ROOM/AREA: EL. 21'SW GEN AREA/RPV CUB
ELEV.: 21' TO 35'
HP AREA: 403C, UNR

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-218
REF. P&ID: 110E035, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
INCONEL 600				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
4.000	0.438	A376 TP316	6-PTB
6.000	0.562	A376 TP316	4-PTB

REVISIONS

REV NO.	ZONE	PROJ EL	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	
1			03/27/92	REVISED PER WALKDOWN	KTG	WAB	JRB	

MICROFORM NO. 271370
CADFILE NO. PRI2132.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	11/13/90		
CHECKED	CTP	03/05/91	APPRV'D	
DRAFTED	KTG	03/20/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
REACTOR VESSEL
INJECTION

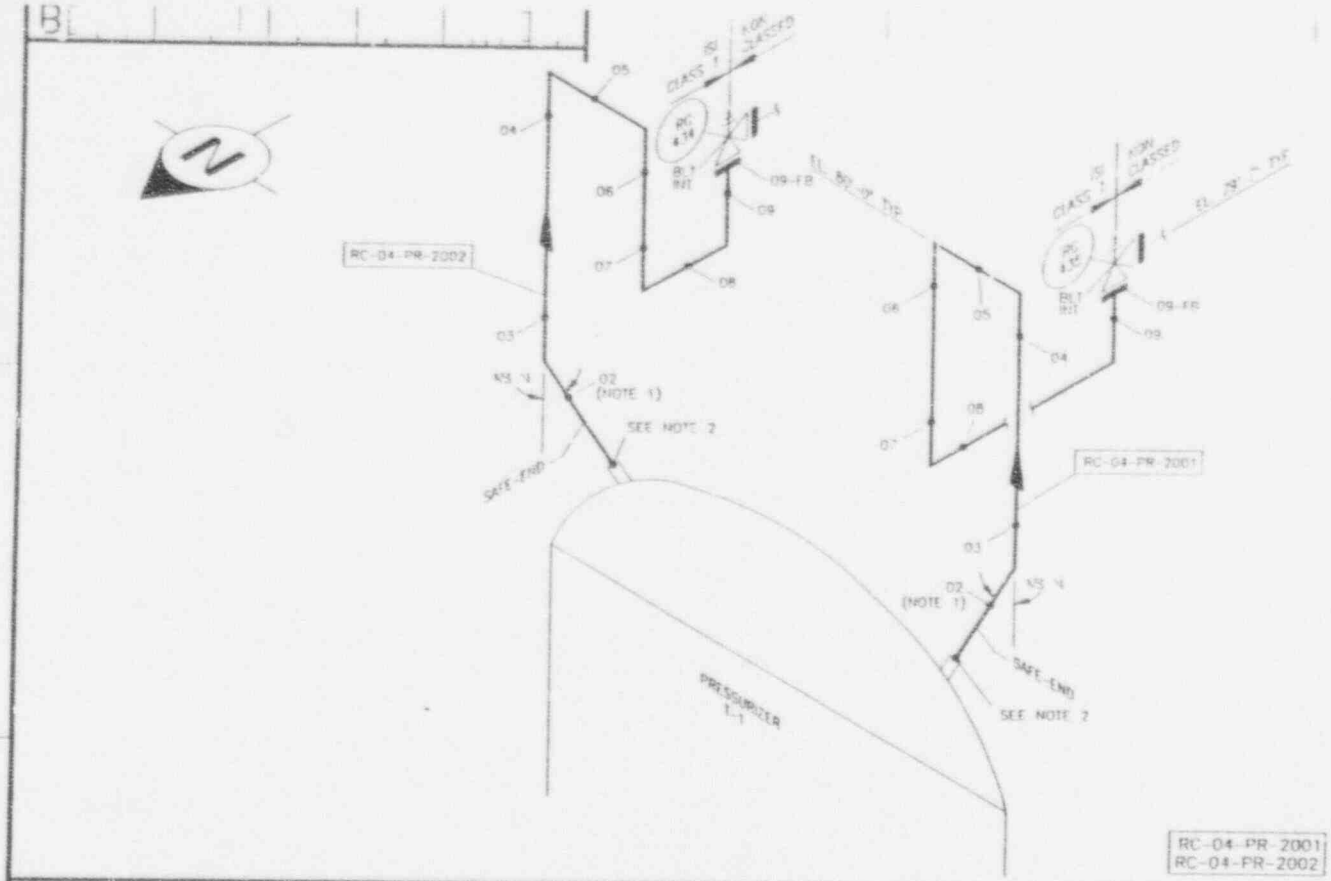
DRAWING NO. ISI-PRI-2132

B | PB | 02 | MSIL | 183014 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ISE CALIBRATION STANDARD 7.10.1B
   FOR SAFE-END TO ELBOW WELD ONLY.
2. NOZZLE ID SAFE-END AT (C TO ∅)
   DIN ISO-FAI-2134.

LOCATION

BLDG: CONTAINMENT
ROOM/AREA: PER CUBICLE
ELEV.: 76'
HP AREA: A08

REFERENCE DRAWINGS

REF: ISO: N.A.
REF: P&ID: 5613E45, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC-2501R-03				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
4.000	0.438	A376 TP316	ASME

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/06/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			03/27/92	REVISED PER WALKDOWN	KTG	WAG	JBR	

DRAWN	DLJ	DATE 11/17/90	APPRV'D
CHECKED	CTP	03/05/91	APPRV'D
DRAFT'G	KTG	03/29/91	APPRV'D GPS 10/01/91

MICROFORM NO. 271371
CADFILE NO. PRI2133.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.5
MOD.: NONE

WISCONSIN ELECTRIC
ISE

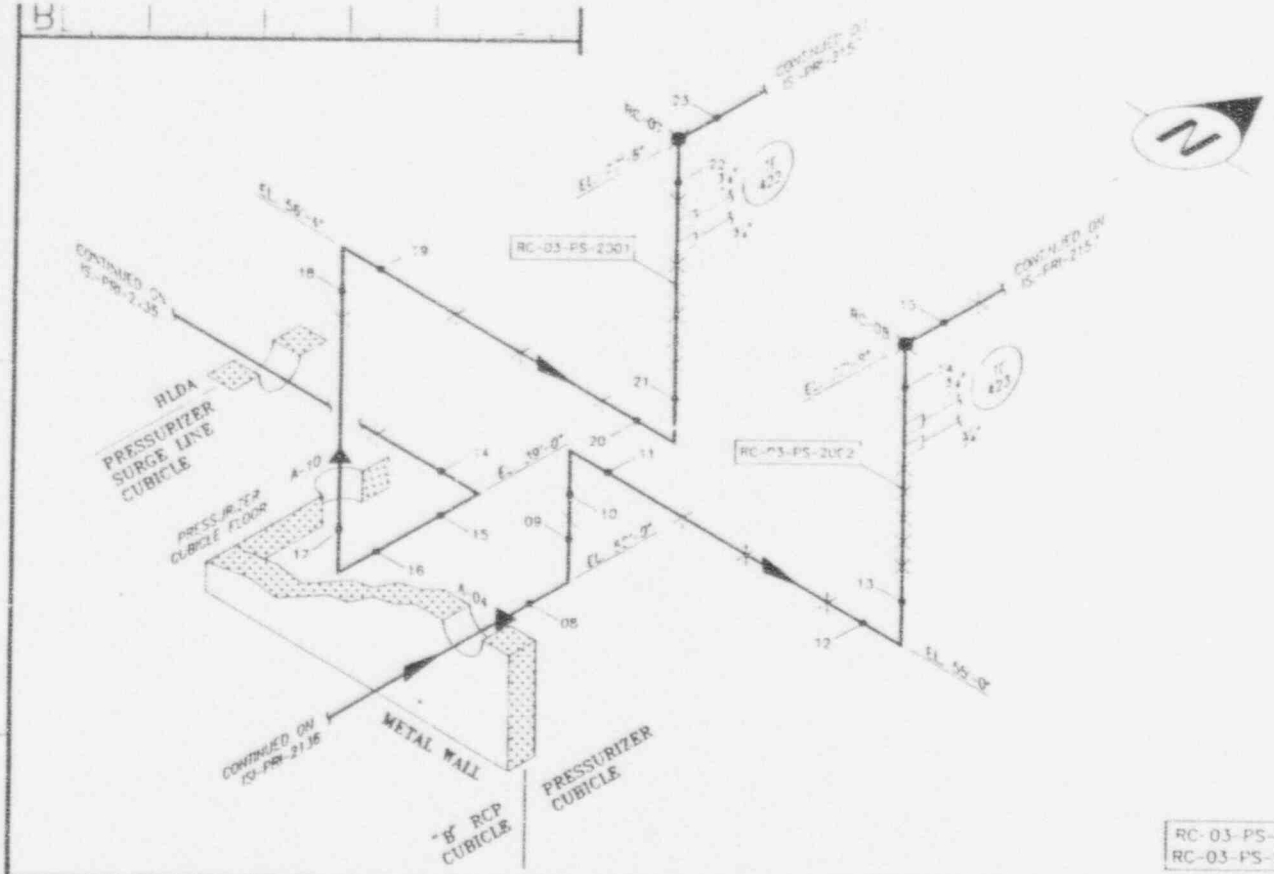
PRIMARY ISI ISOMETRIC
PBNP Unit 2
PRESSURIZER
SAFETY

DRAWING NO. ISI-PRI-2133

B | PB | 02 | MRCL | 183 | 012 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



RC-03-PS-2001
RC-03-PS-2002

DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG: CONTAINMENT
ROOM/AREA: PRESSURIZER CUBICLE
ELEV: 28' TO '8'
HP AREA: 80B

REFERENCE DRAWINGS

REF. ISO: RECNTE_P-243
REF. P&ID: 5610A435 SH1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC-2301-RC1				

COMPDIA	NOMTHCK	MATERIAL	CA/STD
3.000	0.438	A376 TP316	2-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
*								
2			05/08/95	INCORPORATED INTO PDS REF. TRANS. #PB-DWC-92-062	PPL	PPL	DJN	
1			03/27/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271372
CADFILE NO. PRI2134.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.L.: T1.5
MOD.: NONE

DRAWN KTG	DATE 01/20/91	APPRV'D	DATE
CHECKED CTP	03/05/91	APPRV'D	
DRAFT'G KTG	03/29/91	APPRV'D CTS	10/01/91

WISCONSIN ELECTRIC

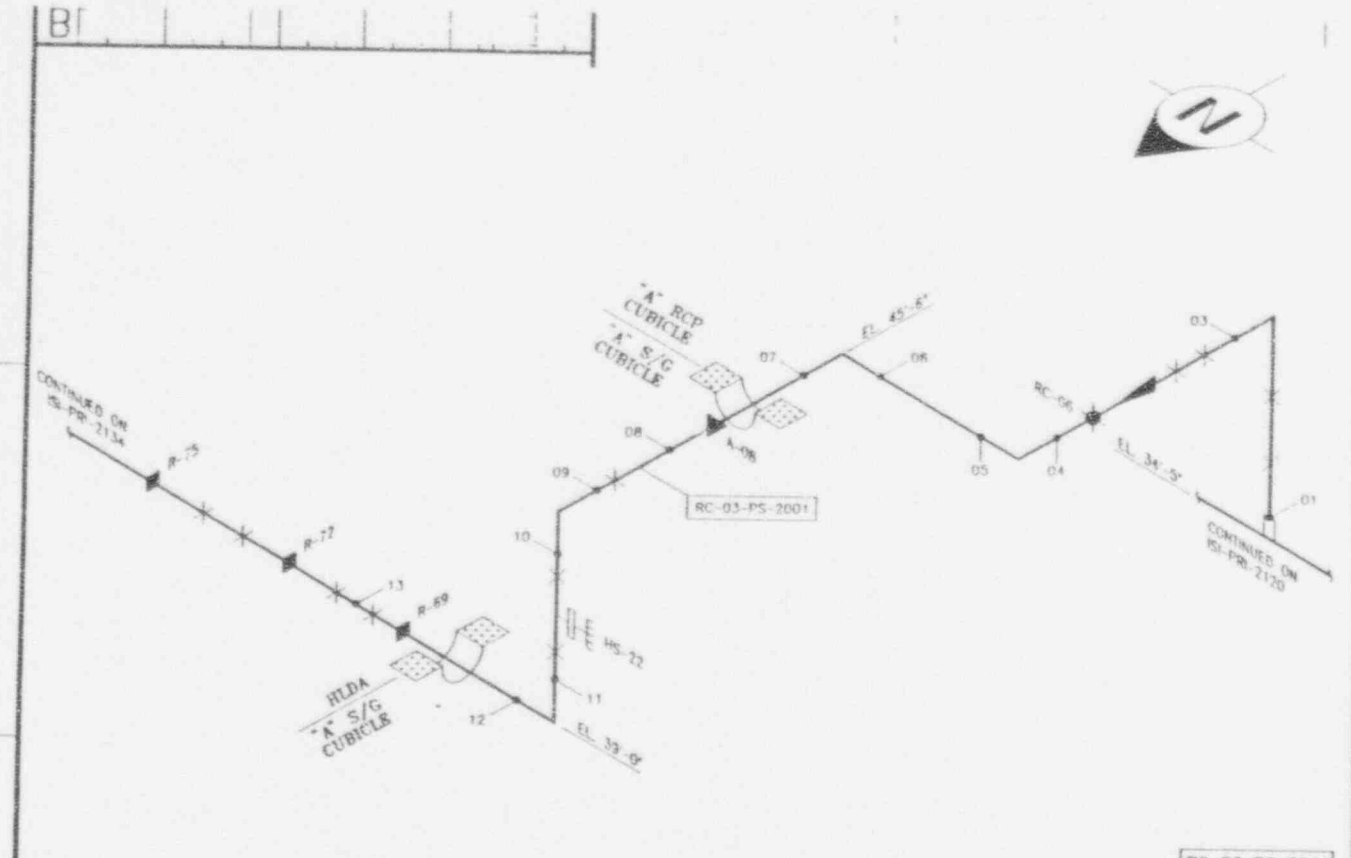
PRIMARY ISI ISOMETRIC
PBNP Unit 2
PRESSURIZER
SPRAY

DRAWING NO. ISI-PRI-2134

B | PB | 02 | MRCL | 183 | 013 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



RC-03-PS-2001

DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: HLDA/"A" S/G CUB/"A" RCP
ELEV.: 35' TO 45'
HP AREA: 403A, 406, 405

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-243
REF. P&ID: 541F445 SH.1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC-2501A-C1				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
3.000	0.438	A376 TP316	3-PTB

REVISIONS

REV NO.	ZONE	PROJ ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. 2PB-DWG-92-062	PPL	PPL	DJM	
1			03/27/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271373
CADFILE NO. PRI2135.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.5
MOD.: NONE

DRAWN KTG	DATE 01/22/91	APPRV'D	DATE
CHECKED CTP	03/22/91	APPRV'D	
DRAFT'G KTG	03/28/91	APPRV'D CRG	10/01/91

WISCONSIN ELECTRIC

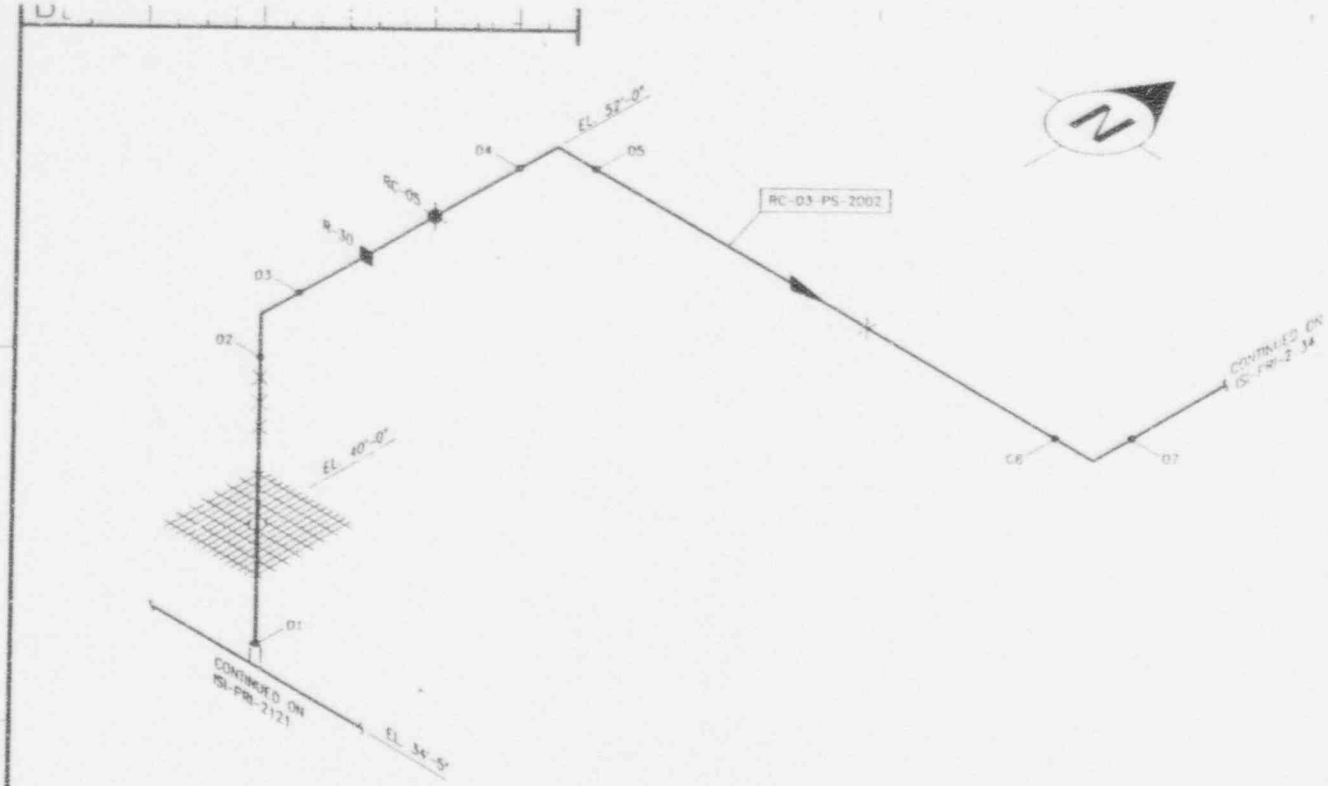
PRIMARY ISI ISOMETRIC
PBNP Unit 2
SPRAY LINE FROM LOOP 'A' TO PRESSURIZER

DRAWING NO. ISI-PRI-2135

B | PB | 02 | MRCL | 183 | 014 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: "B" PIPE CUBICLE
ELEV.: 34' TO 52'
HP AREA: A09

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-343
REF. P&ID: 5413F445 SH 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC-23(B-1)				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
3.000	0.438	A376 TP316	3-PTB

RC-03-PS-2002

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REC'D
2			05/08/93	INCORPORATED INTO PDS. REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	
1			05/27/92	REVISED PER WALKDOWN	XTC	WAB	JBB	

DRAWN XTC	DATE 01/22/91	APPRV'D	DATE
CHECKED CTP	05/27/91	APPRV'D	
DRAFT'G XTG	03/25/91	APPRV'D GPS	10/01/91

MICROFORM NO. 271374
CADFILE NO. PRI2136.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.5
MOD.: NONE

WISCONSIN ELECTRIC

FSS

PRIMARY ISI ISOMETRIC
PBNP Unit 2
SPRAY LINE FROM LOOP 'B'
TO PRESSURIZER

DRAWING NO. ISI-PRI-2136

B | PB | 02 | MRCL | 183 | 015 | 02

SCALE None

RELEASE DATE

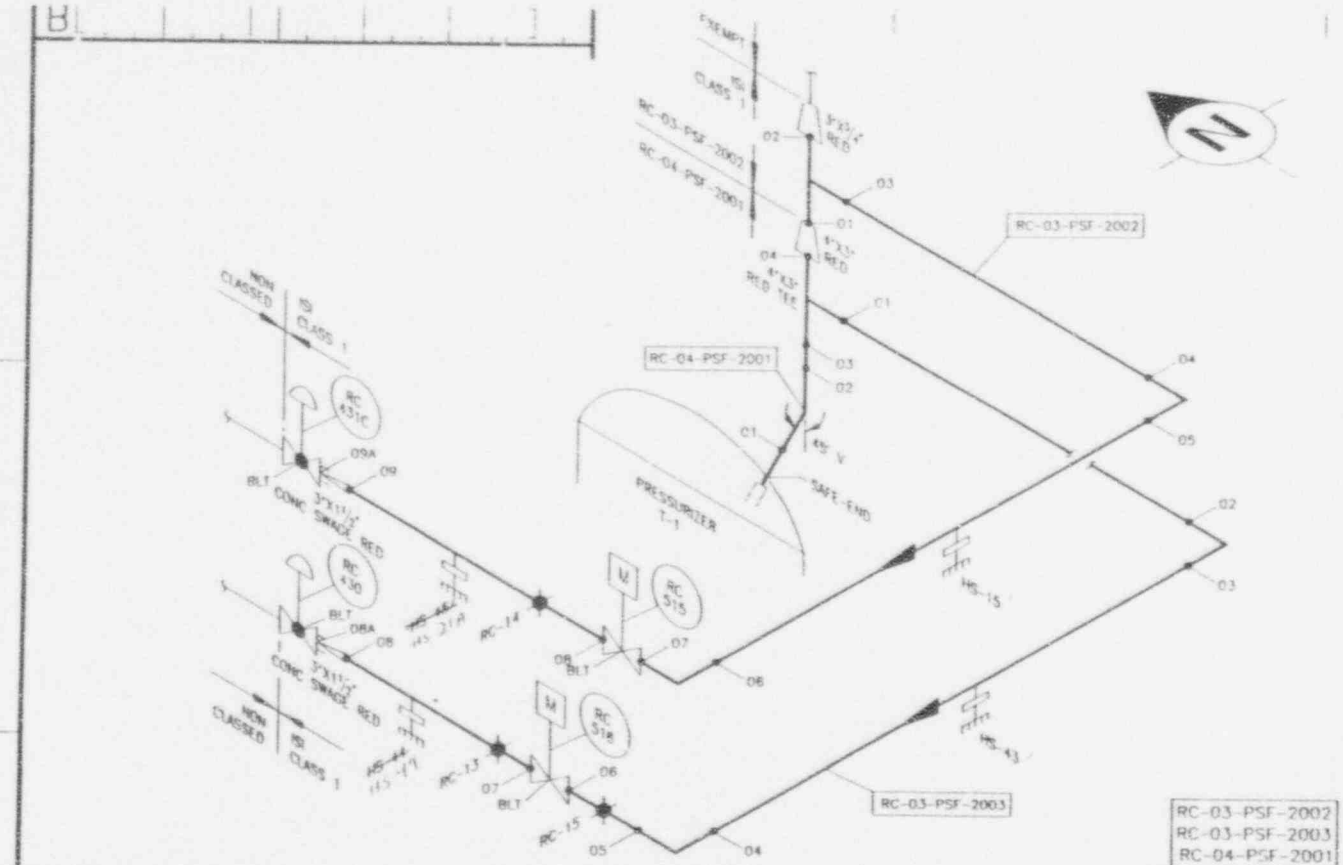
4 3 2 1

C B A

B A 1 5 10 A B

3 4 10 5 1 4 3

FOR INFORMATION ONLY



RC-03-PSF-2002
RC-03-PSF-2003
RC-04-PSF-2001

DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED

LOCATION

BLDG: CONTAINMENT
ROOM/AREA: PSR CUBICLE
ELEV.: TOP OF PRESSURIZER EL. 78'
HP AREA: 40B

REFERENCE DRAWINGS

REF. ISO: N/A
REF. P&ID: 5416445 SH 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC 2501R-02				

COMPOSITION	NOMTHICK	MATERIAL	CALSTD
3.000	0.438	A376 TP316	2-PTB
4.000	0.438	A376 TP316	6-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			05/27/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271375
CADFILE NO. PRI2137.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.L.: T1.5
MOD.: NONE

DRAWN DLJ	DATE 11/25/90	APPRV'D	DATE
CHECKED CTP	06/10/91	APPRV'D	
DRAFT'G KTG	08/15/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
PRESSURIZER POWER OPERATED
RELIEF VALVES

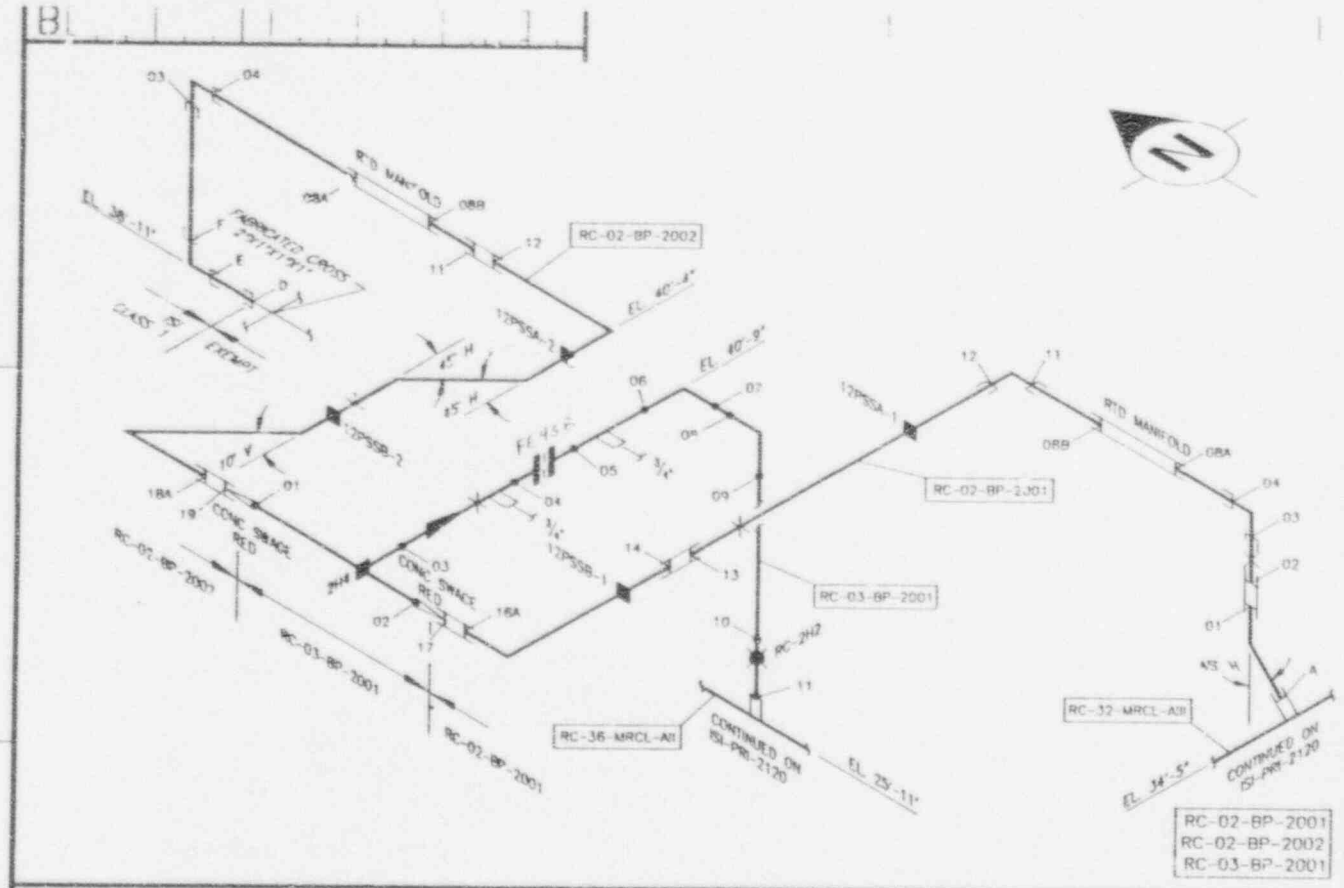
DRAWING NO. ISI-PRI-2137

B | PB | 02 | MRCL | 183 | 016 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: "A" LOOP
ELEV.: 25' TO 37'
HP AREA: 405, 406

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-246
REF. ISO: WEST 6683A, B & C
REF. ISO: WEST 6655A & B
~~REF. P&ID 5x1F091, SH. 1~~ REF. NOT SHOWN SH1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC-2501R-14				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A
3.000	0.438	A376 TP316	2-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED RTD PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			03/27/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271376
CADFILE NO. PRI2138.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.5
MOD.: NONE

DRAWN DLJ	DATE 12/20/90	APPRV'D	DATE
CHECKED CTP	06/11/91	APPRV'D	
DRAFT'G KTG	06/13/91	APPRV'D GBS	10/01/91

WISCONSIN ELECTRIC

TSS

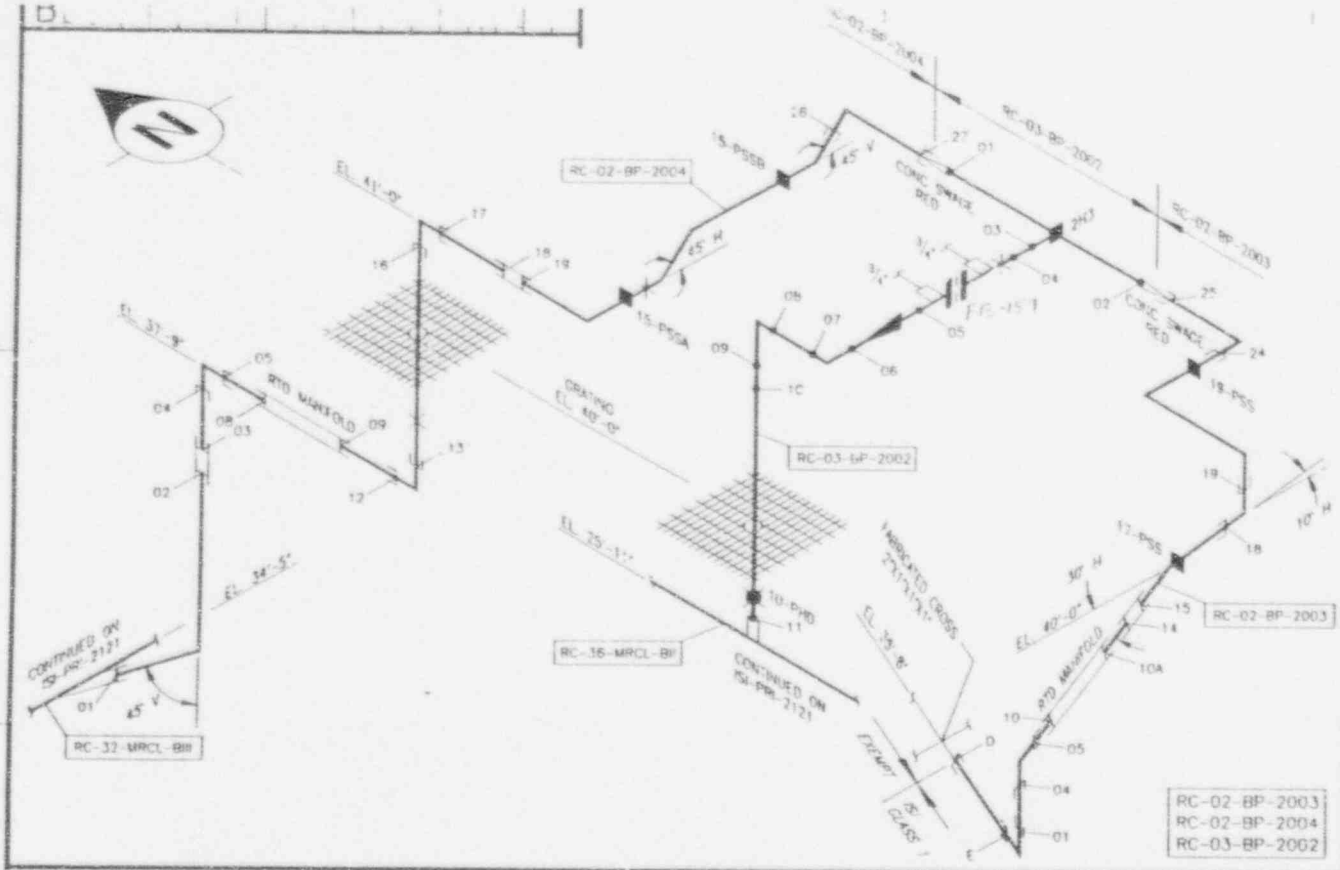
PRIMARY ISI ISOMETRIC
PBNP Unit 2
LOOP "A"
RTD BYPASS

DRAWING NO. ISI-PRI-2138

B | PB | 02 | MRCL | 301702

SCALE None RELEASE DA.

FOR INFORMATION ONLY



1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM AREA: "B" LOOP
ELEV.: 25' TO 37'
HP AREA: 409, 410

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-246
REF. ISO: WEST. 6875A & B
REF. ISO: WEST. 6862A & B
REF. PAID: 8415091, SH. 1 REVISED SHIFTS CHI

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC-2501R-14				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A
3.000	0.438	A376 TP316	2-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWC-92-082	PPL	PPL	DJW	
1			05/27/92	REVISED PER WALKDOWN	RTG	WAB	JBB	

MICROFORM NO. 271377
CADFILE NO. PRI2139.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: 11.5
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	12/17/90		
CHECKED	CTP	06/11/91	APPRV'D	
DRAFT'G	RTG	08/13/91	APPRV'D	10/01/91

WISCONSIN ELECTRIC

TSE

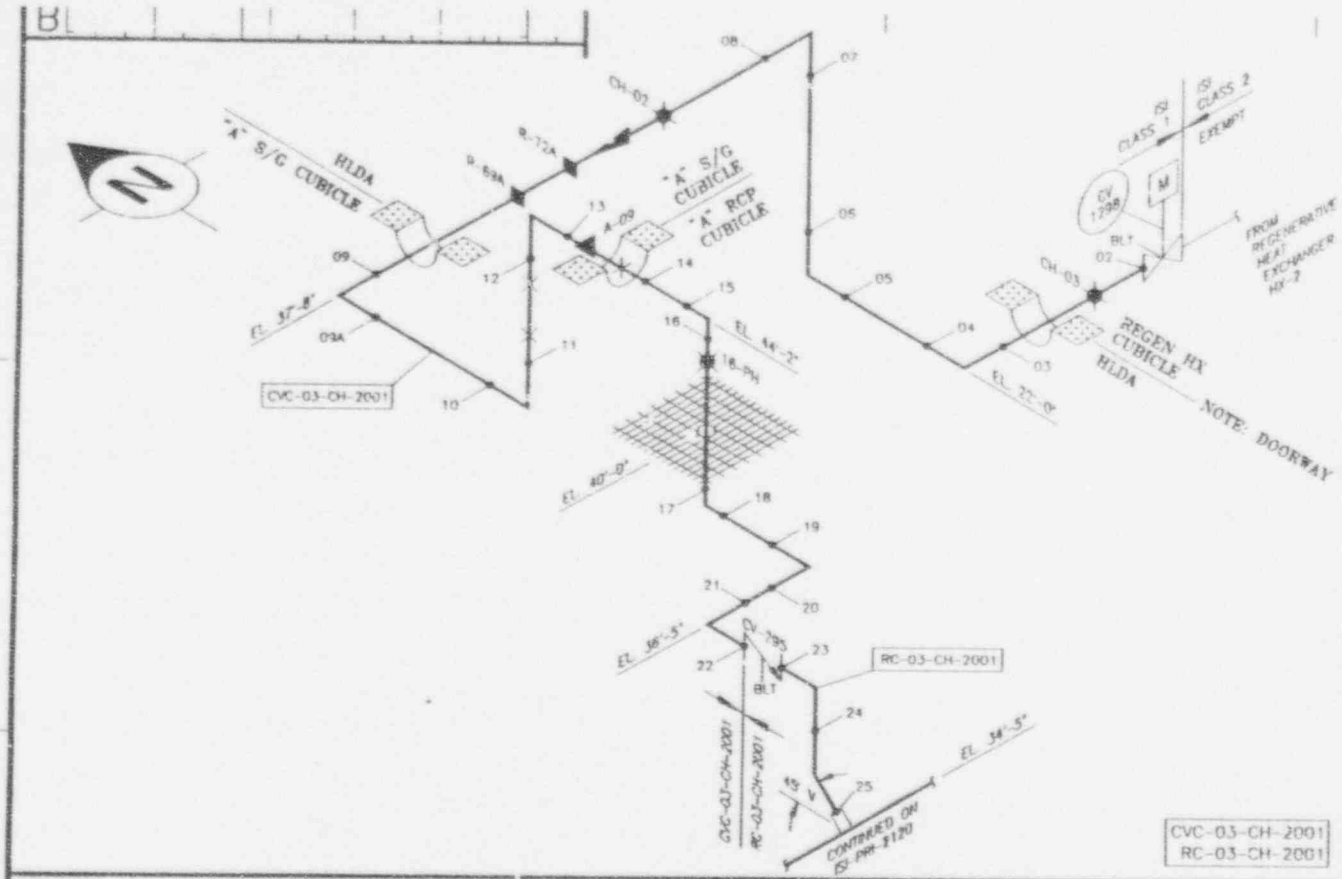
PRIMARY ISI ISOMETRIC
PBNP Unit 2
LOOP 'B'
RTD BYPASS

DRAWING NO. ISI-PRI-2139

B | PB | 02 | MRCL | 183 | 019 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: "A" S/G CUB, HLDA, REGEN HX
ELEV.: 34' TO 37'
HP AREA: 406, 403A, 403E

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-254
REF. P&ID: 885J175 SH 3

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC Z3...K-12				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
3.000	0.438	A316 TP316	2-PTB

REVISIONS

REV NO.	ZONE	PROJ ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			05/13/92	REVISED PER WALKDOWN	KTG	MAB	JBB	

MICROFORM NO. 271378
CADFILE NO. PRI2140.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.2
MOD.: NONE

DRAWN	KTG	01/23/91	APPRV'D		DATE
CHECKED	CTP	06/11/91	APPRV'D		
DRAFT'G	KTG	06/13/91	APPRV'D	GRS	10/01/91

WISCONSIN ELECTRIC

FSE

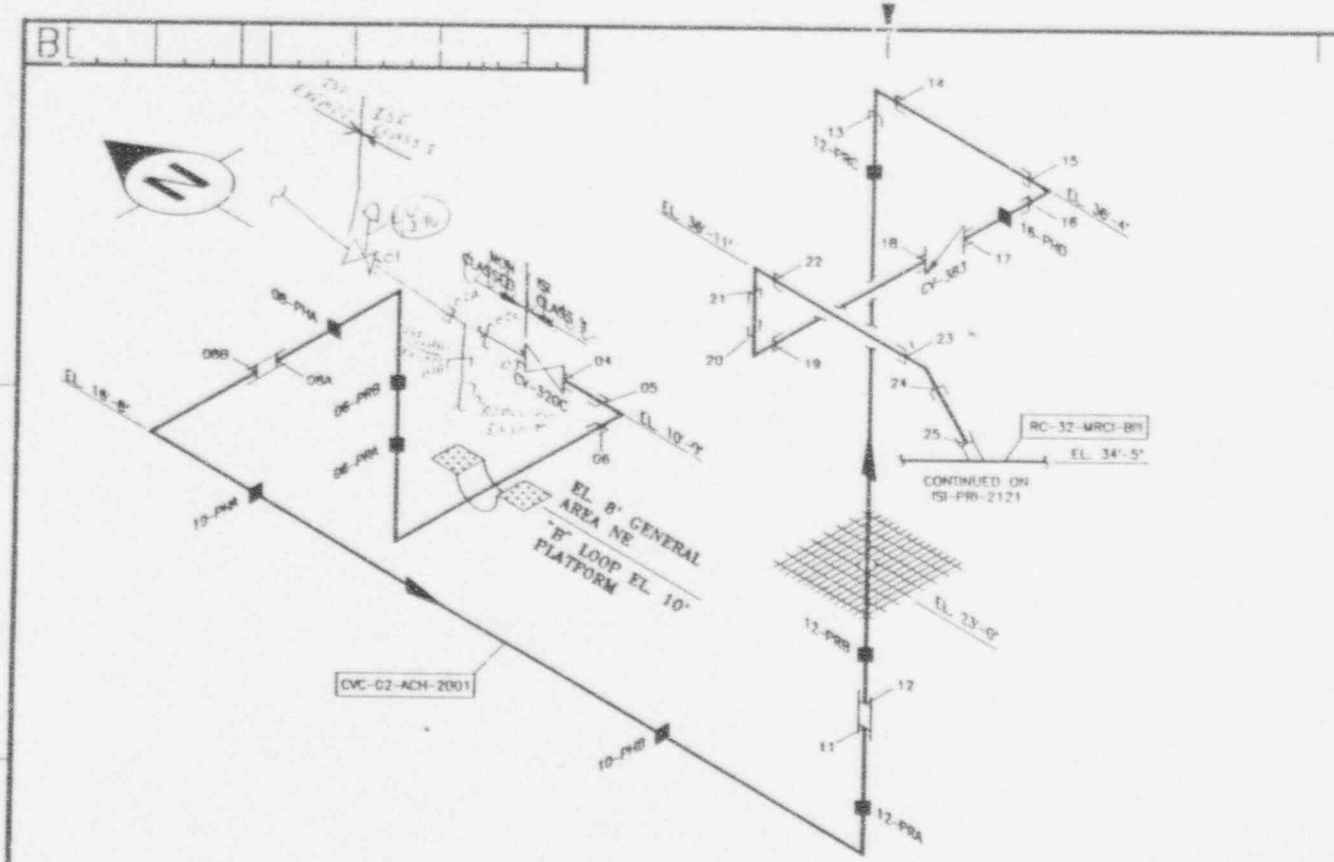
PRIMARY ISI ISOMETRIC
PBNP Unit 2
CHARGING LINE TO
LOOP 'A'

DRAWING NO. ISI-PRI-2140

B | PB | 02 | MCVL | 183 | 001 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: "B" LOOP/PLATFORM, GEN AREA
ELEV.: 34'
HP AREA: 411, 404A

REFERENCE DRAWINGS

REF. ISO: WEST. 6191A & B
REF. P&ID: 6853175

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

CVC-02-ACH-2001

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/92	INCORPORATED INTO PDS RLT. TRANS. #PB-DRC-92-082	PPL	PPL	DJN	
1			05/12/92	REVISED PER WALKDOWN	XTG	WAB	JBB	

MICROFORM NO. 271379
CADFILE NO. PRI2141.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.2
MOD.: NONE

DRAWN DLJ	DATE 12/15/90	APPRV'D	DATE
CHECKED CTP	05/11/91	APPRV'D	
DRAFT'G XTG	08/13/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
AUXILIARY
CHARGING

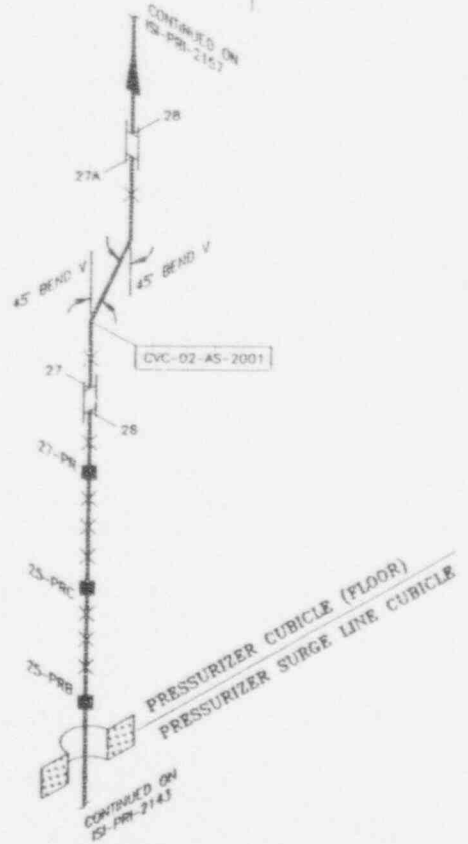
DRAWING NO. ISI-PRI-2141

B PB 02 MCVL 18300202

SCALE None

RELEASE DATE

4 3 2 1



CVC-02-AS-2001

DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: PRESSURIZER CUBICLE
ELEV.: 44' - 78'
HP AREA: 408

REFERENCE DRAWINGS

REF. ISO: WEST. 6699A
REF. P&ID: ~~885J13S~~ 5417445 SH1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC 2574 C1				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO PDS REF. TRANS. #93-DWG-92-082	PPL	PPL	DJN	
1			05/13/92	REVISED PER WALKDOWN	KTG	WAB	JRB	

MICROFORM NO. 271380
CADFILE NO. PRI2142.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.2
MOD.: NONE

DRAWN KTG	DATE 01/20/91	APPRV'D	DATE
CHECKED CTP	03/05/91	APPRV'D	
DRAFT'G KTG	08/13/91	APPRV'D GDS	10/01/91

WISCONSIN ELECTRIC

FSE

PRIMARY ISI ISOMETRIC
PBNP Unit 2
PRESSURIZER
SPRAY

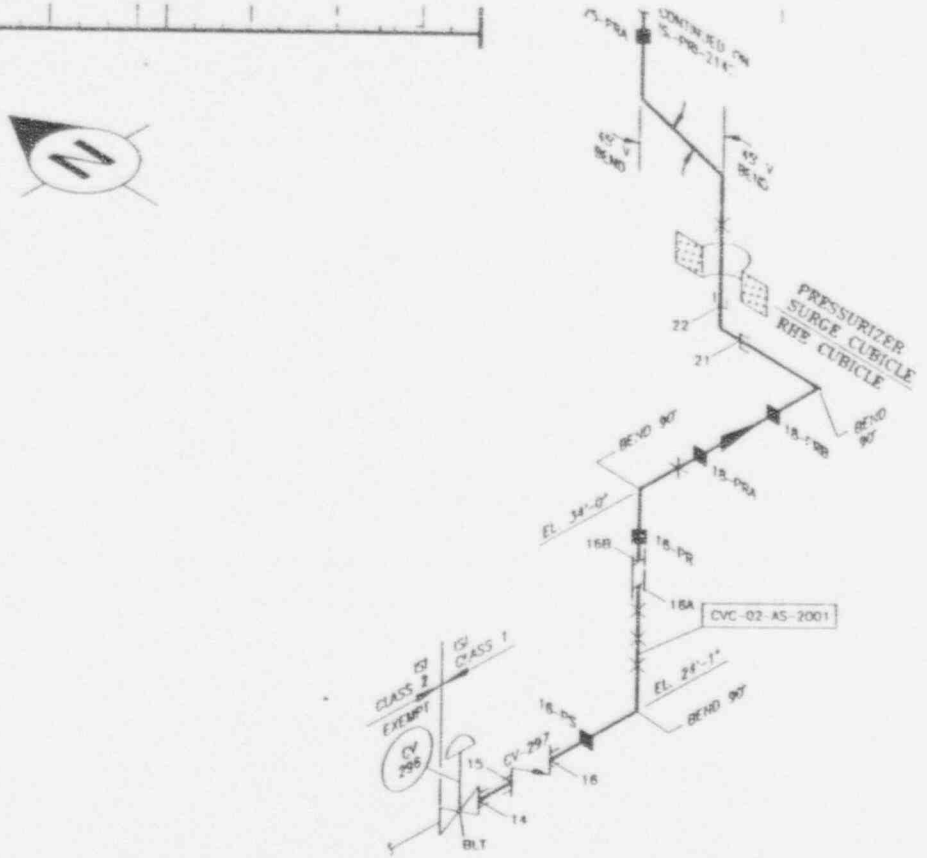
DRAWING NO. ISI-PRI-2142

B | PB | 02 | MCVL | 183 | 003 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



CVC-02-AS-2001

DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: PZR SRGE LINE CUR/REGEN HX
ELEV.: 26' TO 44'
HP AREA: 408

REFERENCE DRAWINGS

REF. ISO: WEST. 6181A
REF. ISO: WEST. 6699A
REF. P&ID: 6852175 Sh 2

DESIGN DATA

PIPE CLASS	DESIGN T	DESIGN PSIG	OPERATING T	OPERATING PSIG
RC-2501E-C1				

COMPONA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	SCL'D
2			01/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWC-92-082	PPL	PPL	D/M	
1			05/13/92	REVISED PER WALKDOWN	XTG	WAB	JBB	

MICROFORM NO. 271381
CADFILE NO. PRI2143.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.2
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	XTG	01/22/91		
CHECKED	CTP	06/11/91	APPRV'D	
DRAFT'G	XTG	08/15/91	APPRV'D	
			DRS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
AUXILIARY SPRAY
TO PRESSURIZER

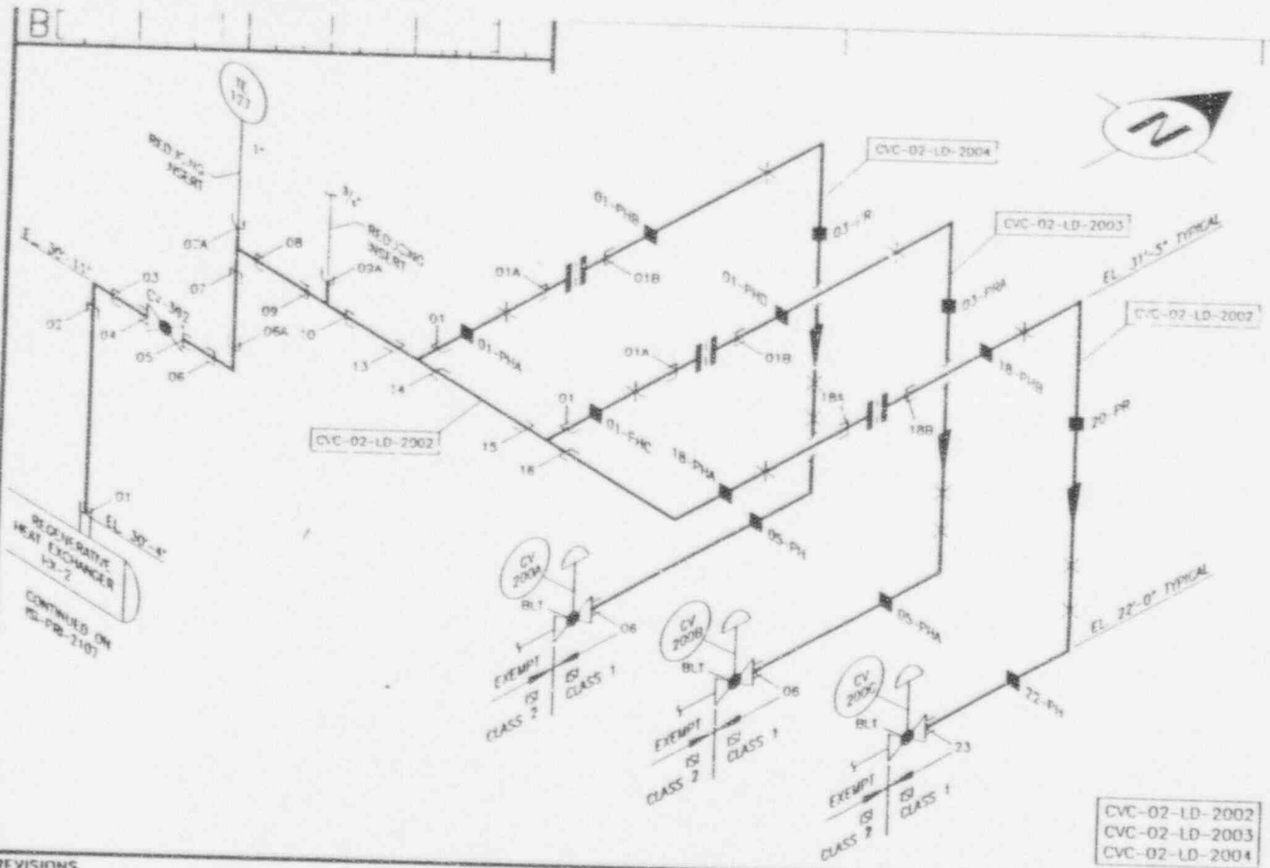
DRAWING NO. ISI-PRI-2143

B | PB | 02 | MCVL | 183 | 004 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
CUBICLE/AREA: REGEN HX CUBICLE
ELEV.: 21' TO 40'
HP AREA: 408

REFERENCE DRAWINGS

REF. ISO: WEST. 61B-1
REF. P&ID: 6885175 Sh. 2

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
CLASS 2S-1R-CS				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/06/93	INCORPORATED INTO PDS REF. TRANS. #PB-DMC-92-062	PPL	PPL	DJM	
1			05/12/92	REVISED PER WALKDOWN	KTC	WAB	JMB	

MICROFORM NO. 271382
CADFILE NO. PRI2144.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.2
MOD.: NONE

DRAWN KTC	DATE 01/22/91	APPRV'D	DATE
CHECKED CTP	06/11/91	APPRV'D	
DRAFT'G KTC	09/13/91	APPRV'D GJS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
LETDOWN

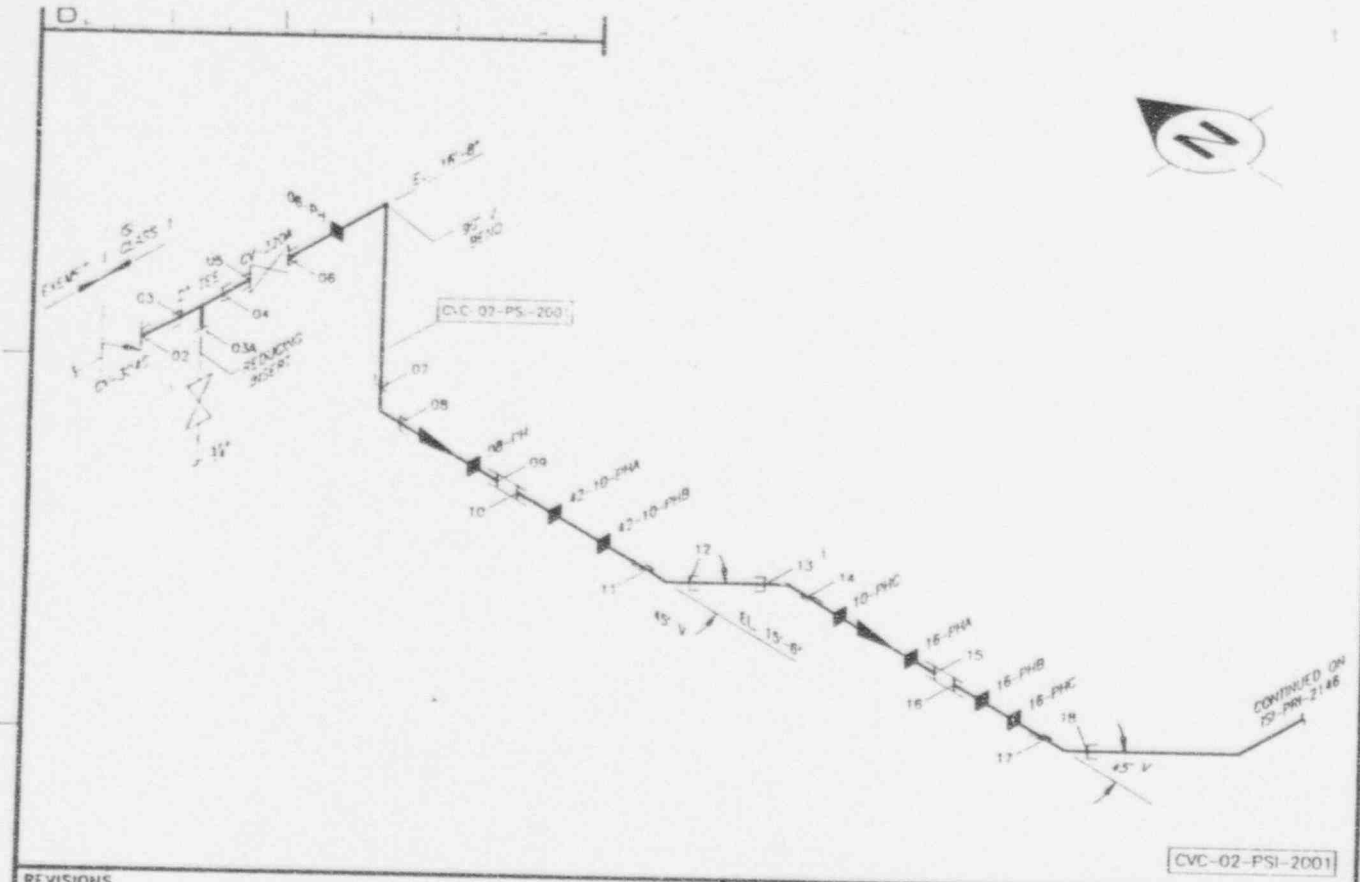
DRAWING NO. ISI-PRI-2144

B | PB | 02 | MCVL | 183 | 005 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



LOCATION

BLDG.: CONTAINMENT
RM/AREA: [illegible]
ELEV.: 8'
HP AREA: 404A, 404D

REFERENCE DRAWINGS

REF. ISO: WEST 6166A
REF. P&ID: 885,175 [illegible]

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
[illegible]				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. NO.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO PDS REF. TRANS. #PS-DWG-92-062	PPL	PPL	DJM	
1			05/12/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271383
CADFILE NO. PRI2145.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.2
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	11/15/90		
CHECKED	CTP	06/11/91	APPRV'D	
DRAFT'G	KTG	06/13/91	APPRV'D	
			GMS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
REACTOR COOLANT PUMP 'A'
SEAL INJECTION

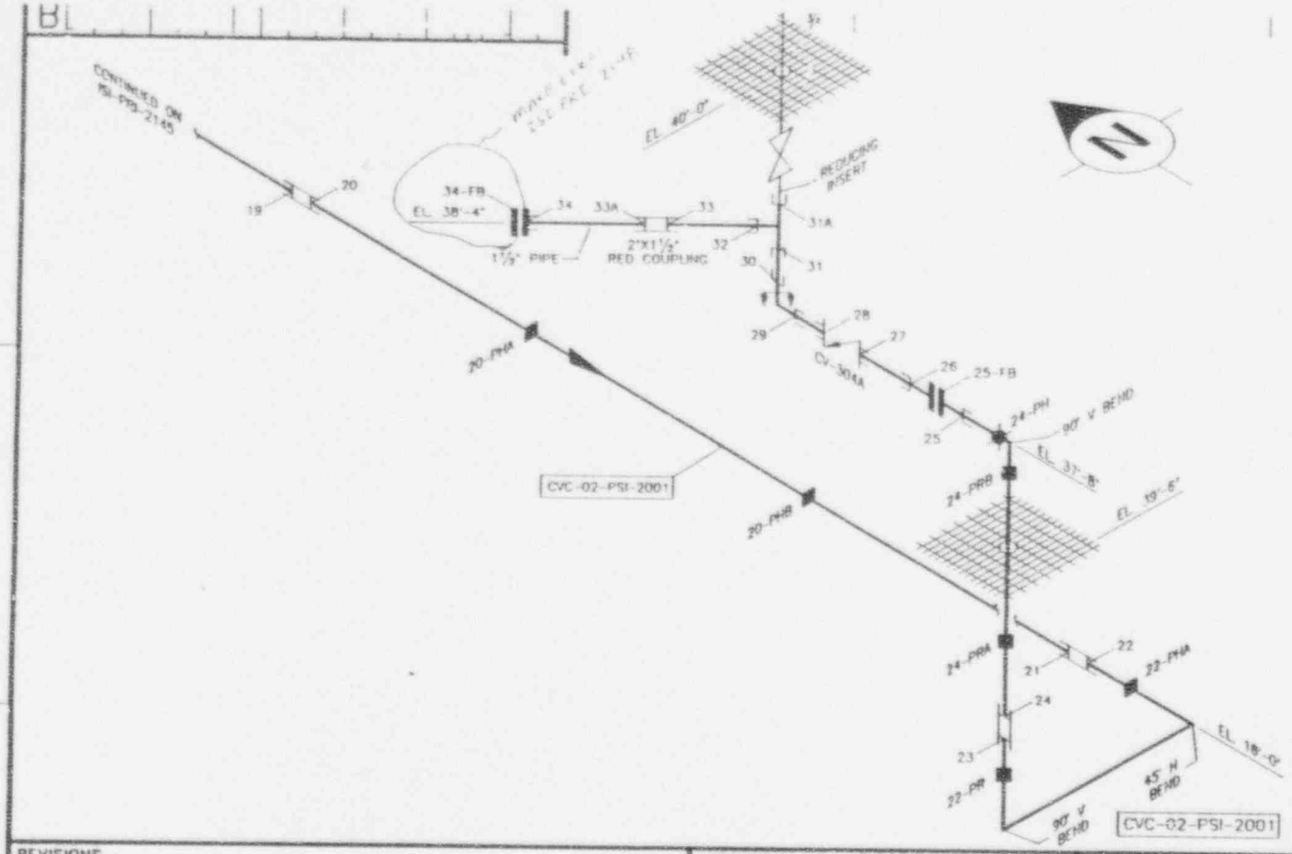
DRAWING NO. ISI-PRI-2145

B | PB | 02 | MCVL | 183 | 006 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: "A" S/G CUB., "A" RCP CUB
ELEV.: 8' TO 26'
HP AREA: 406, 405

REFERENCE DRAWINGS

REF. ISO: WEST. 6166A
REF. ISO: WEST. 6166B
REF. P&ID: 685J175 SH 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
[illegible]				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. NO.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2		-	05/06/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PTL	DJM	
1			05/12/92	REVISED PER WALKDOWN	KTC	WAB	JBB	

MICROFORM NO. 271384
CADFILE NO. PRI2146.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.2
MOD.: NONE

DRAWN DLJ	DATE 11/18/90	APPRV'D	DATE
CHECKED CTP	06/11/91	APPRV'D	
DRAFT'G KTC	06/13/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

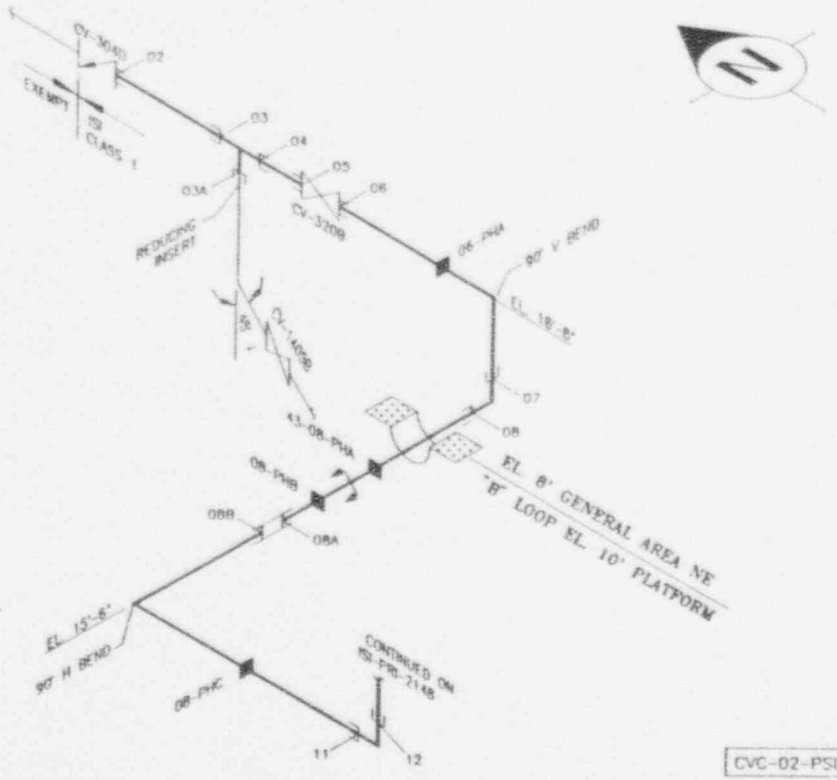
PRIMARY ISI ISOMETRIC
PBNP Unit 2
REACTOR COOLANT PUMP 'A'
SEAL INJECTION

DRAWING NO. ISI-PRI-2146

B | PB | 02 | MCVL | 183 | 007 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



CVC-02-PSI-2002

DRAWING NOTES

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: "B" LOOP, GENERAL AREA
ELEV.: 15' TO 17'
HP AREA: 411, 404A

REFERENCE DRAWINGS

REF. ISO: WEST. 8172A
REF. P&ID: 88SJ175 Sh. 3

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
CHARGING				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/06/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	
1			05/12/92	REVISED PER WALKDOWN	KTC	WAB	JRB	

MICROFORM NO. 271385
CADFILE NO. PRI2147.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.2
MOD.: NONE

DRAWN DLJ	DATE 12/02/90	APPRV'D	DATE
CHECKED CTP	06/12/91	APPRV'D	
DRAFT'G KTG	06/13/91	APPRV'D GPS	10/21/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
REACTOR COOLANT PUMP 'B'
SEAL INJECTION

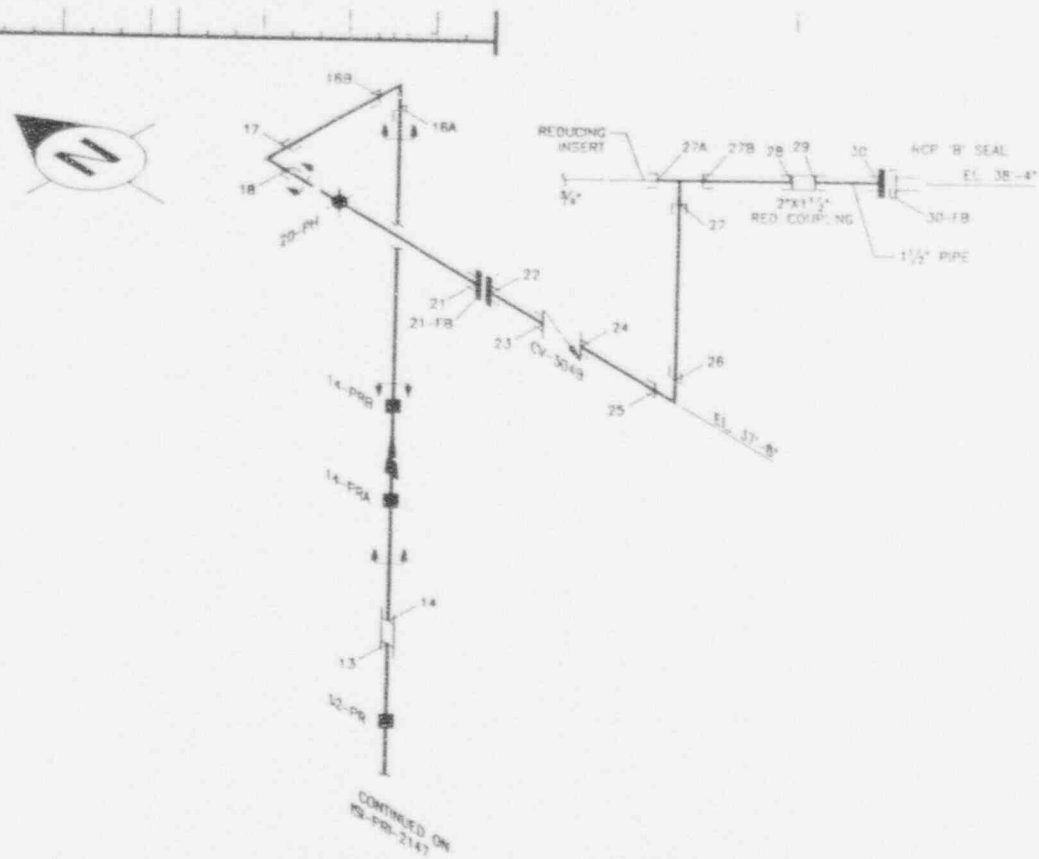
DRAWING NO. ISI-PRI-2147

B | PB | 02 | MCVL | 183 | 008 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



CVC-02-PS:-2002

DRAWING NOTES

LOCATION

BLDG.: CONTAINMENT
ROOM, AREA: "B" RCP CUBICLE
ELEV.: 17' TO 39'
HP AREA: 409

REFERENCE DRAWINGS

REF. ISO: WEST. 61728
REF. P&ID: 6855175 Sh. 3

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
[illegible]				

COMPDIA	NOMTHICK	MATERIAL	CALSTO
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS RET. TRANS. #PB-DWG-92-062	PPL	PPL	DJW	
1			05/12/92	REVISED PER WALKDOWN	KTC	WAB	JBB	

MICROFORM NO. 271386
CADFILE NO. PRI2148.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.2
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	BLJ	12/02/90	APPRV'D	
CHECKED	CTP	08/13/91	APPRV'D	
DRAFT'G	KTC	08/13/91	APPRV'D	10/21/91

WISCONSIN ELECTRIC

TSE

PRIMARY ISI ISOMETRIC
PBNP Unit 2
REACTOR COOLANT PUMP 'B'
SEAL INJECTION

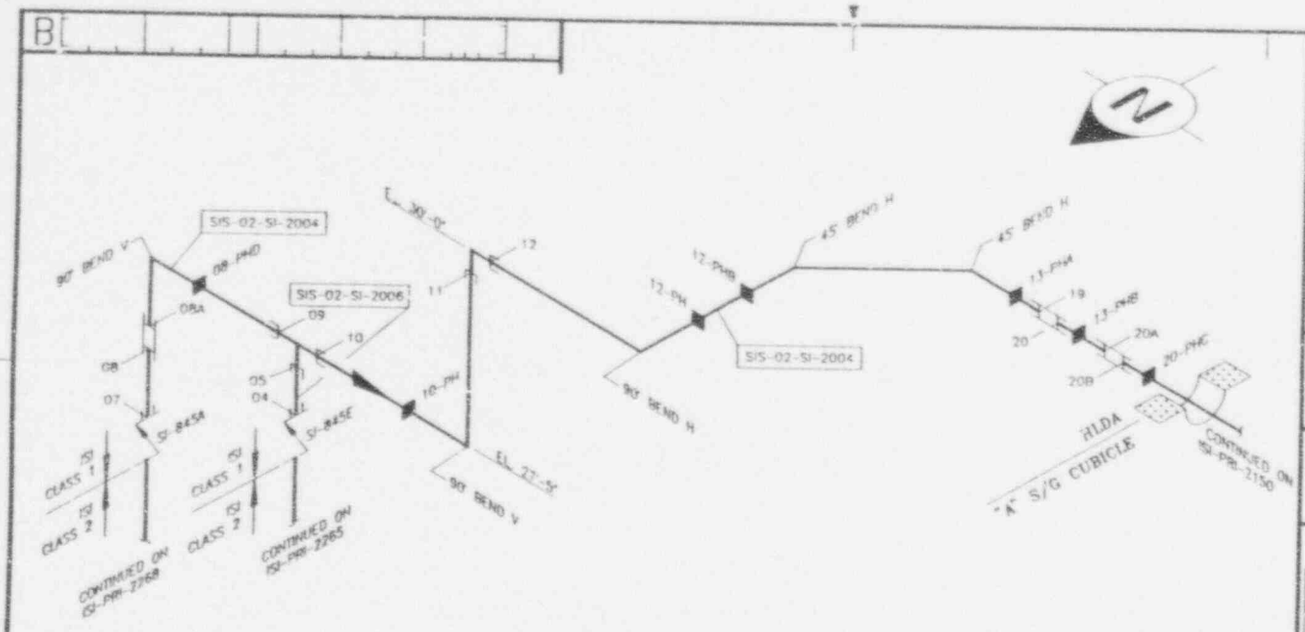
DRAWING NO. ISI-PRI-2148

B | PB | 02 | M | CVL | 183 | 009 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: HLDA
ELEV.: 21' TO 39'
HP AREA: 403A, 403D

REFERENCE DRAWINGS

REF. ISO: WEST. 6602A
REF. P&ID: 110E035, SH 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SZ-ZS-1K-CS				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

SIS-02-SI-2004
SIS-02-SI-2006

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-063	PPL	PPL	DJM	
1			05/12/93	REVISED PER WALKDOWN	KTG	WAB	JDB	

MICROFORM NO. 271387
CADFILE NO. PRI2149.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

DRAWN KTG	DATE 01/24/91	APPRV'D	DATE
CHECKED CTP	06/13/91	APPRV'D	
DRAFT'G STG	06/13/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

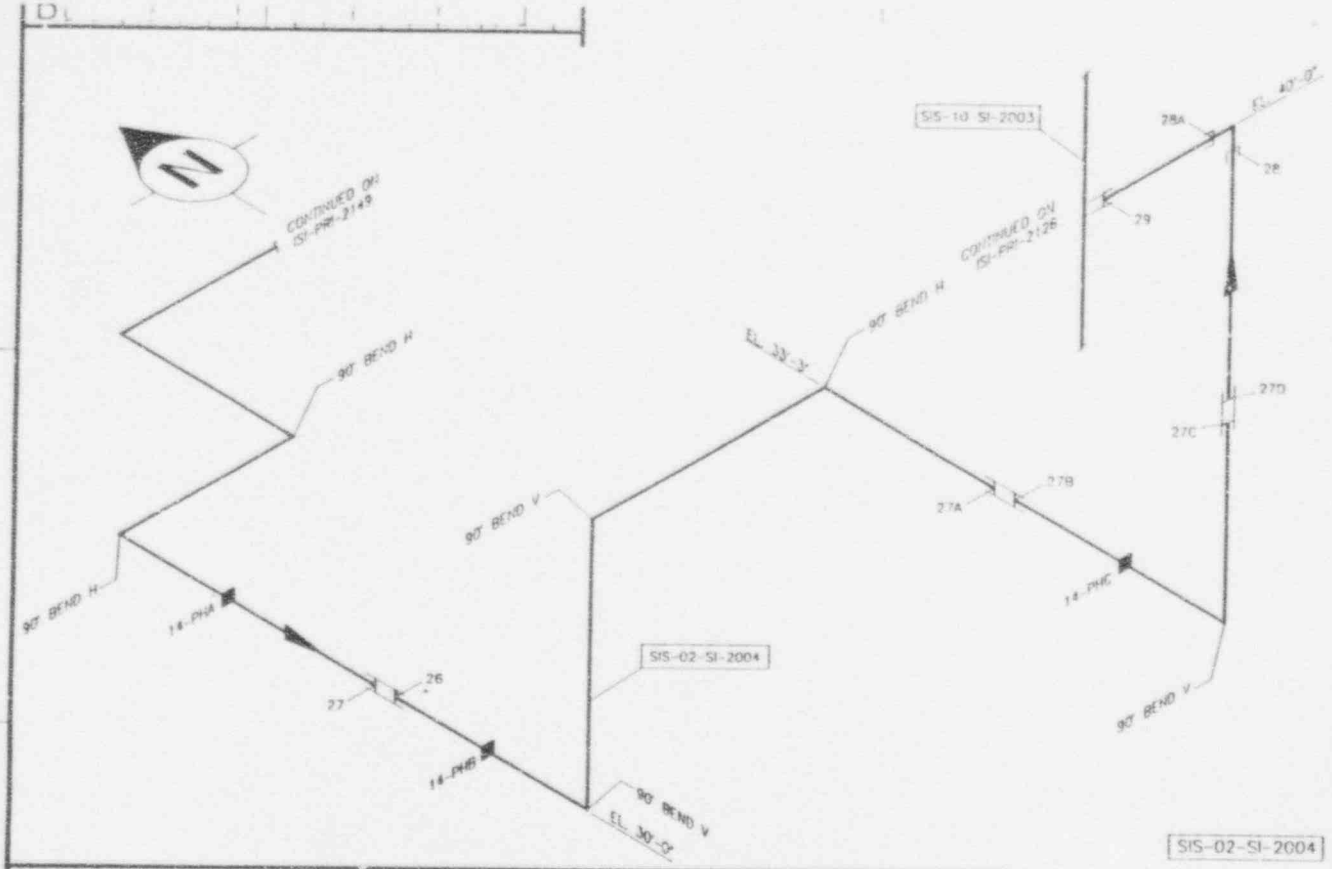
PRIMARY ISI ISOMETRIC
PBNP Unit 2
COLD LEG INJECTION
LOOP 'A'

DRAWING NO. ISI-PRI-2149

B | PB | 02 | MSIL | 183 | 015 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: "A" S.G. CUBICLE
ELEV.: 30' TO 40'
HP AREA: 406

REFERENCE DRAWINGS

REF. ISO: WEST. 6802A
REF. P&ID: 11GE035 Sh 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SE-23-R-CS				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	03.44	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	GJM	
1			05/12/91	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271388
CADFILE NO. PRI2150.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: 12.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	KTG	01/24/91		
CHECKED	CTP	08/12/91	APPRV'D	
DRAFT'D	KTG	08/12/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

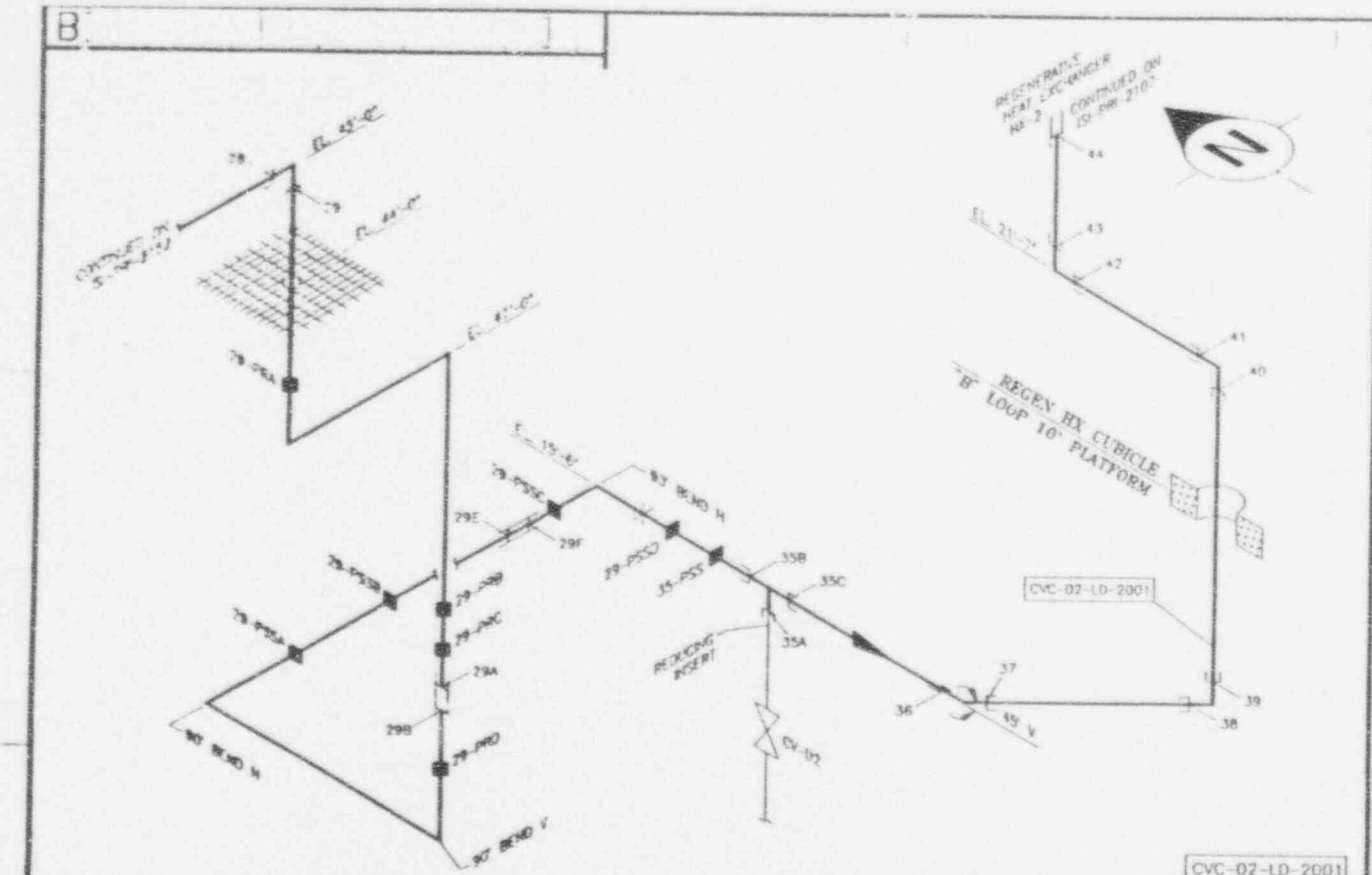
PRIMARY ISI ISOMETRIC
PBNP Unit 2
COLD LEG INJECTION
LOOP 'A'

DRAWING NO. ISI-PRI-2150

B | PB | 02 | MSIL | 183 | 0160 | 2

SCALE None RELEASE DATE

FOR INFORMATION ONLY



CVC-02-LD-2001

DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG: CONTAINMENT
ROOM/AREA: REGEN HX CUB., 'B' LOOP
ELEV: 15' TO 45'
HP AREA: 403E, 411, 410

REFERENCE DRAWINGS

REF. ISO: WEST 6182A
REF. PAID: 8415445 SH 3
REF. PAID: 8851175 SH 3

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SW-2501R-CV				

COMPDIA	NOMTHICK	MATERIAL	CA/STD
2.000	0.344	A376 TP316	N/A

REV NO.	ZONE	PREV NO.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/28/93	INCORPORATED INTO PDS REF. TRANS. #PB-DMC-92-062	PPL	PPL	DJN	
1			05/13/92	REVISED PER WALKDOWN	KTC	WAD	JRG	

MICROFORM NO. 271389
CADFILE NO. PRI2151.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.2
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	KTC	01/27/91		
CHECKED	CTP	06/13/91	APPRV'D	
DRAFTG	KTC	06/13/91	APPRV'D	10/01/91

WISCONSIN ELECTRIC

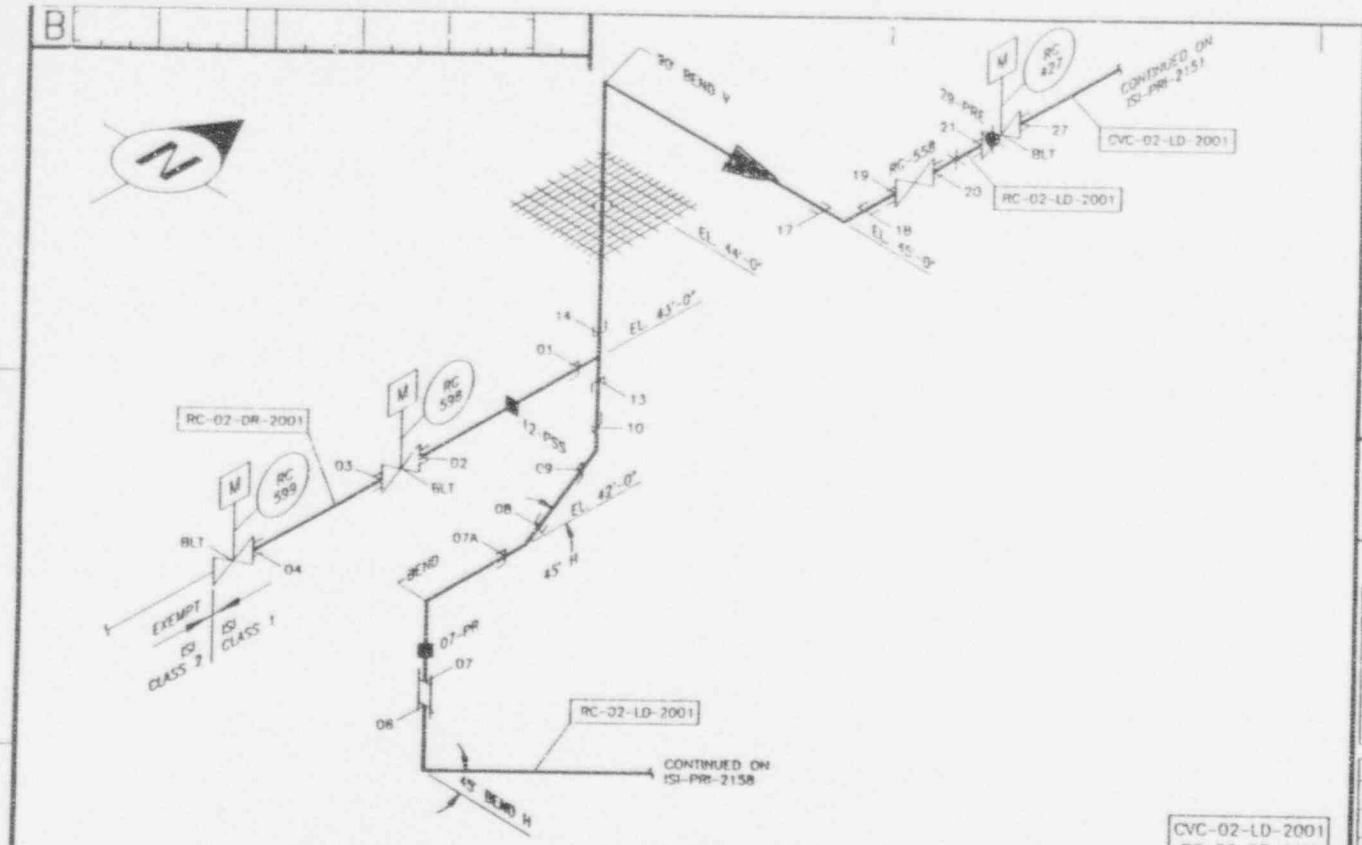
PRIMARY ISI ISOMETRIC
PBNP Unit 2
LETDOWN FROM
LOOP 'B' COLD LEG

DRAWING NO. ISI-PRI-2151

B | PB | 02 | MCVL | 183 | 010 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



CVC-02-LD-2001
RC-02-DR-2001
RC-02-LD-2001

DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: 'B' S/G CUBICLE
ELEV.: 20' TO 45'
HP AREA: 410

REFERENCE DRAWINGS

REF. ISO: WEST. 6182A
REF. ISO: WEST. 6690A & 7055A
REF. P&ID: 541F445 Sht 1
REF. P&ID: 665J175 Sht 3

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC-2501A-1C				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/06/93	INCORPORATED INTO PDS REF. TRANS. PPB-QMC-92-052	PPL	PPL	DJM	
1			05/13/92	REVISED PER WALKDOWN	RTG	WAB	JBB	

MICROFORM NO. 271390
CADFILE NO. PRI2152.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.L.: T2.2
MOD.: NONE

DRAWN RTG	DATE 01/27/91	APPR'D	DATE
CHECKED CTP	06/13/91	APPR'D	
DRAFT'G RTG	06/13/91	APPR'D DSG	10/21/91

WISCONSIN ELECTRIC

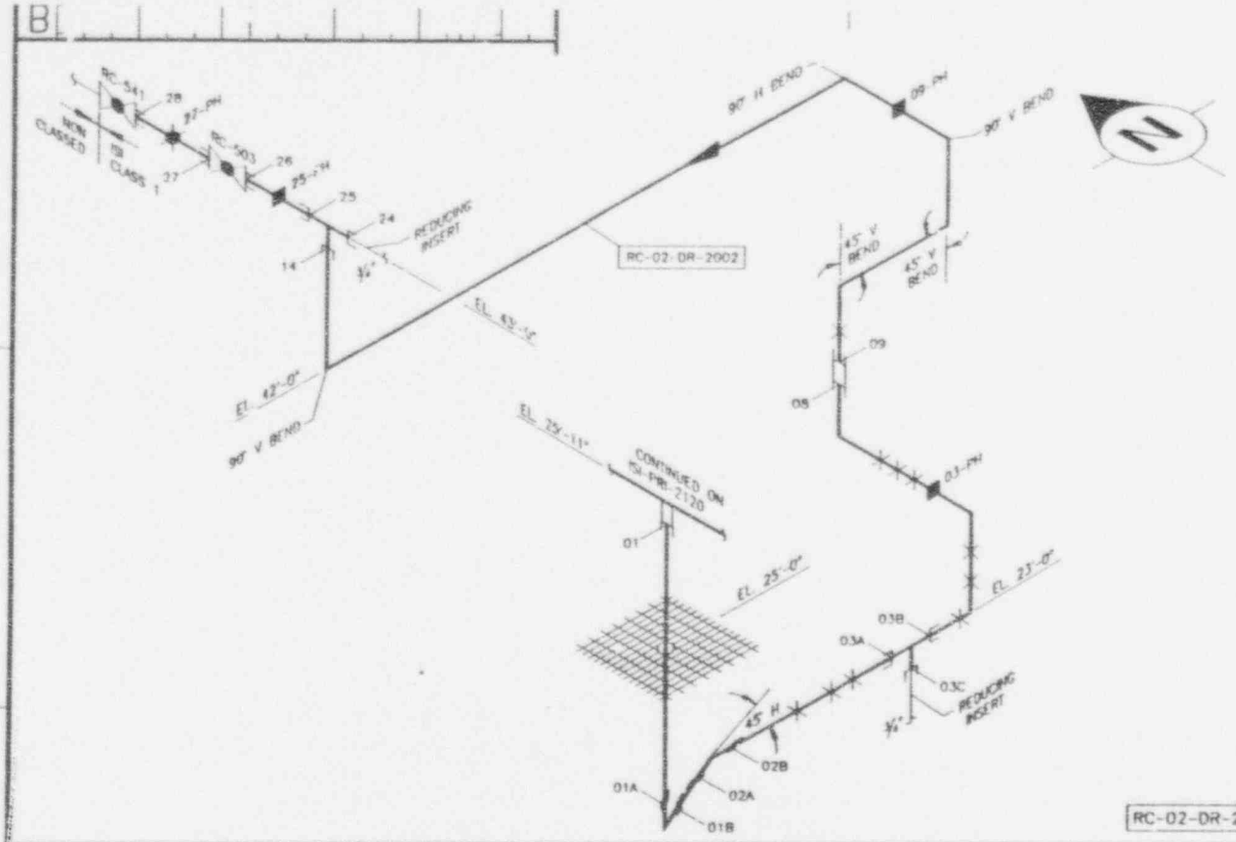
PRIMARY ISI ISOMETRIC
PBNP Unit 2
LETDOWN FROM
LOOP 'B' COLD LEG

DRAWING NO. ISI-PRI-2152

B | PB | 02 | MCVL | 183 | 011 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: "A" LOOP
ELEV.: 23' TO 43'
HP AREA: 405, 406

REFERENCE DRAWINGS

REF. ISO: WEST. 6651A & B
REF. P&ID: 5415445 SH 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC-2501R-13				

COMPONA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPR'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			05/12/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271391
CADFILE NO. PRI2153.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.2
MOD.: NONE

		DATE	APPR'D	DATE
DRAWN	KTG	01/23/91		
CHECKED	CTP	06/13/91		
DRAFT'G	KTG	06/13/91	DBS	10/21/91

WISCONSIN ELECTRIC

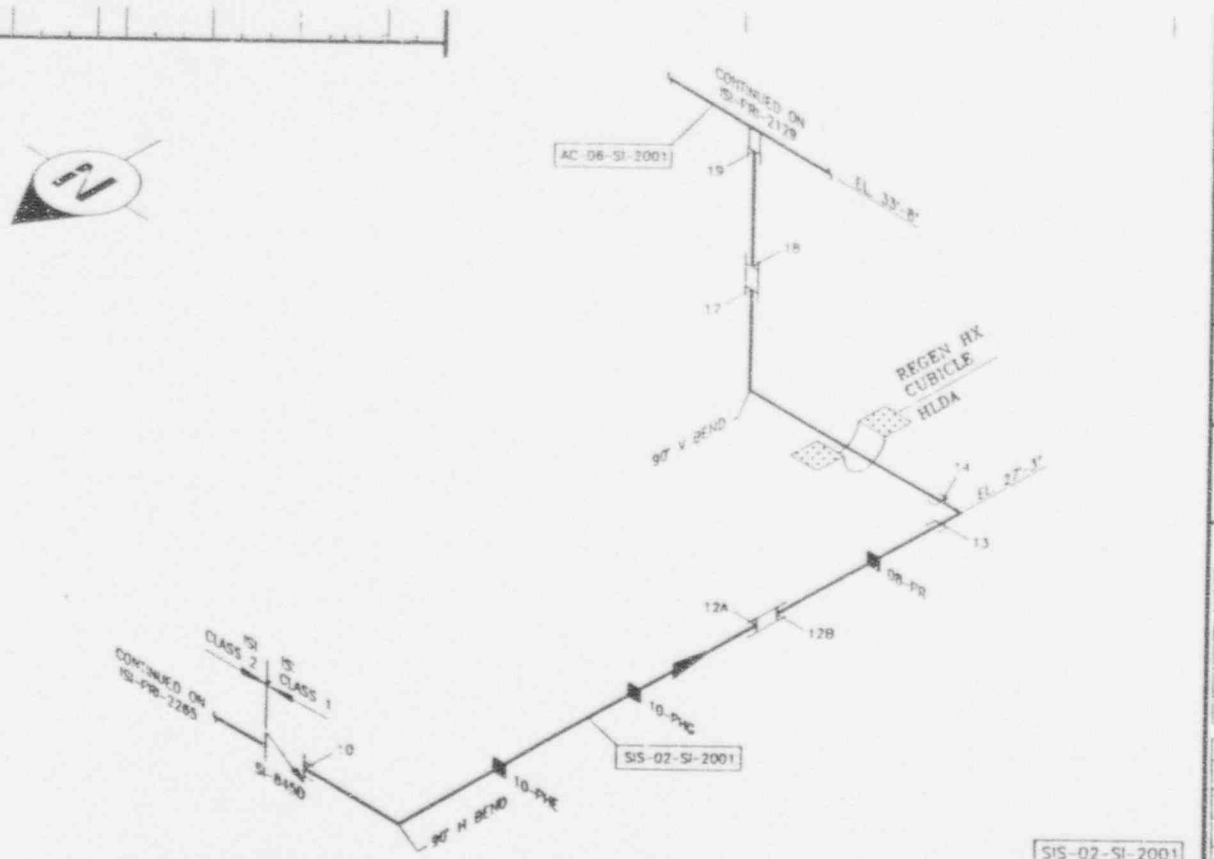
PRIMARY ISI ISOMETRIC
PBNP Unit 2
EXCESS LETDOWN TO CHEMICAL AND VOLUME CONTROL SYSTEM

DRAWING NO. ISI-PRI-2153

B	PB	02	MCVL	183	012	02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



SIS-02-SI-2001

DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: REGEN HX CUBICLE, HLDA
ELEV.: 27' TO 34'
HP AREA: 403E, 403A

REFERENCE DRAWINGS

REF. ISO: N/A
REF. P&ID: 110E035, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN		OPERATING	
	°F	PSIG	°F	PSIG
SEE SCHEDULE				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. NO.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-93-062	PPL	PPL	DJM	
1			05/12/93	REVISED PER WALKDOWN	KTG	WAB	JBR	

MICROFORM NO. 271392
CADFILE NO. PRI2154.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

DRAWN KTG	DATE 01/23/91	APPRV'D	DATE
CHECKED CTP	05/13/91	APPRV'D	
DRAFT'G KTG	05/13/91	APPRV'D CPS	10/01/91

WISCONSIN ELECTRIC

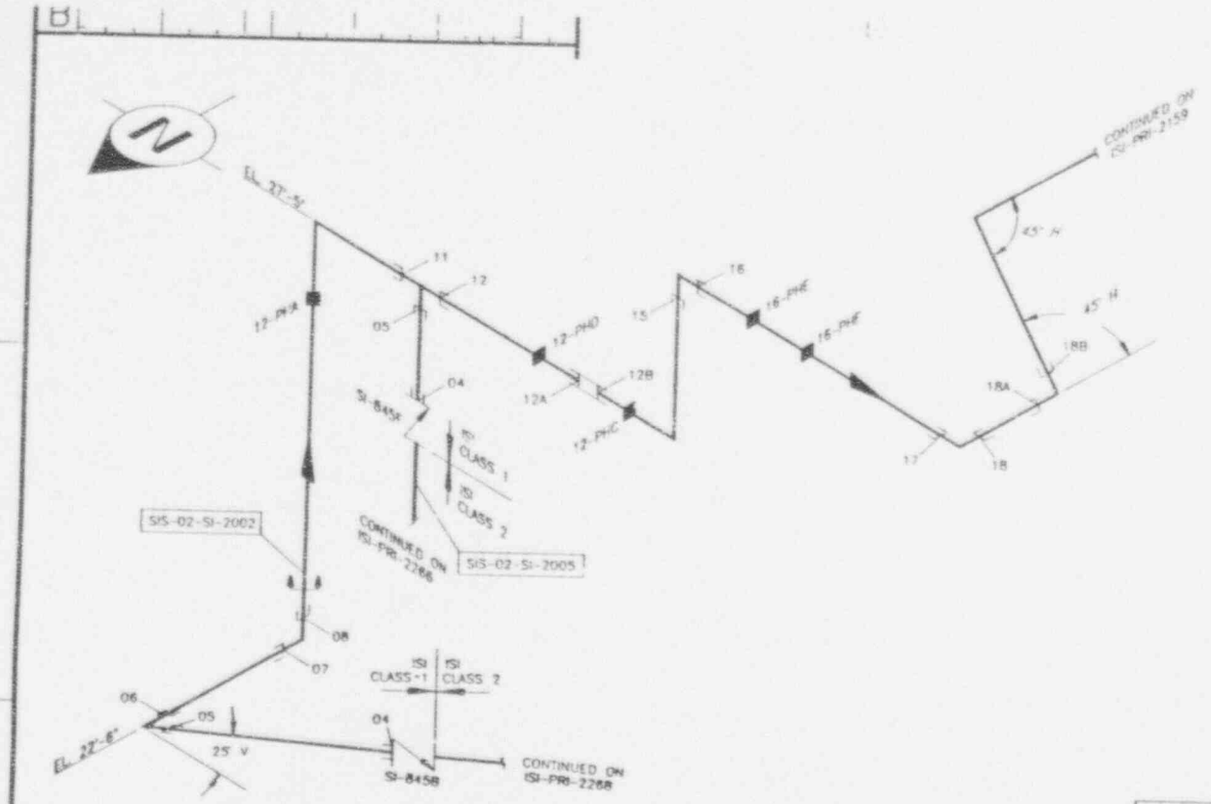
PRIMARY ISI ISOMETRIC
PBNP Unit 2
CORE DELUGE
INJECTION LINE

DRAWING NO. ISI-PRI-2154

B | PB | 02 | MSIL | 183 | 017 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



SIS-02-SI-2002
SIS-02-SI-2005

DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED FROM WELD #8 AND UP.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: H-10A
ELEV.: 22' TO 44'
HP AREA: 403A, 409

REFERENCE DRAWINGS

REF. ISO: WEST. 6610A
REF. P&ID: 11DE035, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN		OPERATING	
	°F	PSIG	°F	PSIG
SA-2304-CC				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	RE.'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJH	
1			05/13/93	REVISED PER WALKDOWN	KTG	WAB	JBS	

MICROFORM NO. 271393
CADFILE NO. PRI2155.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	KTG	01/25/91		
CHECKED	CTP	09/13/91	APPRV'D	
DRAFT'G	KTG	09/13/91	APPRV'D SPS	10/01/91

WISCONSIN ELECTRIC

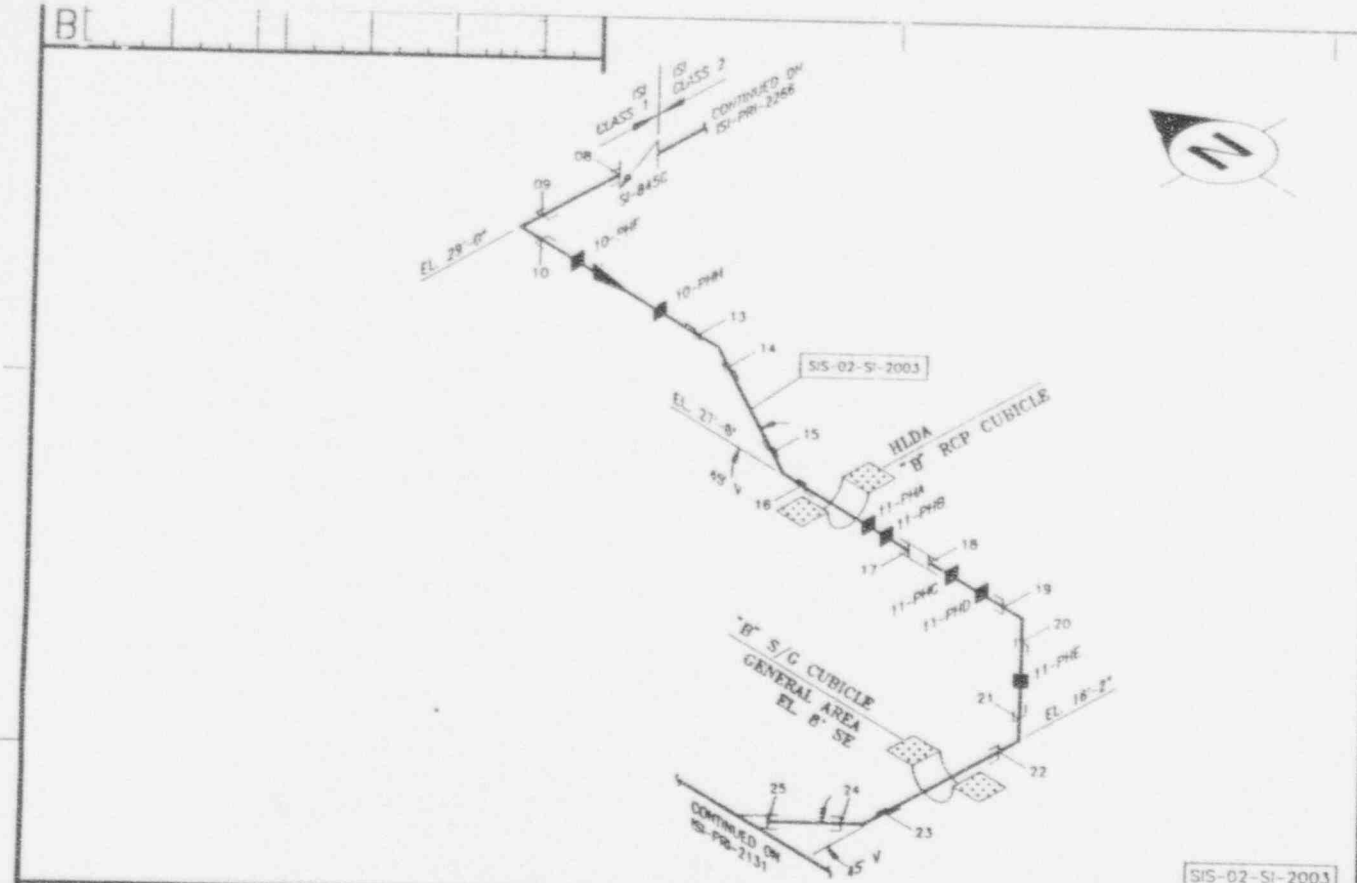
PRIMARY ISI ISOMETRIC
PBNP Unit 2
COLD LEG INJECTION
LOOP 'B'

DRAWING NO. ISI-PRI-2155

B | PB | 02 | MSIL | 183 | 018 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



SIS-02-SI-2003

DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: HLDA, "B" LOOP/GENERAL AREA
ELEV.: 16' TO 29'
HP AREA: 403A, 409, 410, 404B

REFERENCE DRAWINGS

REF: ISO: WEST. 6601A
REF: P&ID: 110E035, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SEE SIS-02-SI-2003				

COMP DIA	NOM THICK	MATERIAL	CALC STD
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. PPB-DWG-92-062	PPL	PPL	DJM	
1			05/12/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271394
CADFILE NO. PRI2156.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

DRAWN KTG	DATE 01/23/91	APPRV'D	DATE
CHECKED CTP	06/13/91	APPRV'D	
DRAFT'D KTG	06/13/91	APPRV'D GPS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
CORE DELUGE
HEADER

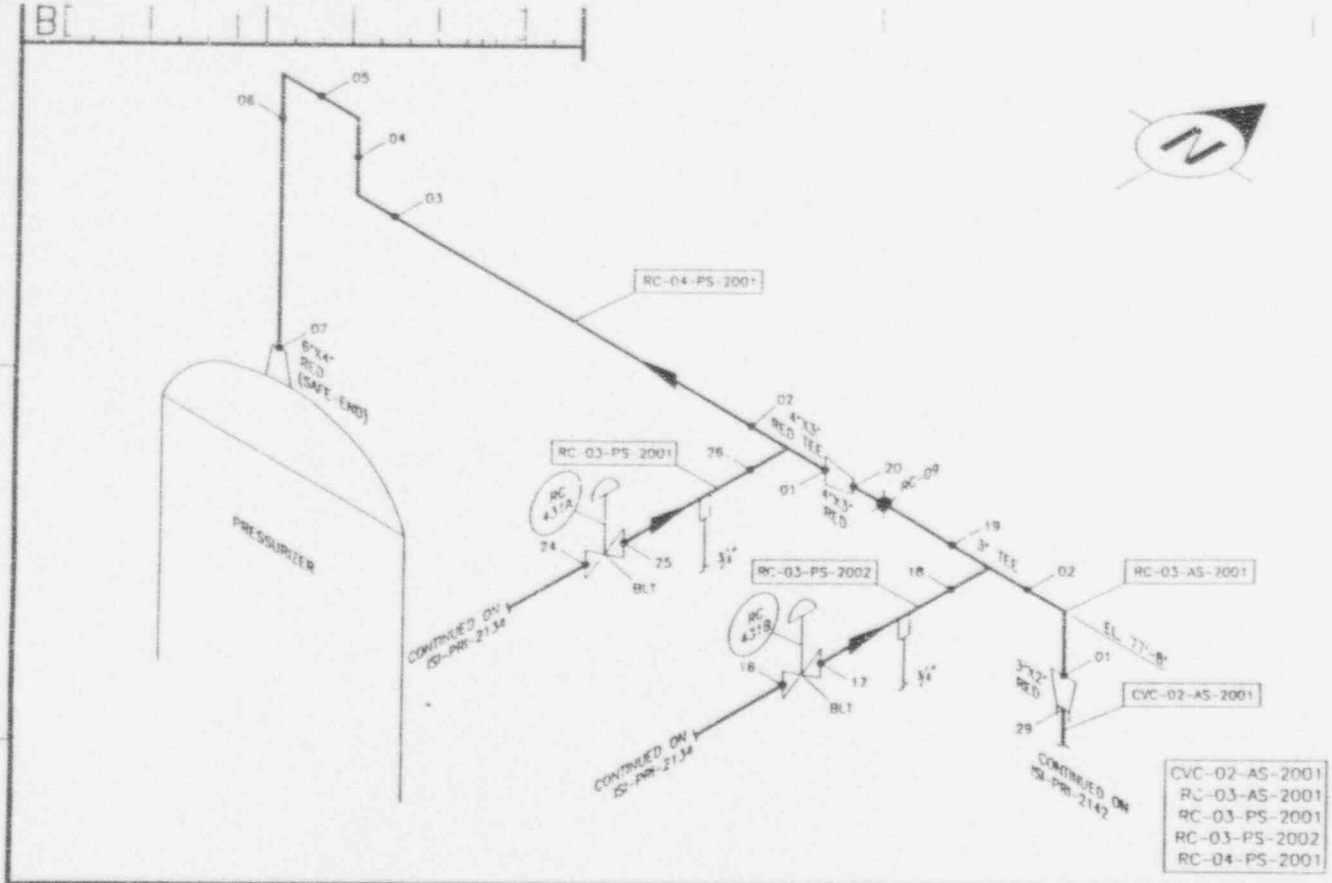
DRAWING NO. ISI-PRI-2156

B | PB | 02 | MSIL | 183 | 019 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



CVC-02-AS-2001
RC-03-AS-2001
RC-03-PS-2001
RC-03-PS-2002
RC-04-PS-2001

DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

CLOG: CONTAINMENT
ROOM, AREA: PRESSURIZER CUBICLE
ELEV: 76' TO 79'
HP AREA: 408

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-243
REF. ISO: WEST 6099A
REF. P&ID: 5115E445 SH1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC 2501K 01				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A
3.000	0.438	A376 TP316	2-PTB
4.000	0.531	A376 TP316	6-PTB

REVISIONS

REV NO.	ZONE	PROJ. NO.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. PPB-DWG-92-052	PPL	PPL	DJH	
1			05/13/92	REVISED PER WALKDOWN	RTG	WAB	JBB	

MICROFORM NO. 271395
CADFILE NO. PRI2157.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.5
MOD.: NONE

DRAWN RTG	DATE 01/20/91	APPRV'D	DATE
CHECKED CTP	03/05/91	APPRV'D	
DRAFT'G KTR	09/13/91	APPRV'D GRS	10/31/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
PRESSURIZER
SPRAY

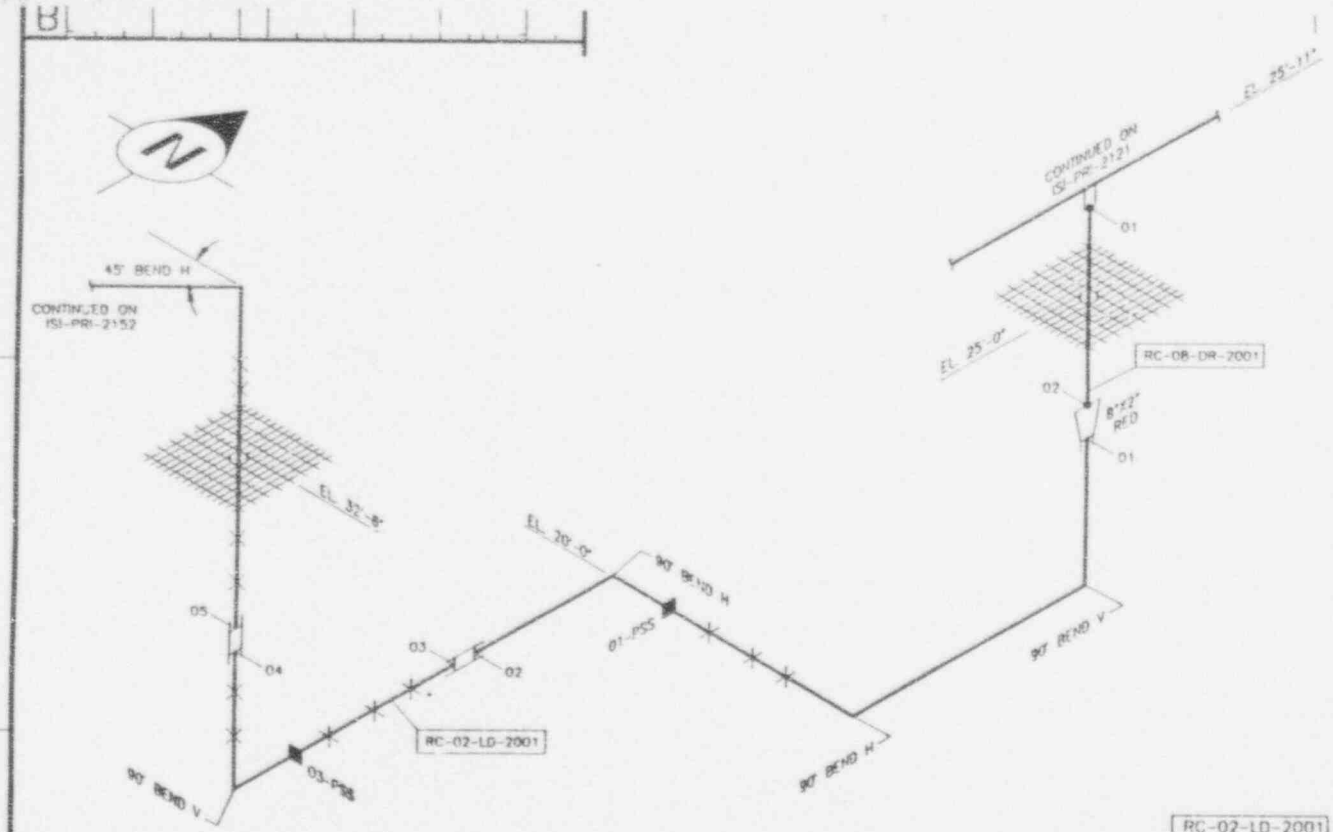
DRAWING NO. ISI-PRI-2157

B | PB | 02 | MRCL | 183 | 0 | 18 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



RC-02-LD-2001
RC-08-DR-2001

DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: 'B' S/G CUBICLE
ELEV.: 20' TO 45'
HP AREA: 410

REFERENCE DRAWINGS

REF. ISO: WEST. 8182A
REF. ISO: WEST. 6690A & 7055A
REF. P&ID: 5416445 SH 1
REF. P&ID: 5613175 SH 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
RC 2501R-1C				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A
8.000	0.820	A376 TP316	17-PTB

REVISIONS

REV NO.	ZONE	PROJ. ISS.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
1			03/06/93	INCORPORATED INTO PDS. REF. TRANS. #PB-DWG-92-002	PPL	PPL	DJM	

MICROFORM NO. 271396
CADFILE NO. PRI2158.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.2
MOD.: NONE

	DATE	APPRV'D	DATE
DRAWN ETC	06/30/92		
CHECKED WAB	07/14/92		
DRAFT'G ETC	07/20/92	JBB	08/24/92

WISCONSIN ELECTRIC

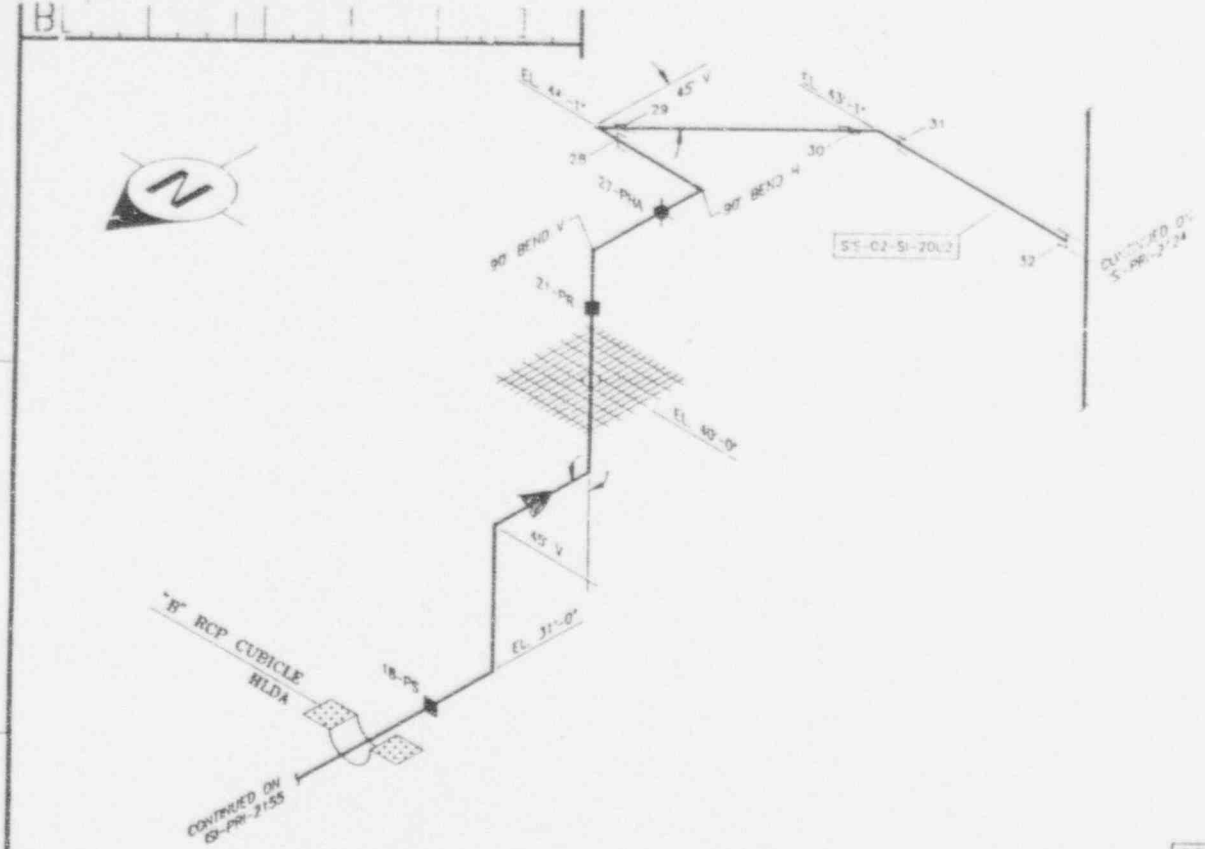
PRIMARY ISI ISOMETRIC
PBNP Unit 2
LETDOWN FROM
LOOP 'B' COLD LEG

DRAWING NO. ISI-PRI-2158

B | PB | 02 | MCVL | 183 | 013 | 01

SCALE None RELEASE DATE

FOR INFORMATION ONLY



S1S-02-S-2002

DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG: CONTAINMENT
ROOM, AREA: HLDA, "B" RCP CUBICLE
ELEV: 22' TO 44'
HP AREA: 403A, 409

REFERENCE DRAWINGS

REF. ISO: WEST. 6610A
REF. P&ID: 110E035, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SE-2501P-06				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
1			03/08/93	INCORPORATED BHTO PDS REF. TRANS. #PB-DWG-92-063	PPL	PPL	DJM	

MICROFORM NO. 271397
CADFILE NO. PRI2159.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	KTG	08/30/92	APPRV'D	
CHECKED	WAB	07/14/92	APPRV'D	
DRAFT'G	KTG	07/20/92	APPRV'D	08/25/92

WISCONSIN ELECTRIC

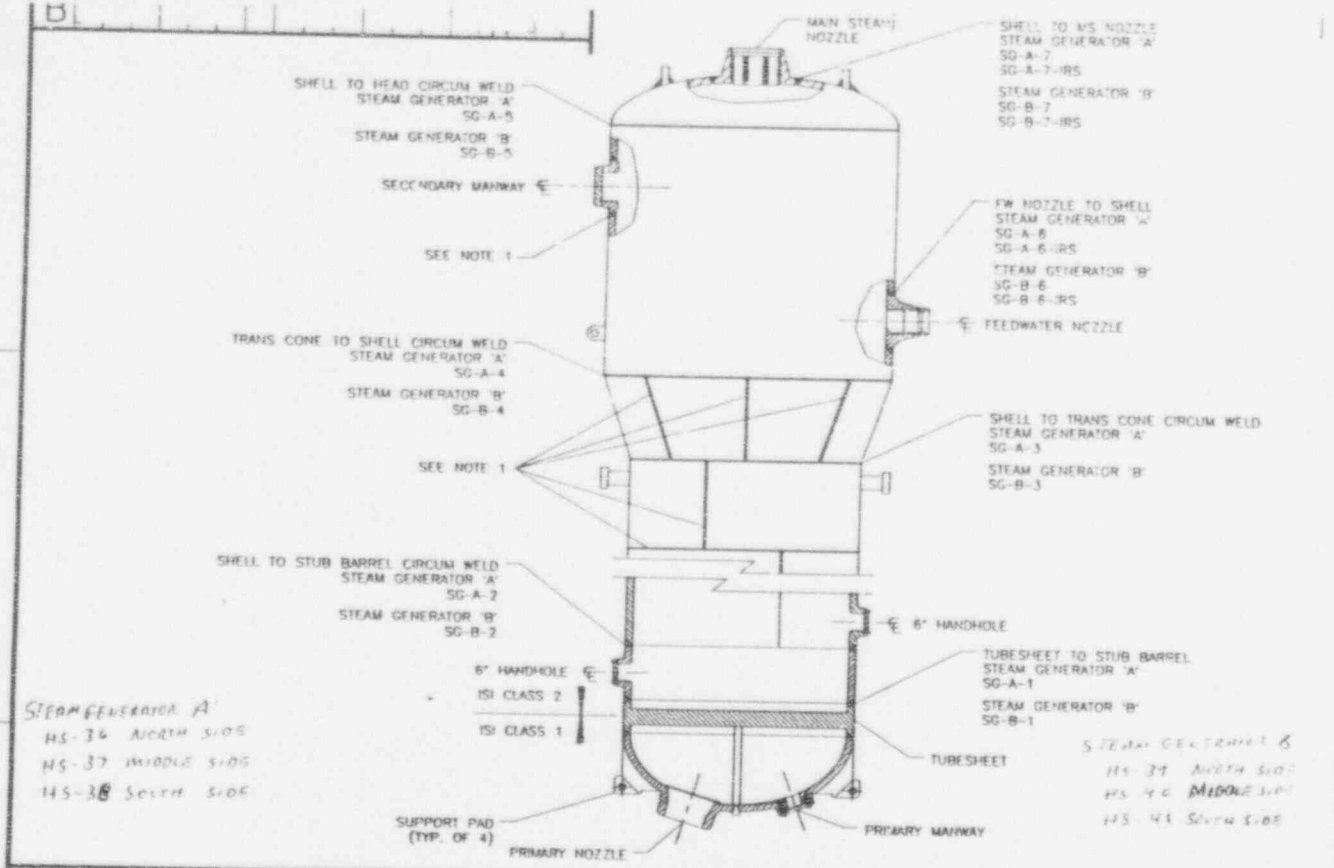
PRIMARY ISI ISOMETRIC
PBNP Unit 2
COLD LEG INJECTION
LOOP 'B'

ISI-PRI-2159

B | PB | 02 | M | S | I | L | 18 | 3 | 0 | 2 | 0 | 0 | 1

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. WELD IS NOT TO BE EXAMINED SINCE IT IS NOT IN THE ISI PROGRAM. WELD IS SHOWN FOR INFORMATION ONLY.
2. ALL COMPONENTS ON THIS DRAWING ARE INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: A & B S/G CUBICLE
ELEV.: 34' TO 96'
HP AREA: 406, 410

REFERENCE DRAWINGS

REF. DWG.: WEST. TECHNICAL MANUAL

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SHELL	555	1085		
TUBE	650	2485		

COMPDIA	NOMTHICK	MATERIAL	CALSTD
		SA216 WCC	39-PTB
		SA216 WCC	40-PTB
		SA533 GR. B	41-PTB
		SA508 CL2	42-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	
1			02/28/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271398
CADFILE NO. PRI2201.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.6
MOD.: NONE

		DATE		DATE
DRAWN	KRH	10/18/90	APPRV'D	
CHECKED	CTP	02/21/91	APPRV'D	
DRAFT'G	KTG	02/28/91	APPRV'D	GRS 10/21/91

WISCONSIN ELECTRIC

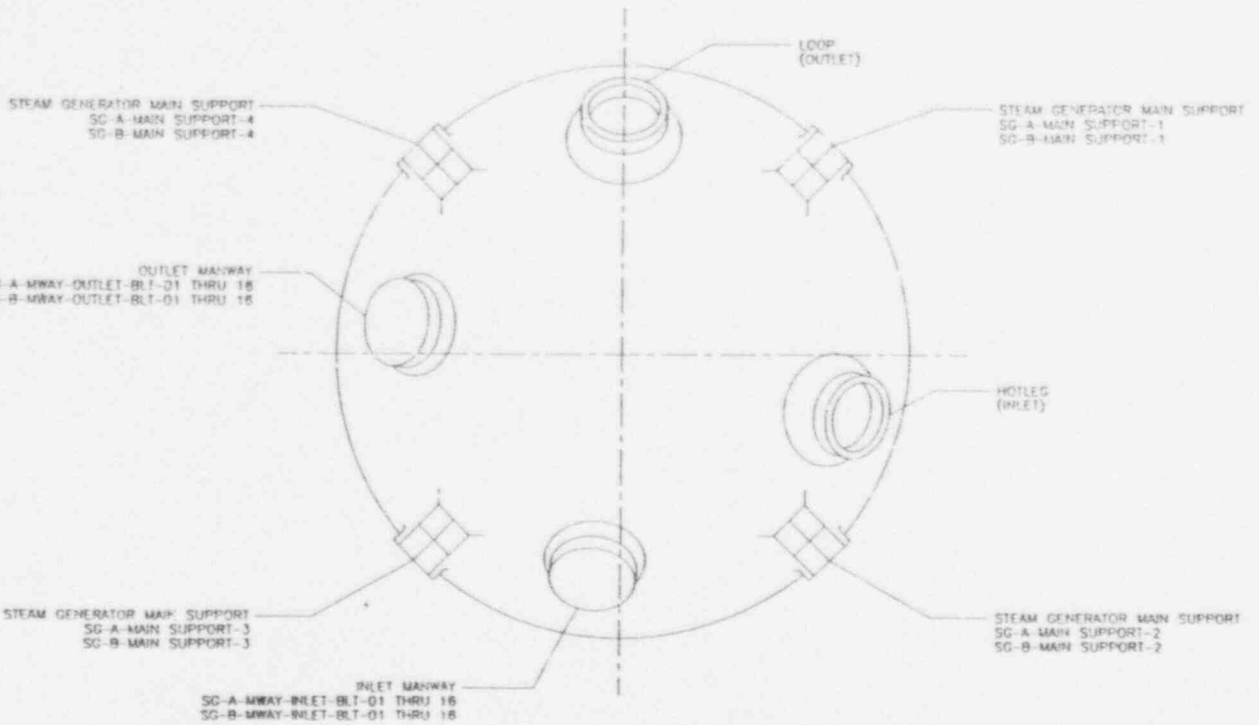
PRIMARY ISI ISOMETRIC
PBNP Unit 2
STEAM GENERATORS
HX-1A AND HX-1B

DRAWING NO. ISI-PRI-2201

B | PB | 02 | MSGG | 108 | 001 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ALL COMPONENTS ON THIS DRAWING ARE INSULATED

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: A & B S. G. CUBICLE
ELEV.: MANWAY PLATFORM
HP AREA: 406, 410

REFERENCE DRAWINGS

REF. ISO: WEST. TECHNICAL MANUAL

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG

COMPDIA	NOMTHICK	MATERIAL	CALSTD

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO FOS RCT. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			02/26/93	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271399
CADFILE NO. PRI2202.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T1.6
MOD.: NONE

DRAWN KRH	DATE 10/18/90	APPRV'D	DATE
CHECKED CTP	02/21/91	APPRV'D	
DRAFT'D KTG	02/28/91	APPRV'D CRS	10/01/91

WISCONSIN ELECTRIC

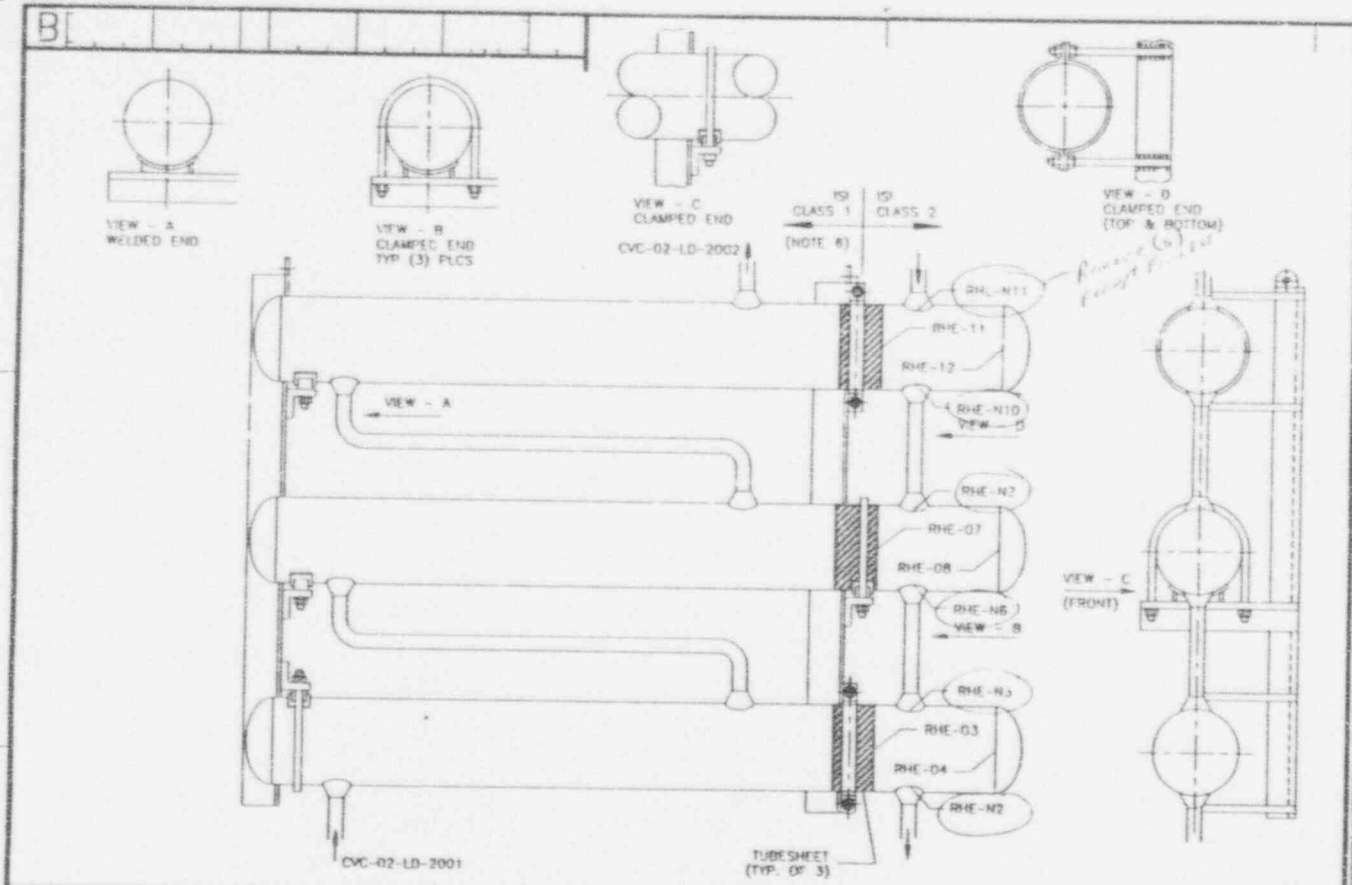
PRIMARY ISI ISOMETRIC
PBNP Unit 2
STEAM GENERATORS HX-1A
AND HX-1B (BOTTOM VIEW)

DRAWING NO. ISI-PRI-2202

B | PB | 02 | M | SGL | 108 | 001 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ISI CLASS 1/CLASS 2 BREAK IS AT TUBESHEET.
2. EXCHANGER SPEC. SHEET: AH-RG503
3. TYPE: SHELL & U-TUBE
4. APPROX. DRY WT.: 4669 LBS.
5. APPROX. FLOODED WT.: 5451 LBS.
6. FOR CLASS 1 PORTION OF REGENERATIVE HEAT EXCHANGER SEE ISI-PRI-2107
7. ALL COMPONENTS ON THIS DRAWING ARE INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: REGEN HX CUBICLE
ELEV.: 21'
HP AREA: 403E

REFERENCE DRAWINGS

REF. DWG.: SENTRY A04195-Au1-2 & A1C4

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SHELL	650	2485		
TUBE	650	2735		

COMPDIA	NOMTHICK	MATERIAL	CALSTD
8.000	0.812	A376 TP304	17-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJN	
1			07/26/93	REVISED PER WALKDOWN	XTG	WAB	JBR	

MICROFORM NO. 271400
CADFILE NO. PRI2203.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.2
MOD.: NONE

DRAWN	KBH	10/31/90	APPR'D		DATE
CHECKED	CTP	02/21/91	APPR'D		
DRAFT'G	XTG	02/28/91	APPR'D	PBD	10/21/91

WISCONSIN ELECTRIC

TSB

PRIMARY ISI ISOMETRIC
PBNP Unit 2
REGENERATIVE HEAT
EXCHANGER HX-2

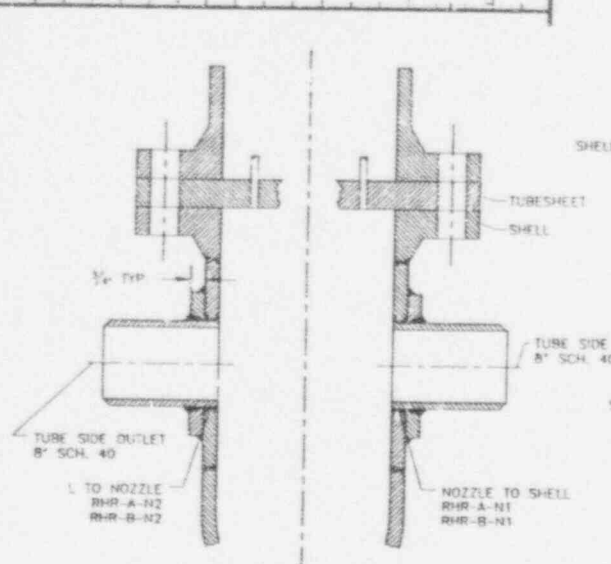
DRAWING NO. ISI-PRI-2203

B | PB | 02 | MCVL | 108 | 001 | 02

SCALE None

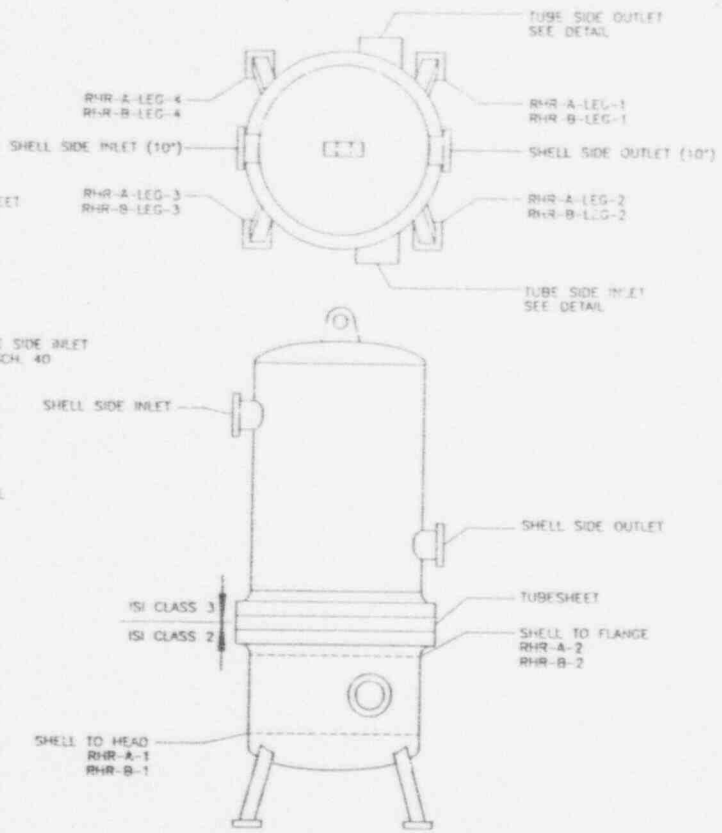
RELEASE DATE

FOR INFORMATION ONLY



DETAIL

TUBE SIDE NOZZLE WELDS



DRAWING NOTES

1. ALL COMPONENTS ON THIS DRAWING ARE INSULATED.

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: RHR Hx CUBICLE
ELEV.: -5' TO 18'
HP AREA: 119

REFERENCE DRAWINGS

REF. ISO: N/A
REF. DWG.: J. CAT SK-J-1520-1J11

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG

COMPDIA	NOMTHICK	MATERIAL	CALSTD
			43-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. 6PB-DWG-92-062	PPL	PPL	DJM	
1			02/26/93	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271401
CADFILE NO. PRI2204.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.J.: T2.3.3
MOD.: NONE

DRAWN	KRH	10/31/90	
CHECKED	CTP	02/21/91	
DRA/TG	KTG	02/26/91	
APPRV'D			
APPRV'D			
APPRV'D	GRS	10/21/91	

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
RESIDUAL HEAT REMOVAL HEAT EXCHANGERS HX-11A AND HX-11B

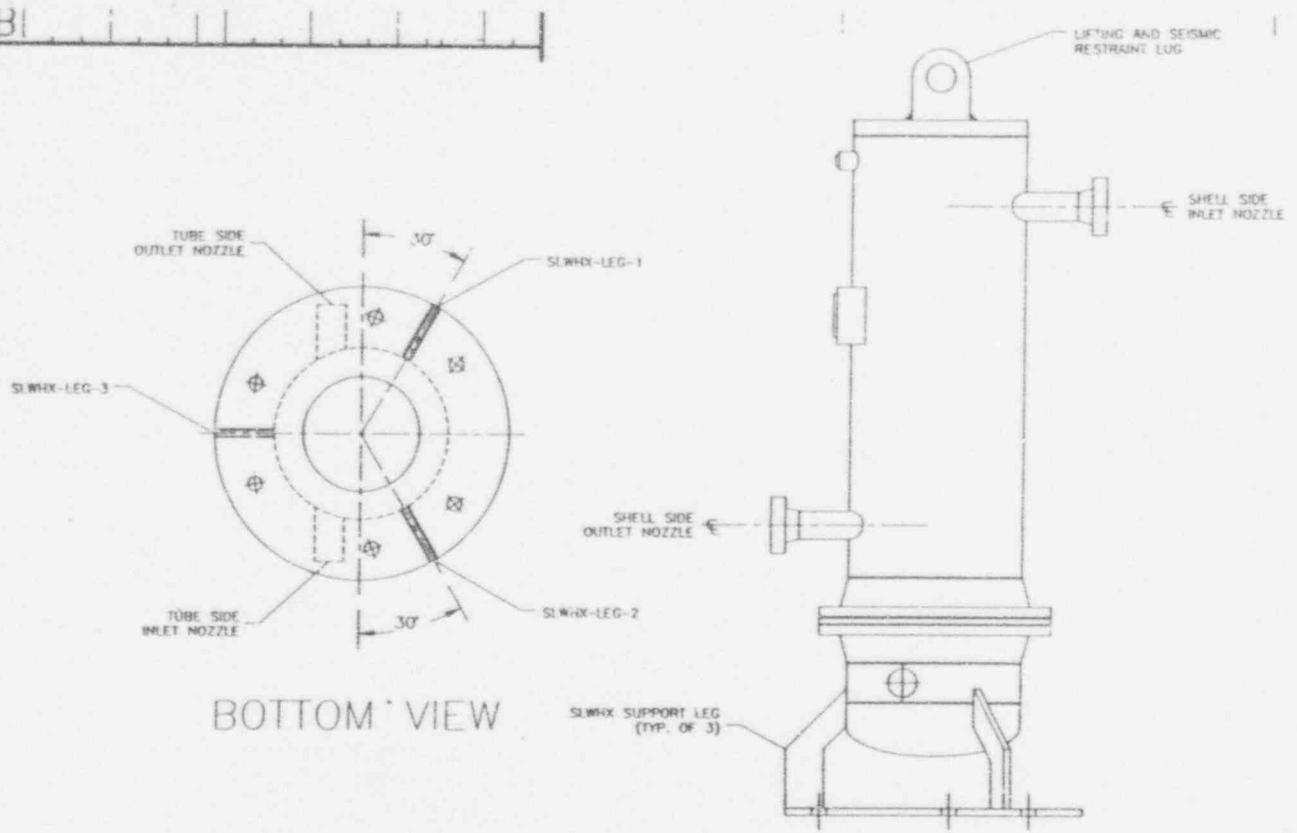
DRAWING NO. ISI-PRI-2204

B | PB | 02 | MRHL | 108 | 002 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: SEAL WATER RETURN HX CUB.
ELEV.: 8'
HP AREA: 144

REFERENCE DRAWINGS

REF. DWG.: ATLAS D-1259

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SHELL	250	150		
TUBE	250	150		

COMPDIA	NOMTHICK	MATERIAL	CALSTD
			N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	
1			02/26/92	REVISED PER WALKDOWN	KTG	WAB	JGB	

MICROFORM NO. 271402
CADFILE NO. PRI2205.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.J.: 12.2
MOD.: NONE

DRAWN KBH	DATE 10/31/90	APPRV'D	DATE
CHECKED CTP	02/21/91	APPRV'D	
DRAFT'D KTG	02/28/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

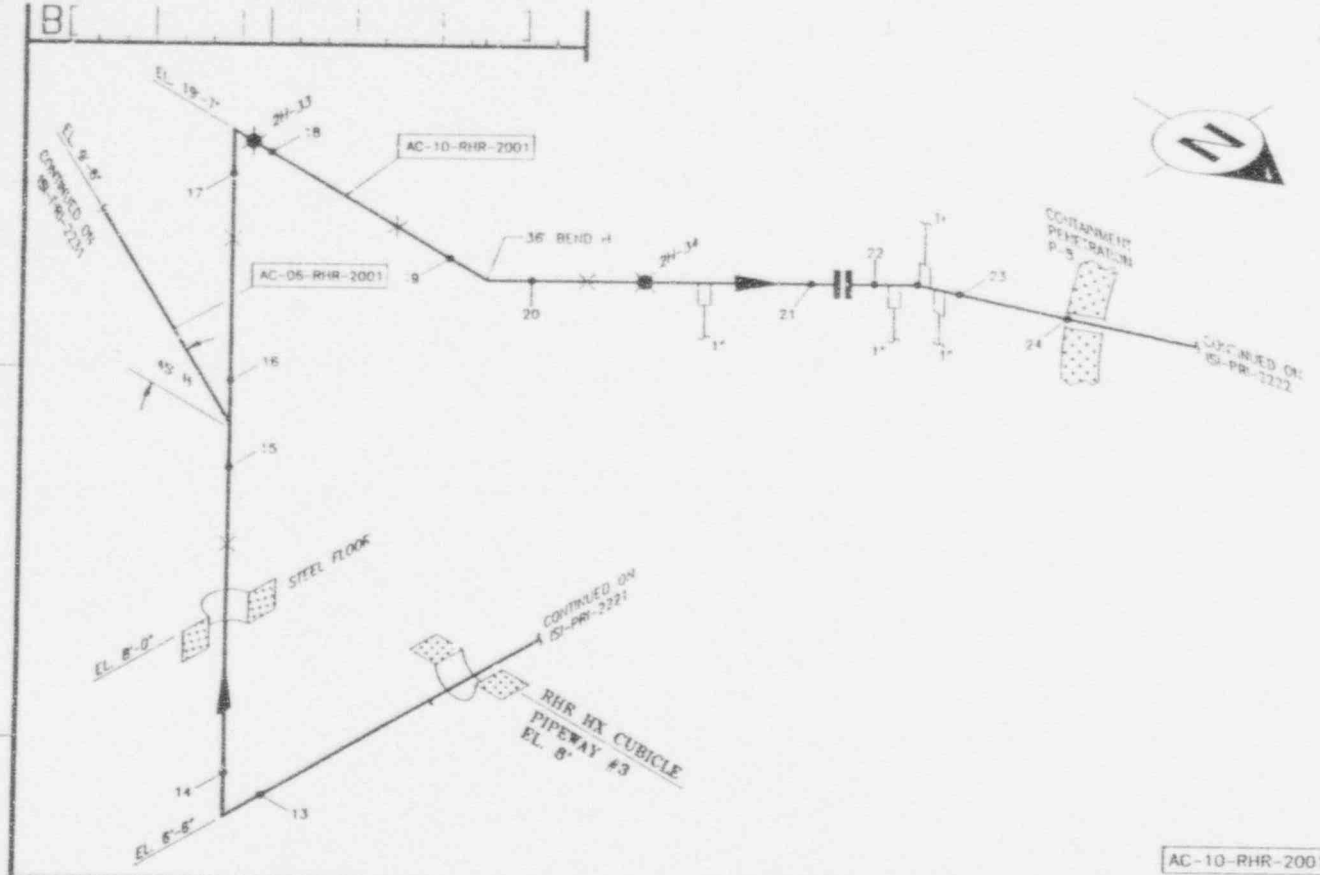
PRIMARY ISI ISOMETRIC
PBNP Unit 2
SEAL WATER
HEAT EXCHANGER HX-5

DRAWING NO. ISI-PRI-2205

B | PB | 02 | MCVL | 108 | 002 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: PIPEWAY #3 EL. 8'
ELEV.: 8' TO 20'
HP AREA: 13

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-234
REF. P&ID: 11SE029, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
AC 60R 04				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
+0.000	0.365	A312 TP304	N/A

REVISIONS

REV NO.	ZONE	PROJ. NO.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			07/01/92	REVISED PER WALKDOWN	KTC	WAB	JBB	

MICROFORM NO. 271403
CADFILE NO. PRI2220.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.3.3
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	12/15/90		
CHECKED	CTP	06/13/91	APPRV'D	
DRAFT'G	KTG	06/13/91	APPRV'D	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR FROM HX
TO PENETRATION

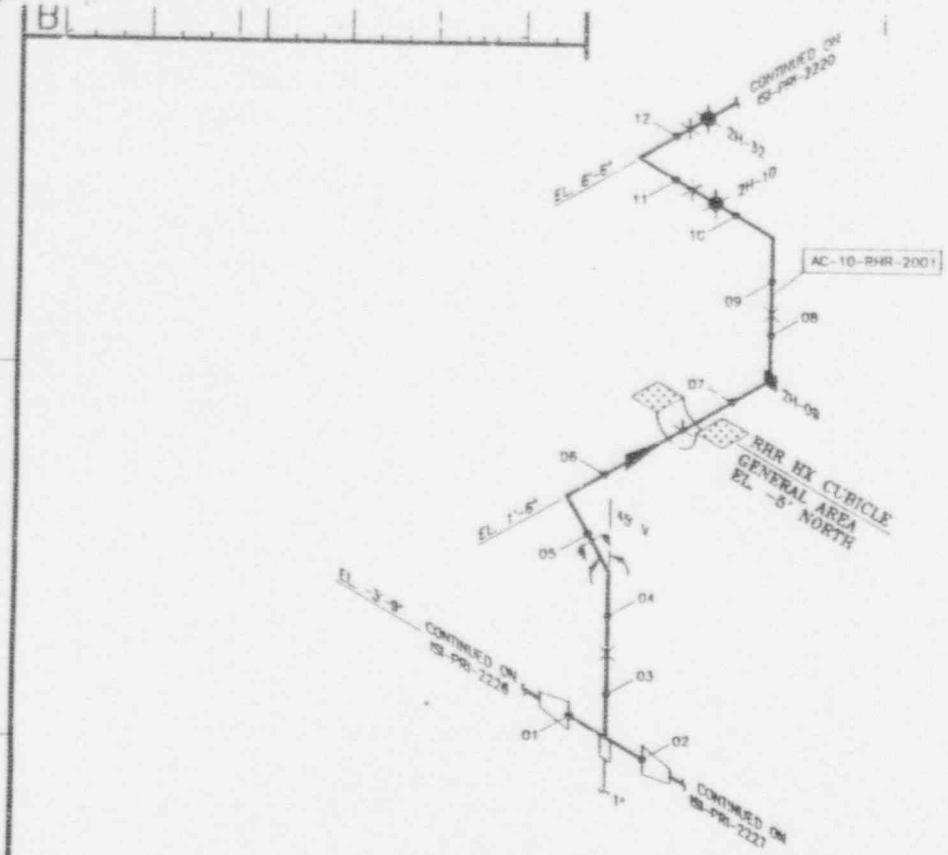
DRAWING NO. ISI-PRI-2220

B PB 02 MRHL 183004 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



N

AC-10-RHP-2001

DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: GEN AREA EL. -5'/RHR HX CUB
ELEV.: -3' TO 6'
HP AREA: 113, 119

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-234
REF. P&ID: 11OE029, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
PC60E-06				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
10.000	0.365	A312 TP304	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. SPB-DWG-92-002	PPL	PPL	DJN	
1			07/01/92	REVISED PER WALKDOWN	XTC	WAB	JBS	

MICROFORM NO. 271404
CADFILE NO. PRI2221.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.3.3
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	RLJ	12/19/90		
CHECKED	CTP	06/13/91		
DRAFT'G	KTR	06/13/91		
			DPS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR FROM HX
TO PENETRATION

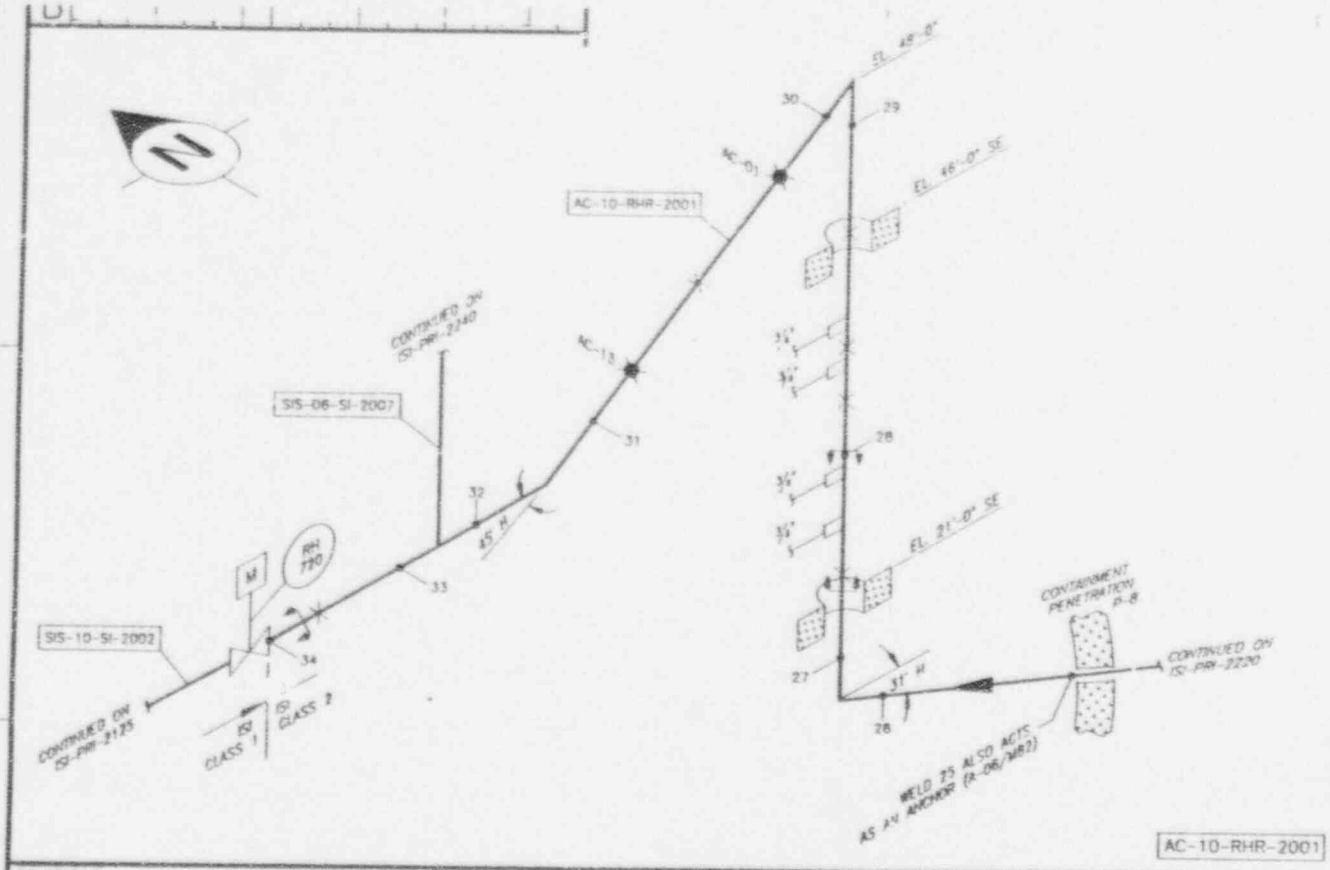
DRAWING NO. ISI-PRI-2221

B | PB | 02 | MRHL | 183 | 005 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



AC-10-RHR-2001

DRAWING NOTES

LOCATION

BLDG.: CONTAINMENT
ROOM, AREA: GENERAL AREA SE
ELEV.: 19' TO 48'
HP AREA: 402B, 403B, 404B

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-248
REF. P&ID: 11OE029, SH. 1
REF. CEID: [illegible]

DESIGN DATA

PIPE CLASS	DESIGN T	DESIGN PSIG	OPERATING T	OPERATING PSIG
SE-CAT.B.02				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
*0.000	0.385	A316 TP304	N/A

REVISIONS

REV NO.	ZONE	PROJ. NO.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWO-93-082	PPL	PPL	DJM	
1			07/01/92	REVISED PER WALKDOWN	KTD	WAB	JBB	

MICROFORM NO. 271405
CADFILE NO. PRI2222.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.3.3
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	11/17/90		
CHECKED	CTP	06/13/91	APPRV'D	
DRAFTG	KTD	06/13/91	APPRV'D	

WISCONSIN ELECTRIC

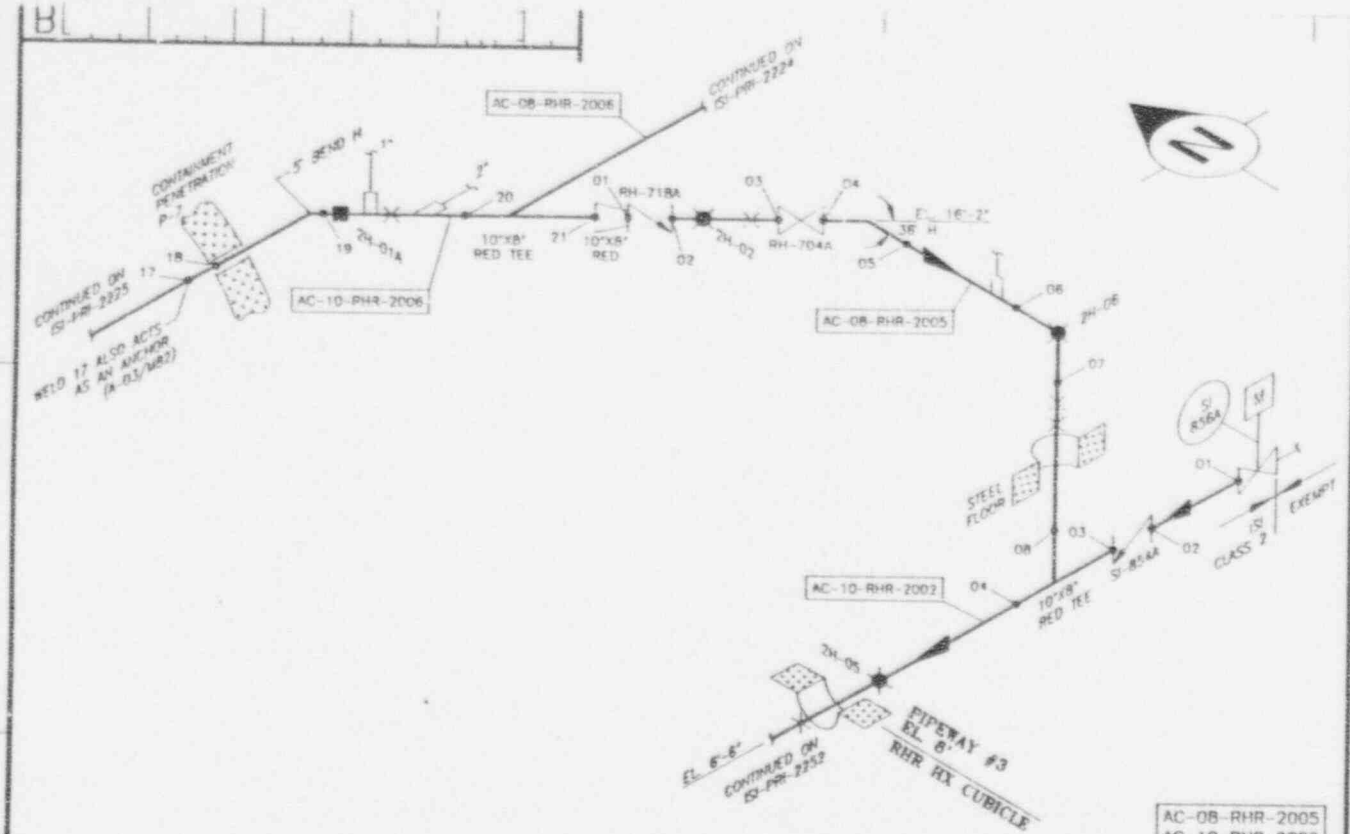
PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR TO SAFETY INJECTION
ACCUMULATOR 'B' IN CONTAINMENT

DRAWING NO. ISI-PRI-2222

B | PB | 02 | MRHL | 183 | 006 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



AC-08-RHR-2005
AC-10-RHR-2002
AC-10-RHR-2006

DRAWING NOTES

LOCATION

BLDG: AUXILIARY
ROOM/AREA: PIPEWAY #3/RHR HX CUBICLE
ELEV.: 6' TO 16'
HP AREA: 137, 119

REFERENCE DRAWINGS

REF. ISO: BECHTEL F-232
REF. P&ID: 11DE029, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
AC GOVE 02				
AC GOVE 03				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
8.000	0.322	A312 TP304	N/A
10.000	0.365	A312 TP304	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DMC-92-062	PPL	PPL	DJM	
1			07/01/93	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271406
CADFILE NO. PRI2223.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.3.3
MOD.: NONE

DRAWN DLJ	DATE 12/25/90	APPRV'D	DATE
CHECKED CTP	06/17/91	APPRV'D	
DRAFT'G KTG	06/24/91	APPRV'D SRS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR PUMP 'A' SUCTION FROM CONT. SUMP & LOOP 'A' HOT LEG

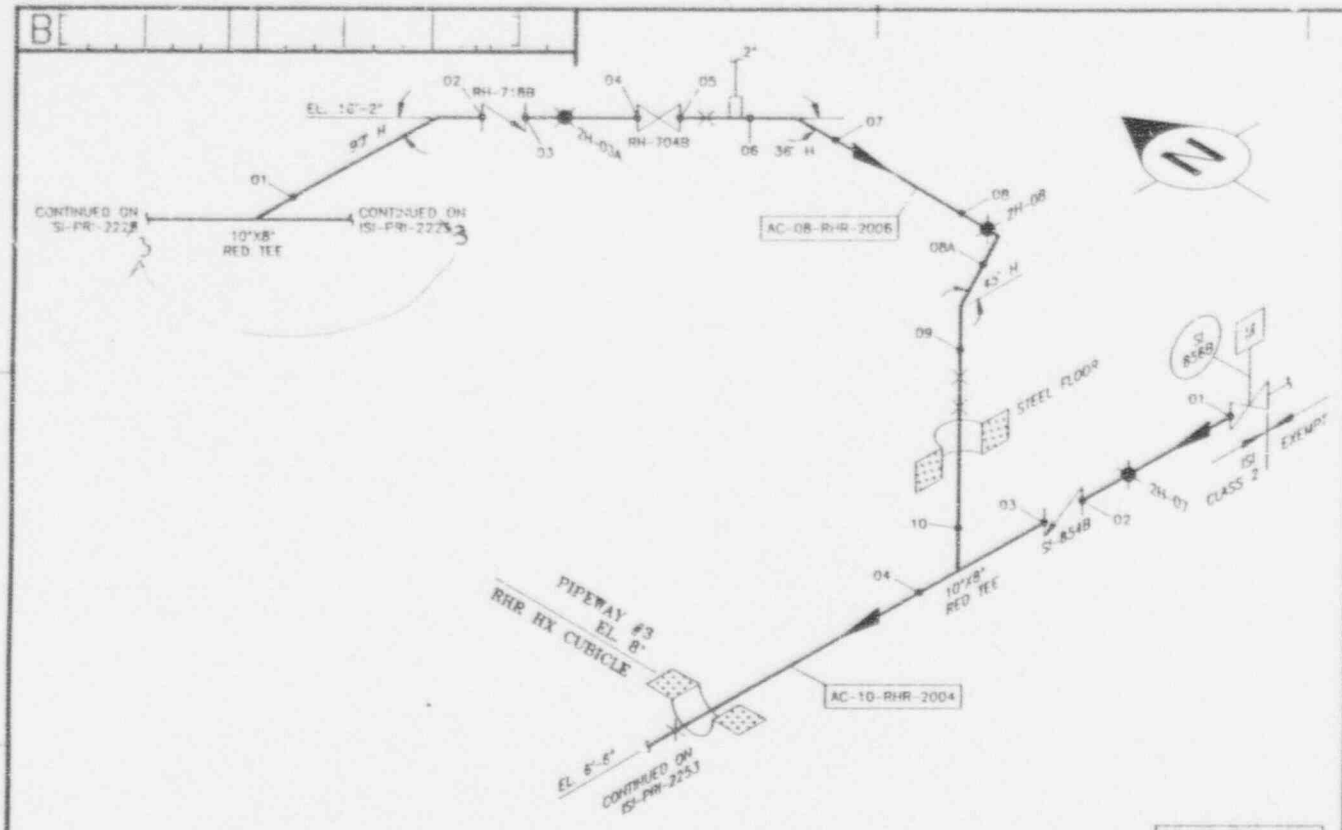
DRAWING NO. ISI-PRI-2223

B | PB | 02 | MRHL | 183 | 007 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



AC-08-RHR-2006
AC-10-RHR-2004

DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: PIPEWAY #3/RHR HX CUBICLE
ELEV.: 6' TO 16'
HP AREA: 137, 119

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-232
REF. P&ID: 110E029, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
AC-60A-02				
AC-60A-03				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
8.000	0.322	A312 TP304	N/A
10.000	0.365	A312 TP304	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	
1			07/01/92	REVISED PER WALKDOWN	KTG	WAR	JBB	

MICROFORM NO. 271407
CADFILE NO. PRI2224.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.3.3
MOD.: NONE

DRAWN DLJ	DATE 12/27/90	APPRV'D	DATE
CHECKED CTP	06/17/91	APPRV'D	
DRAFT'G KTG	06/24/91	APPRV'D CRS	10/01/91

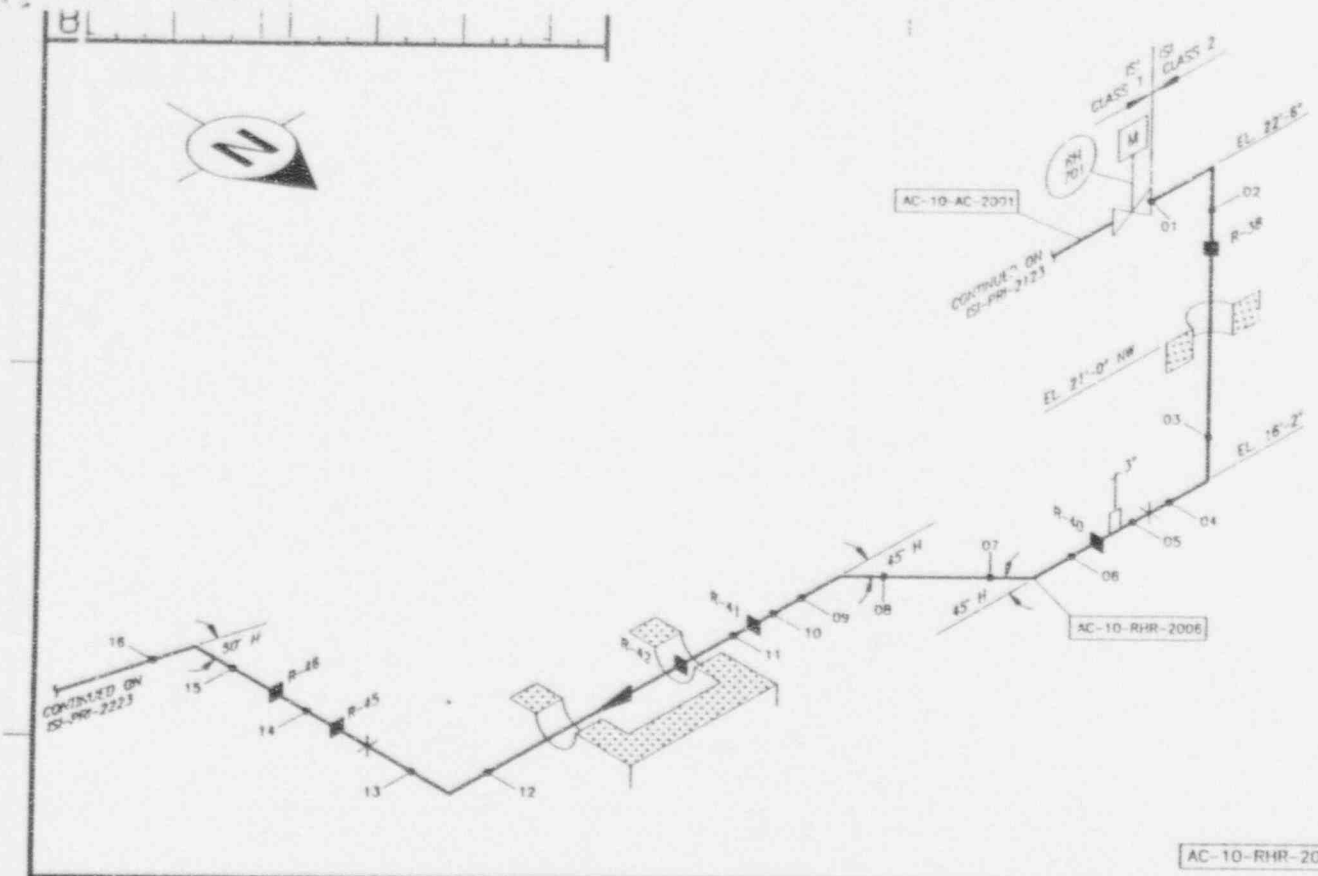
WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR PUMP 'B' SUCTION FROM
CONT. SUMP & LOOP 'B' HOT LEG
DRAWING NO. ISI-PRI-2224

B | PB | 02 | MRHL | 183 | 008 | 02

SCALE None
RELEASE DATE

FOR INFORMATION ONLY



AC-10-RHR-2006

DRAWING NOTES

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: GENERAL AREA
ELEV.: 18' TO 22'
HP AREA: 403D, 404D, 404A, 404B

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-232
REF. ISO: BECHTEL P-248
REF. P&ID: 11OE029, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
AC GOR 02				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
10.000	0.365	A312 TP304	N/A

REVISIONS

REV NO.	ZONE	FSCM NO.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS INST. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			07/03/92	REVISED PER WALKDOWN	RTS	WAB	JBB	

MICROFORM NO. 271408
CADFILE NO. PRi2225.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.5.3
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	11/17/90		
CHECKED	CTP	06/17/91	APPRV'D	
DRAFT'D	RTS	09/24/91	APPRV'D	10/01/91

WISCONSIN ELECTRIC

TSE

PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR PUMP SUCTION FROM
LOOP 'A' HOT LEG IN CONTAINMENT

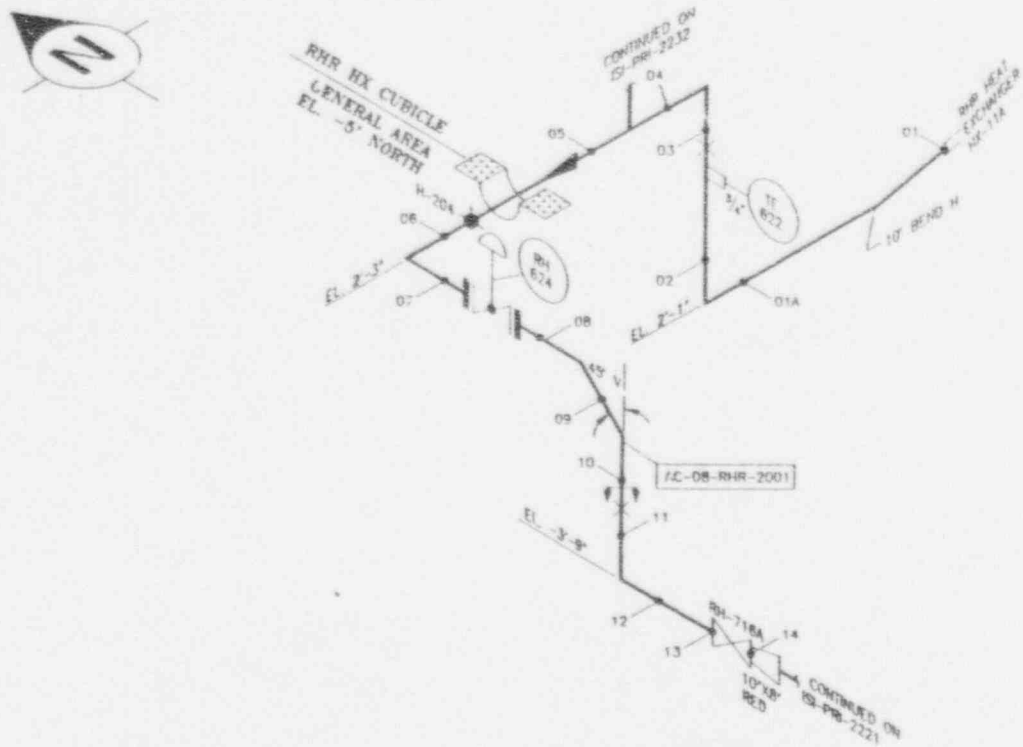
DRAWING NO. ISI-PRI-2225

B | PB | 02 | M | RHL | 183 | 009 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



AC-08-RHR-2001

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: GENERAL AREA, RHR HX CUB
ELEV.: -3' TO 2'
HP AREA: 113, 119

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-234
REF. P&ID: 110E029, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN		OPERATING	
	°F	PSIG	°F	PSIG
AC CARBON STEEL				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
8.000	0.322	A316 TP304	N/A

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	ISS'D
2			05/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DRG-92-062	PPL	PPL	DJM	
1			07/03/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271409
CADFILE NO. PRI2226.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.3.3
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	12/03/90	APPRV'D	
CHECKED	CTP	06/17/91	APPRV'D	
DRAFT'D	KTG	06/24/91	APPRV'D	12/21/91

WISCONSIN ELECTRIC

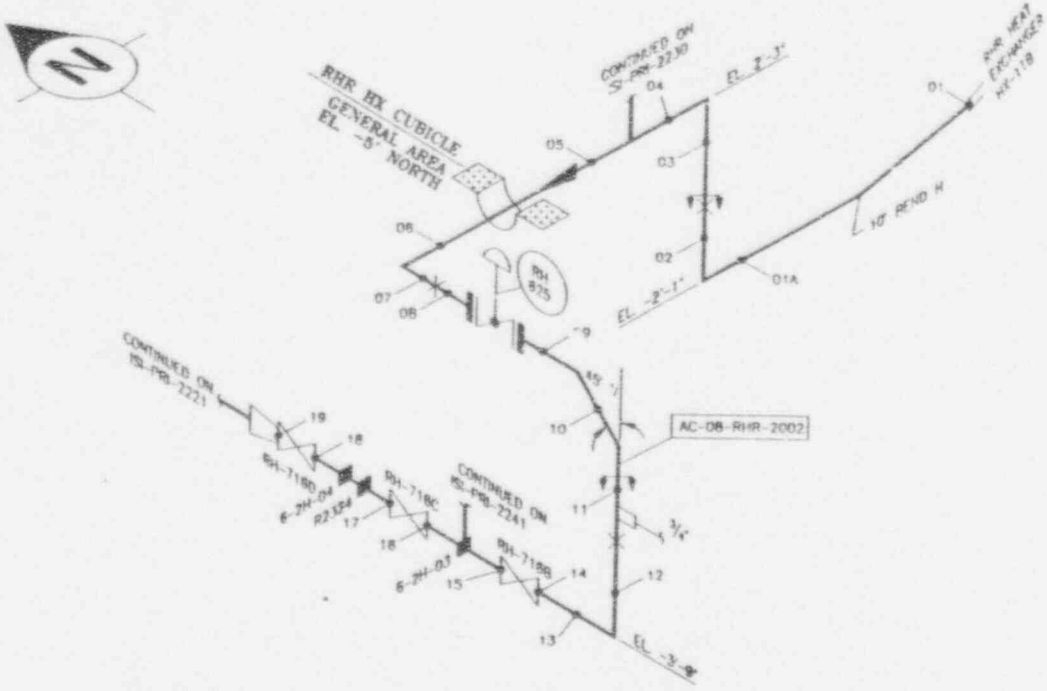
PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR HEAT EXCHANGER
HX-11A OUTLET

DRAWING NO. ISI-PRI-2226

B | PB | 02 | MRHL | 183 | 010 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



AC-08-RHR-2002

DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: GENERAL AREA/RHR HX CUB
ELEV.: -3' TO 2'
HP AREA: 113, 119

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-234
REF. P&ID: 110E029, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
AC-60R-04				
SF-60R-02				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
8.000	0.322	A316 TP304	N/A

REVISIONS

REV NO.	ZONE	P&DI ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO PDS REF. TPAMS #PB-DWG-92-002	PPL	PPL	DJM	
1			07/03/93	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271410
CADFILE NO. PRI2227.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.3.3
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	12/03/90		
CHECKED	CTP	06/17/91	APPRV'D	
DRAFT'G	KTG	06/24/91	APPRV'D RRS	10/01/91

WISCONSIN ELECTRIC

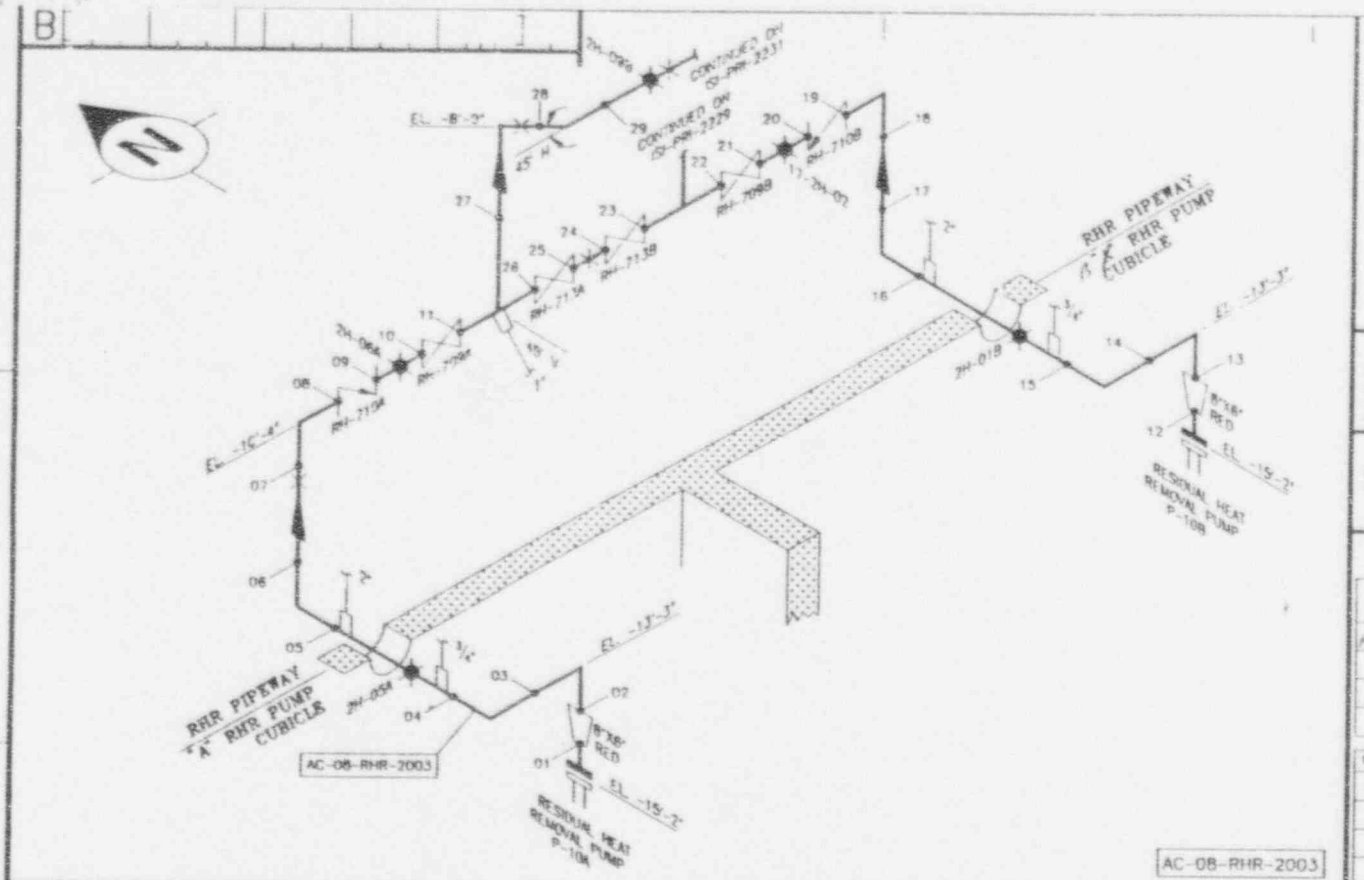
PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR HEAT EXCHANGER
HX-11B OUTLET

DRAWING NO. ISI-PRI-2227

B | PB | 02 | MRHL | 183 | 011 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

UNIT: 2 DG: AUXILIARY
ROOM/AREA: "A" & "B" RHR PUMP CUB.
ELEV.: -15' TO -8'
HP AREA: 108, 109, 110, 111

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-233
REF. P&ID: 1126029, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
AC60K-04				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
8.000	0.322	A312 TP304	N/A

REVISIONS

REV NO.	ZONE	PRES. EL.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED RHTO PDS REF. TRANS. #PD-DWC-92-062	PPL	PPL	DJM	
1			07/03/91	REVISED PER WALKDOWN	KTG	WAR	JBR	

MICROFORM NO. 271411
CADFILE NO. PRI2228.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.3.3
MOD.: NONE

DRAWN	DLJ	DATE 12/06/90	APPRV'D
CHECKED	CTP	06/17/91	APPRV'D
DRAFT'D	KTG	06/24/91	APPRV'D GSS 10/31/91

WISCONSIN ELECTRIC

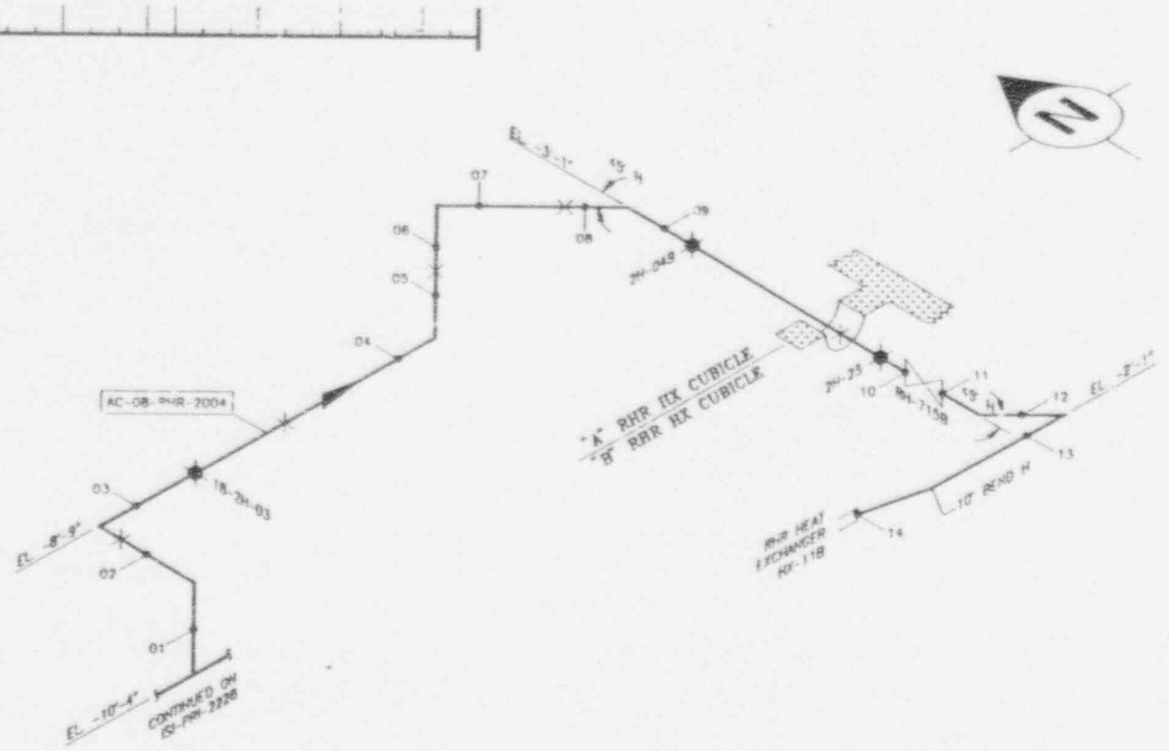
PRIMARY ISI ISOMETRIC
PBNP Unit 2
RESIDUAL HEAT REMOVAL
PUMP DISCHARGE

DRAWING NO. ISI-PRI-2228

B PB 02 MRHL 183 012 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



AC-08-RHP-2004

DRAWING NOTES

C

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: RHR PIPEWAY/RHR HX CUBICLE
ELEV.: -10' TO -2'
HP AREA: 110, 111, 119

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-233
REF. P&ID: 11080029, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
AC-08-RHP-2004				

COMPONA	NOMTHICK	MATERIAL	CALSTD
8.000	0.322	A312 TP304	N/A

B

A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPROV'D	REL'D
2			05/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			07/03/92	REVISED PER WALKDOWN	KTG	WAS	JBB	

MICROFORM NO. 271412
CADFILE NO. PRI2229.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.3.3
MOD.: NONE

DRAWN DLJ	DATE 12/06/90	APPROV'D	DATE
CHECKED CTP	08/16/91	APPROV'D	
DRAFT'G KTG	09/26/91	APPROV'D GRS	10/01/91

WISCONSIN ELECTRIC

FSE

PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR HEAT EXCHANGER
HX-11B INLET

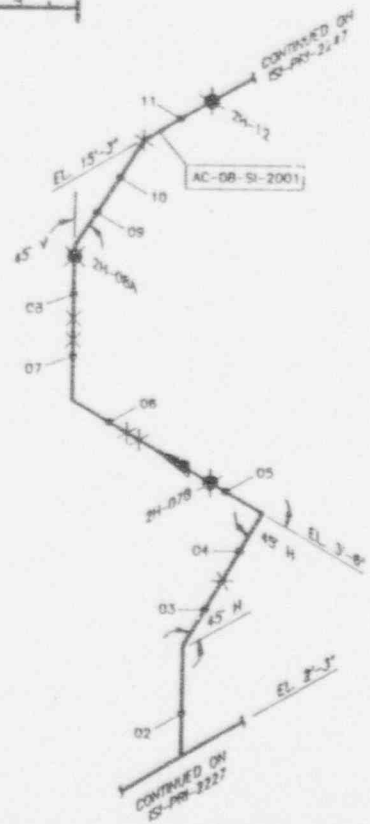
DRAWING NO. ISI-PRI-2229

B	PB	02	MRHL	183	013	02

SCALE None RELEASE DATE

4 3 2 1

FOR INFORMATION ONLY



AC-08-SI-2001

DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: GENERAL AREA
ELEV.: 2' TO 15'
HP AREA: 119

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-234
REF. P&ID: 110E029, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
AC-08W-06				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
8.000	0.322	A312 TP304	N/A

REVISIONS

REV NO.	ZONE	PROJ. ENGR.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/09/93	INCORPORATED INTO PDS REF. TRANS. #PB-DRG-92-062	PPL	PPL	DJM	
1			07/07/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271413
CADFILE NO. PRI2230.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	12/15/90		
CHECKED	CTP	06/18/91	APPRV'D	
DRAFT'D	KTG	06/24/91	APPRV'D	
			QRS	12/31/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR TO
'B' SI PUMP SUCTION

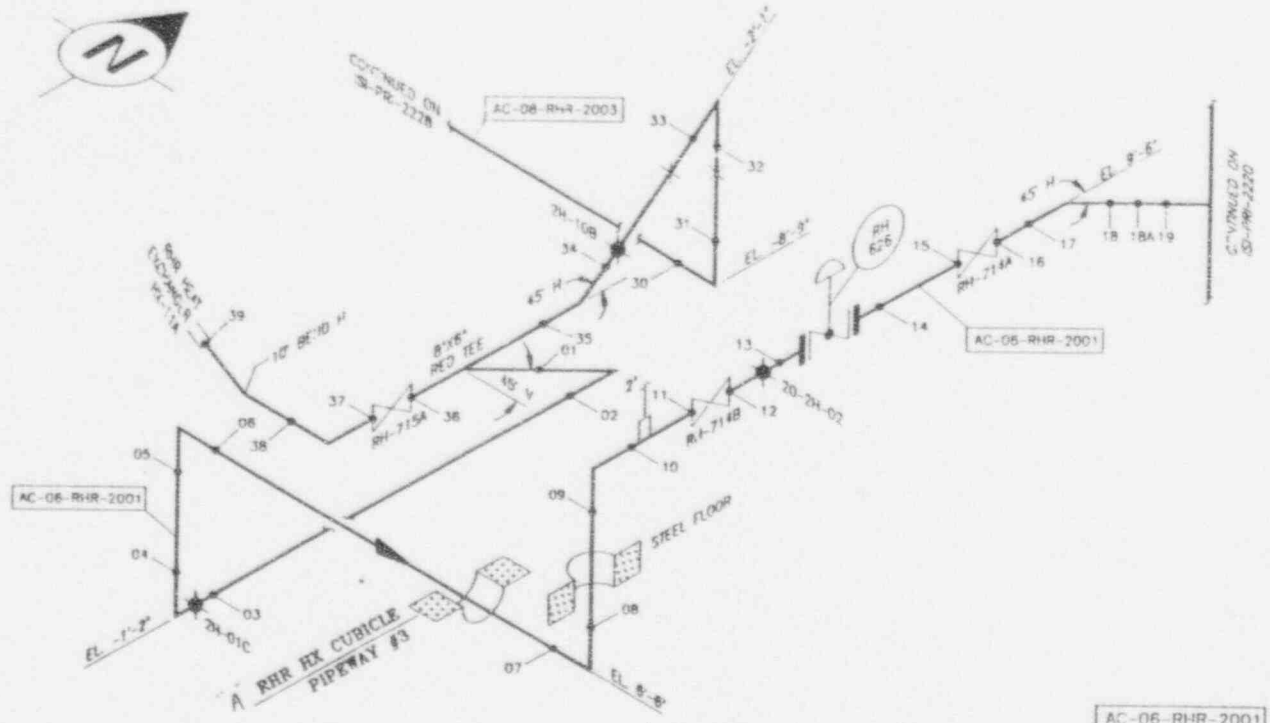
DRAWING NO. ISI-PRI-2230

B PB 02 MSIL 183021 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: PIPEWAY #3/RHR HX CUBICLE
ELEV.: -2' TO 19'
HP AREA: 137, 119

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-233
REF. ISO: BECHTEL P-234
REF. P&ID: 1-0E029, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
AC 60R-03				
AC 60R-04				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
8.000	0.280	A316 TP304	N/A
8.000	0.322	A312 TP304	N/A

AC-06-RHR-2001
AC-08-RHR-2003

REVISIONS

REV NO.	ZONE	PROJ ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DMO-92-082	PPL	PPL	DJN	
1			07/07/93	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271414
CADFILE NO. PRI2231.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.3.3
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	12/09/90		
CHECKED	CTP	06/18/91	APPRV'D	
DRAFTG	KTG	06/24/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

TSE

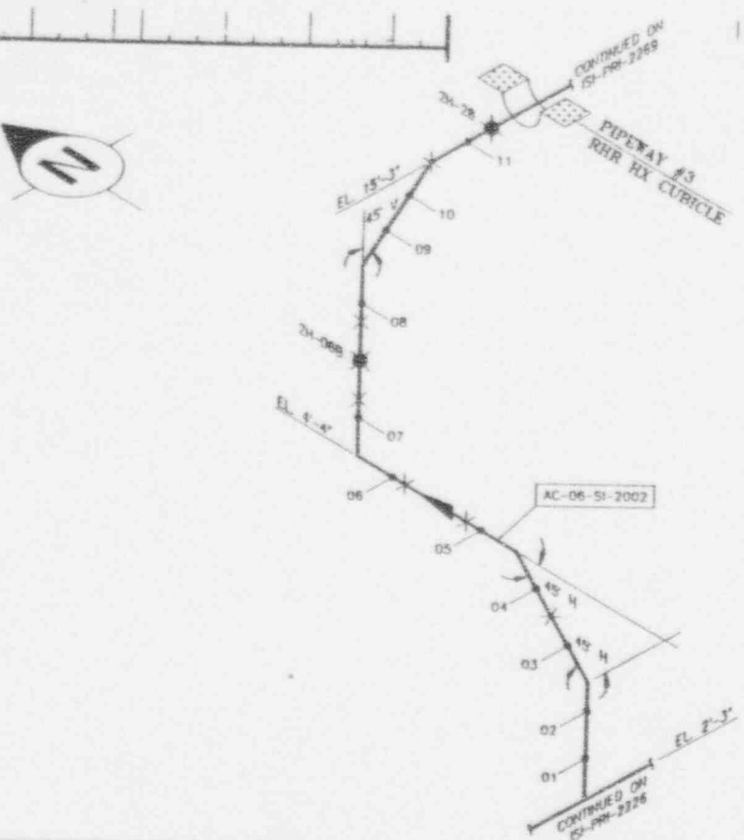
PRIMARY ISI ISOMETRIC
PBNP Unit 2
RESIDUAL HEAT REMOVAL
HEAT EXCHANGER BYPASS

DRAWING NO. ISI-PRI-2231

B | PB | 02 | MRHL | 183 | 014 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: RHR HX CUBICLE
ELEV.: 2' TO 15'
HP AREA: 119

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-234
REF. P&ID: 110E029, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
AC-60K-06				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
6.000	0.280	A312 TP304	N/A

AC-06-SI-2002

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/91	INCORPORATED INTO PDS REF. TRANS. EPB-DWG-82-063	PPL	PPL	DJN	
1			07/07/91	REVISED PER WALKDOWN	KTG	WAB	JMR	

MICROFORM NO. 271415
CADFILE NO. PRI2232.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	12/15/90		
CHECKED	CTP	06/18/91	APPRV'D	
DRAFT'G	KTG	06/24/91	APPRV'D	
			GPS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR TO
'A' SI PUMP SUCTION

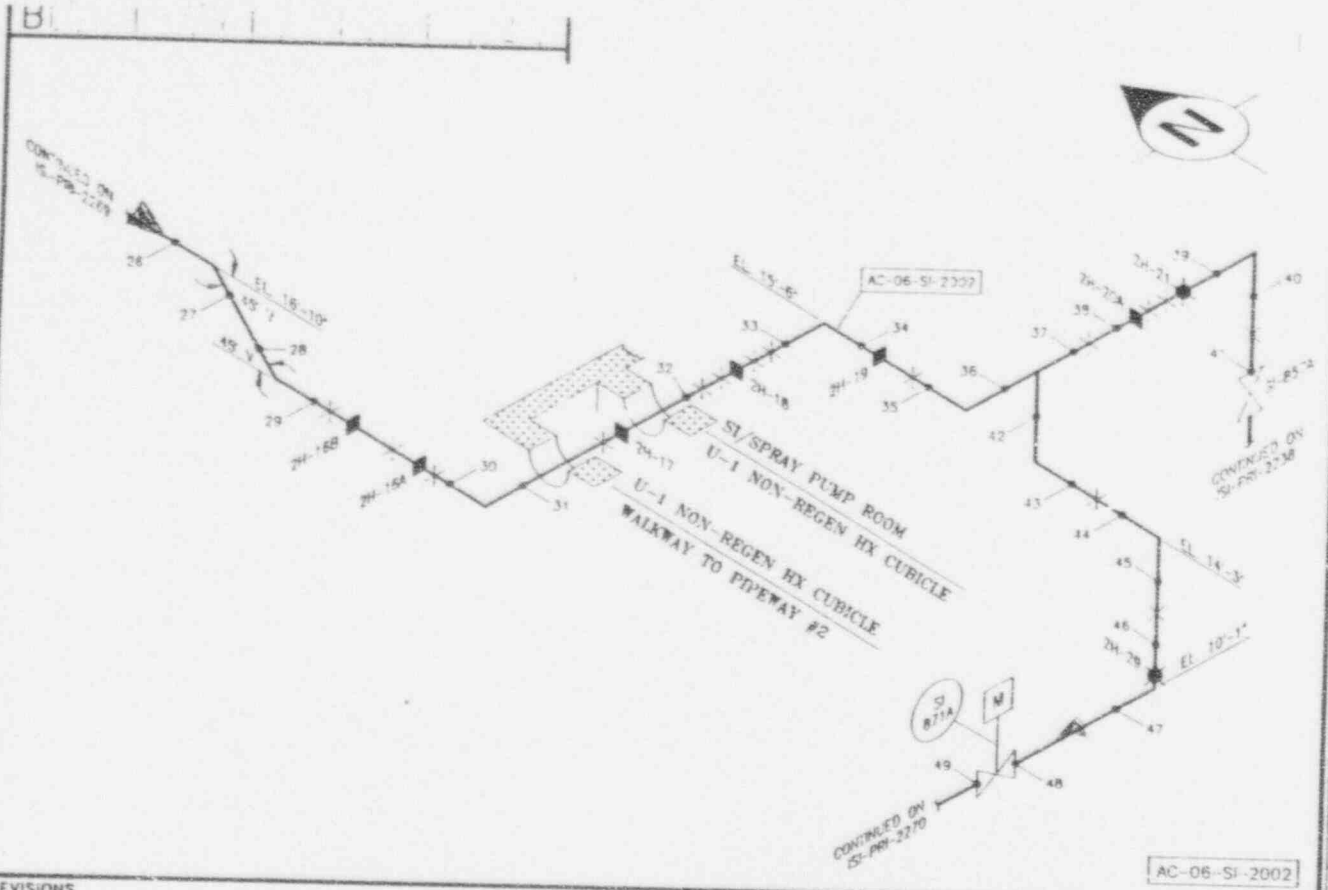
DRAWING NO. ISI-PRI-2232

B | PB | 02 | MSIL | 183022 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: GEN AREA/U-1 NON-REGEN HX
ELEV.: 10' TO 17'
HP AREA: 142, 146, 151A, 151B

REFERENCE DRAWINGS

REF. ISO. BECHTEL P-234
REF. P&ID 11CE229, SH. 1
REF. PLOT ACCESS SHT.

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SEE CLASIFICATION				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
3.000	0.280	A312 TP304	N/A

REVISIONS

REV NO.	ZONE	PROJ. NO.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/06/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWC-92-062	PPL	PPL	DJM	
1			07/07/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271416
CADFILE NO. PRI2233.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	12/15/90		
CHECKED	CTP	08/20/91	APPRV'D	
DRAFT'G	KTG	08/23/91	APPRV'D	
			DRS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR TO
'A' SI PUMP SUCTION

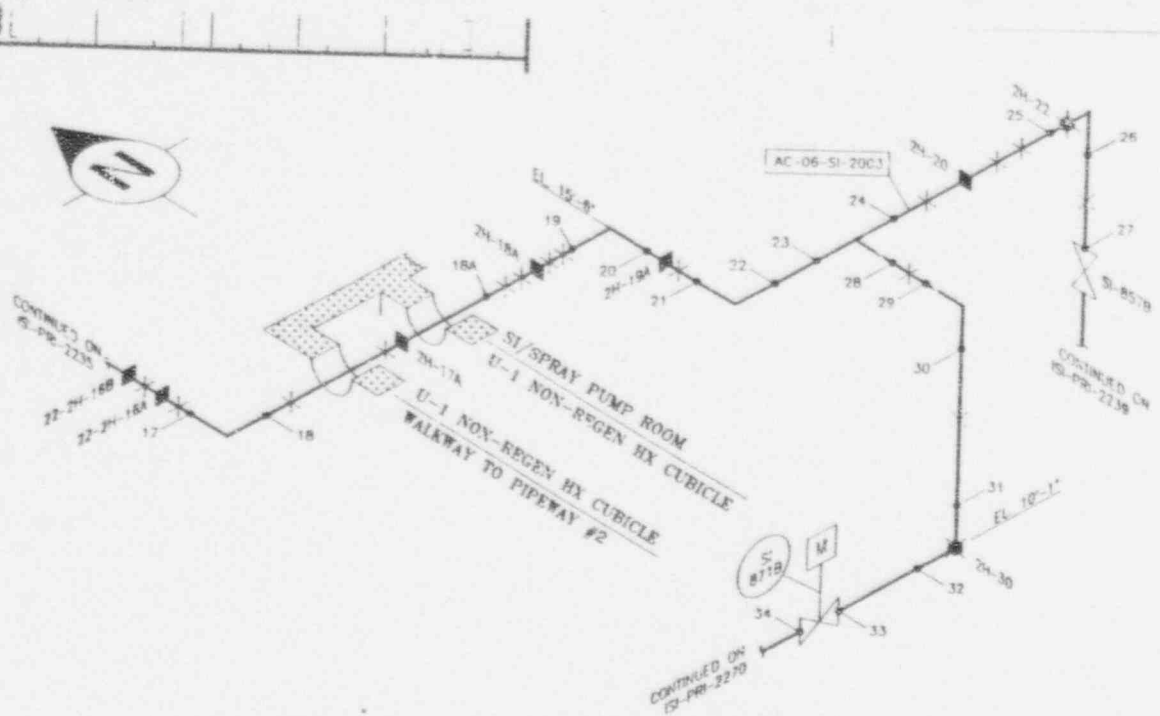
DRAWING NO. ISI-PRI-2233

B | PB | 02 | MSIL | 183 | 023 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: GEN AREA/U-1 NON-REGEN HX
ELEV.: 10' TO 15'
HP AREA: 142, 146, 151A, 151B

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-234
REF. PWD: 110E029, SH. 1
REF. PIPE HORCH. SHT.

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SC-CS1A-C1				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
6.000	0.280	A312 TP304	N/A

AC-06-SI-2003

REVISIONS

REV NO.	ZONE	PROJ. ISS.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-93-082	PPL	PPL	DJM	
1			07/07/92	REVISED PER WALKDOWN	KTC	WAB	JRB	

MICROFORM NO. 271417
CADFILE NO. PRI2234.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

DRAWN DLJ	DATE 12/07/90	APPRV'D	DATE
CHECKED CTP	06/20/91	APPRV'D	
DRAFT'G KTC	06/25/91	APPRV'D GSJ	10/01/91

WISCONSIN ELECTRIC

FSE

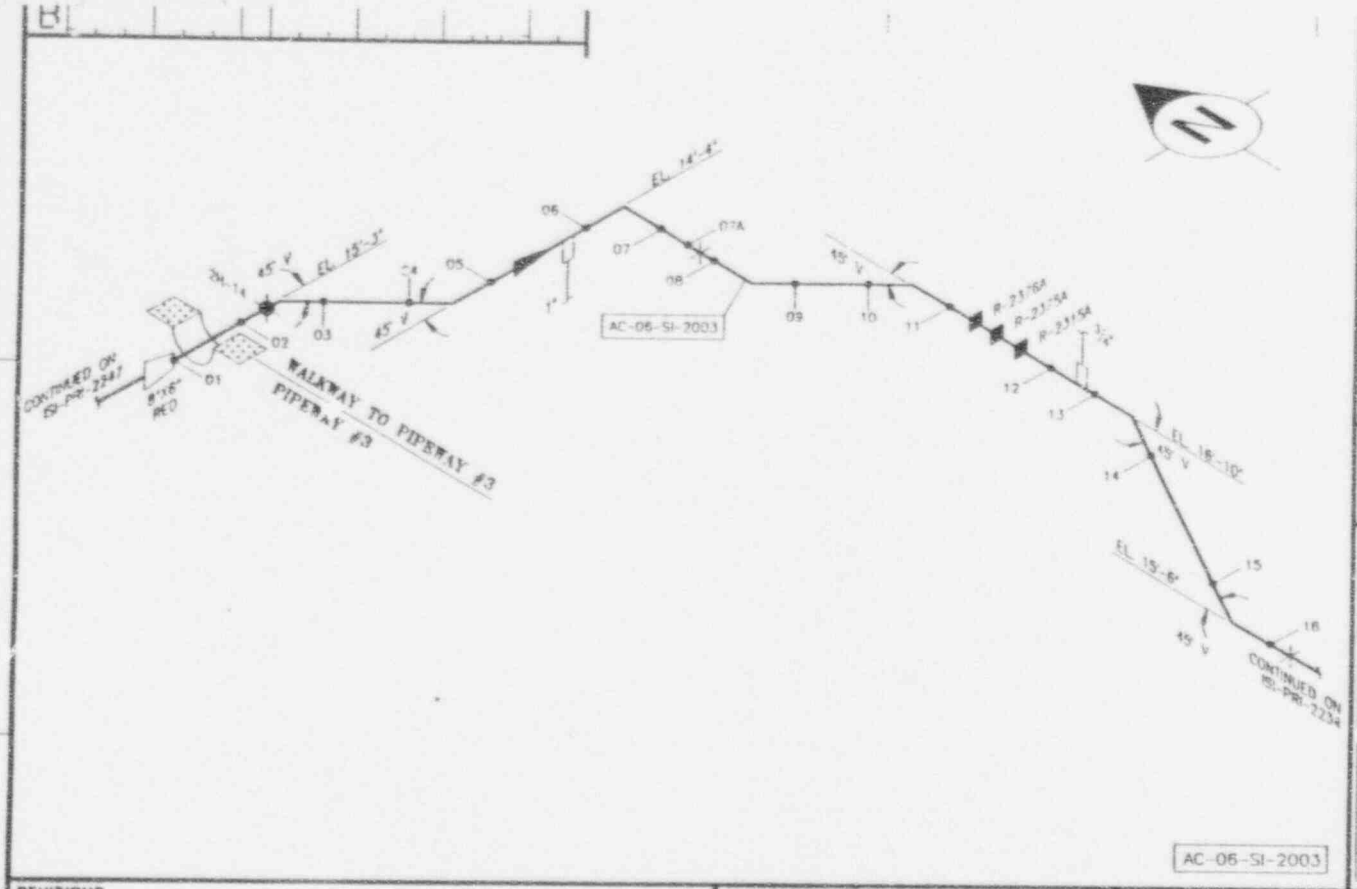
PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR TO
'B' SI PUMP SUCTION

DRAWING NO. ISI-PRI-2234

B | PB | 02 | M | SIL | 183 | 024 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



AC-06-SI-2003

DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: GENERAL AREA/PIPEWAY #3
ELEV.: 14' TO 17'
HP AREA: 142, 137

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-234
REF. P&ID: 1104029, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
AL 60K QC				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
6.000	0.280	A312 TP304	N/A

REVISIONS

REV NO.	ZONE	PROJ. ISL	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			07/07/91	REVISED PER WALKDOWN	KTC	WAB	JBB	

MICROFORM NO. 271418
CADFILE NO. PRI2235.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

DRAWN	DLJ 12/07/90	APPRV'D	DATE
CHECKED	CTP 06/20/91	APPRV'D	
DRAFT'D	KTC 09/28/91	APPRV'D	GRS 10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR TO
SI PUMP SUCTION

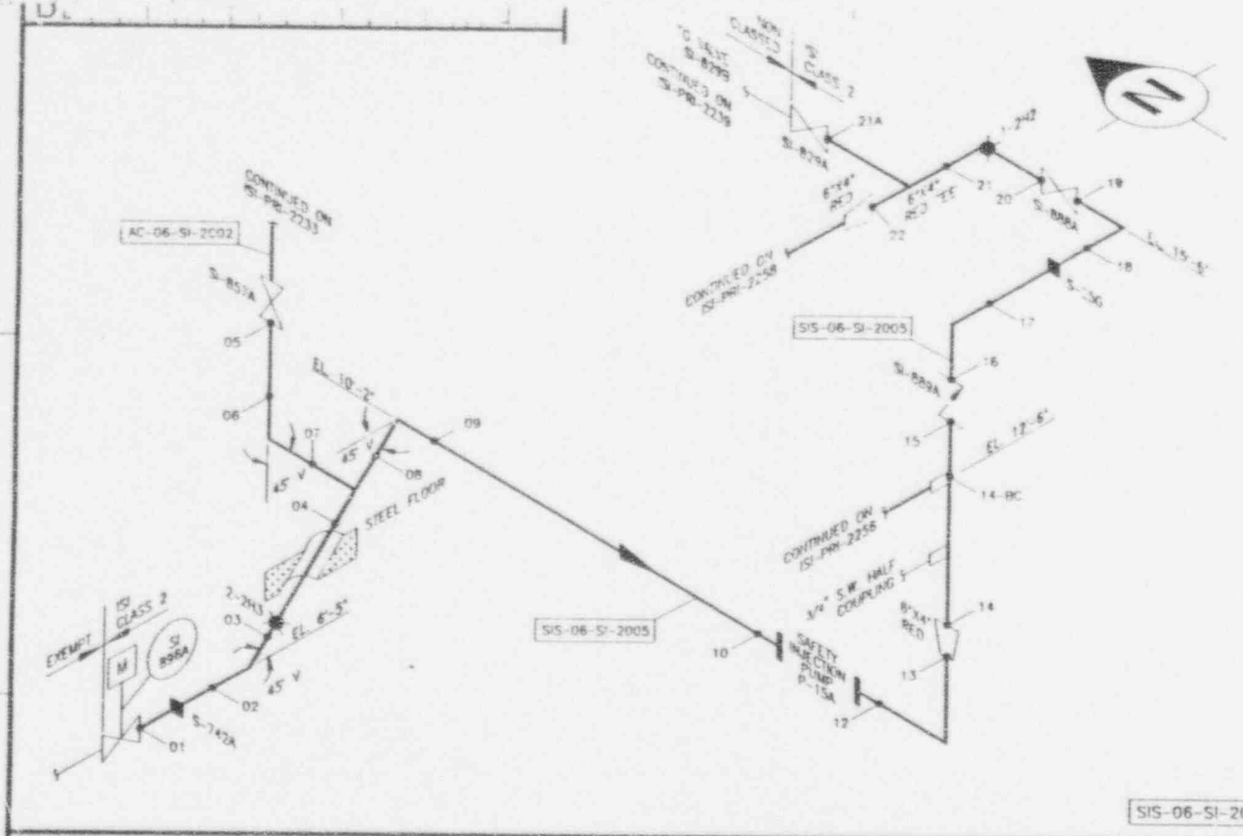
DRAWING NO. ISI-PRI-2235

B | PB | 02 | M | S | I | L | 18 | 30 | 25 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



LOCATION

BLDG.: AUXILIARY
ROOM/AREA: S. PUMP AREA
ELEV.: 8' to 15'
HP AREA: 151A

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-202
REF. ISO: BECHTEL P-219
REF. P&ID: 110E035, SH. 2

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SI-151R-02				
SI-151R-05				
SI-1501R-01				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
6.000	0.134	A312 TP304	N/A
6.000	0.432	A312 TP316	N/A
4.000	0.337		ANSI B36.10

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DMC-92-082	FPL	FPL	DJM	
1			07/07/92	REVISED PER WALKDOWN	KTC	WAB	JBB	

MICROFORM NO. 271419
CADFILE NO. PRI2238.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	12/07/90	APPRV'D	
CHECKED	CTP	06/20/91	APPRV'D	
DRAFT'G	KTC	06/20/91	APPRV'D QRS	10/21/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
SAFETY INJECTION
PUMP 'A' INLET AND OUTLET

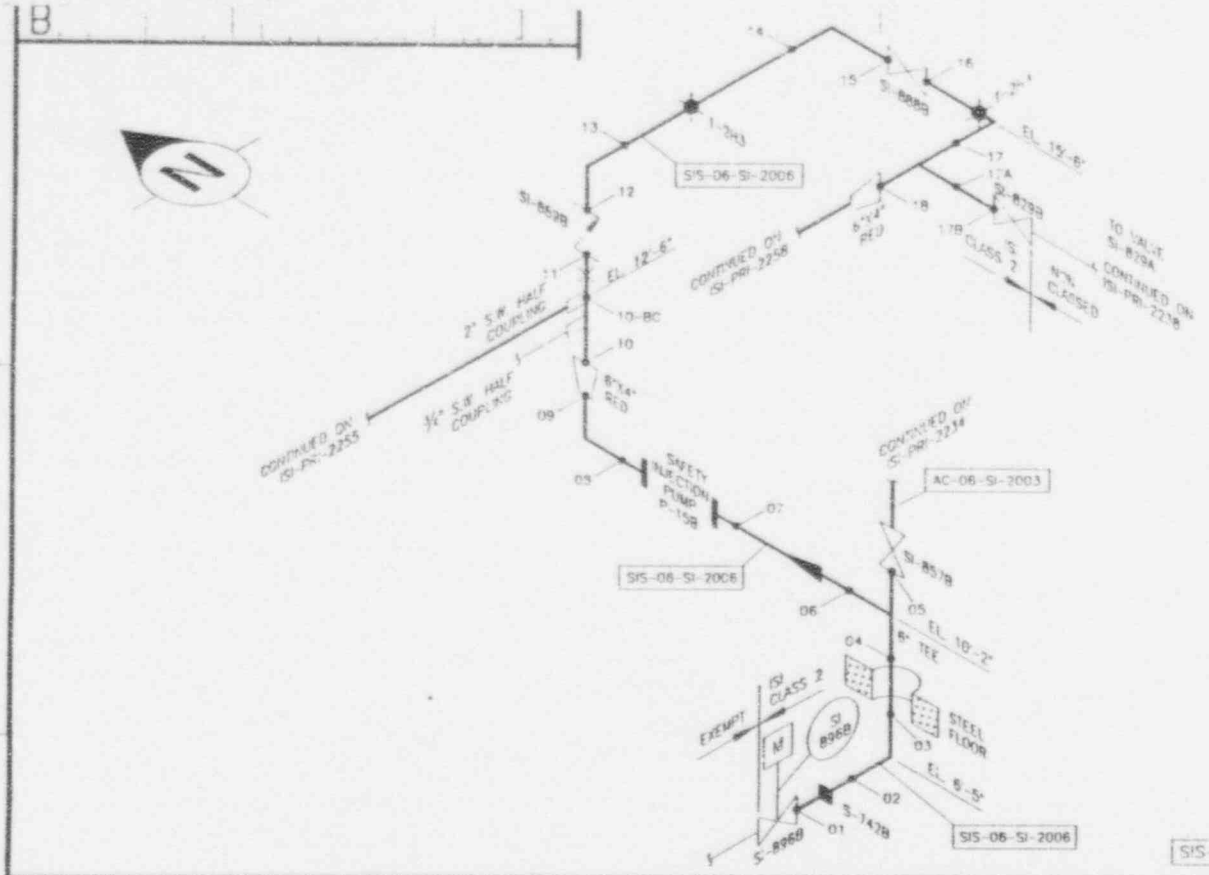
DRAWING NO. ISI-PRI-2238

B | PB | 02 | MSIL | 183026 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY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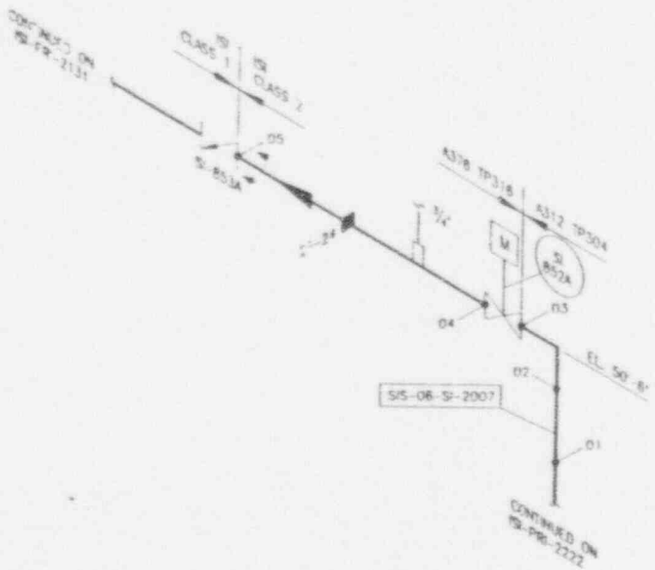
SI-8



SIS-06-SI-2007

DRAWING NOTES

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: GENERAL AREA EL. 46' SE
ELEV.: 48' TO 50'
HP AREA: 402B

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-218
REF. ISO: BECHTEL P-248
REF. P&ID: 11760035, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SE-CS-1R-C1				
SE-CS-1R-C2				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
6.000	0.280	A312 TP304	N/A
6.000	0.562	A376 TP316	4-PTB

REVISIONS

REV NO.	ZONE	PROJ NO.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/06/91	INCORPORATES RTD FDS RET. TRANS. #PB-DMC-91-082	PPL	PPL	DJM	
1			07/07/89	REVISED PER WALKDOWN	KTD	WAS	JDB	

MICROFORM NO. 271421
CADFILE NO. PRI2240.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	11/16/90	APPRV'D	
CHECKED	CTP	06/25/91	APPRV'D	
DRAFT'G	KTD	07/08/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

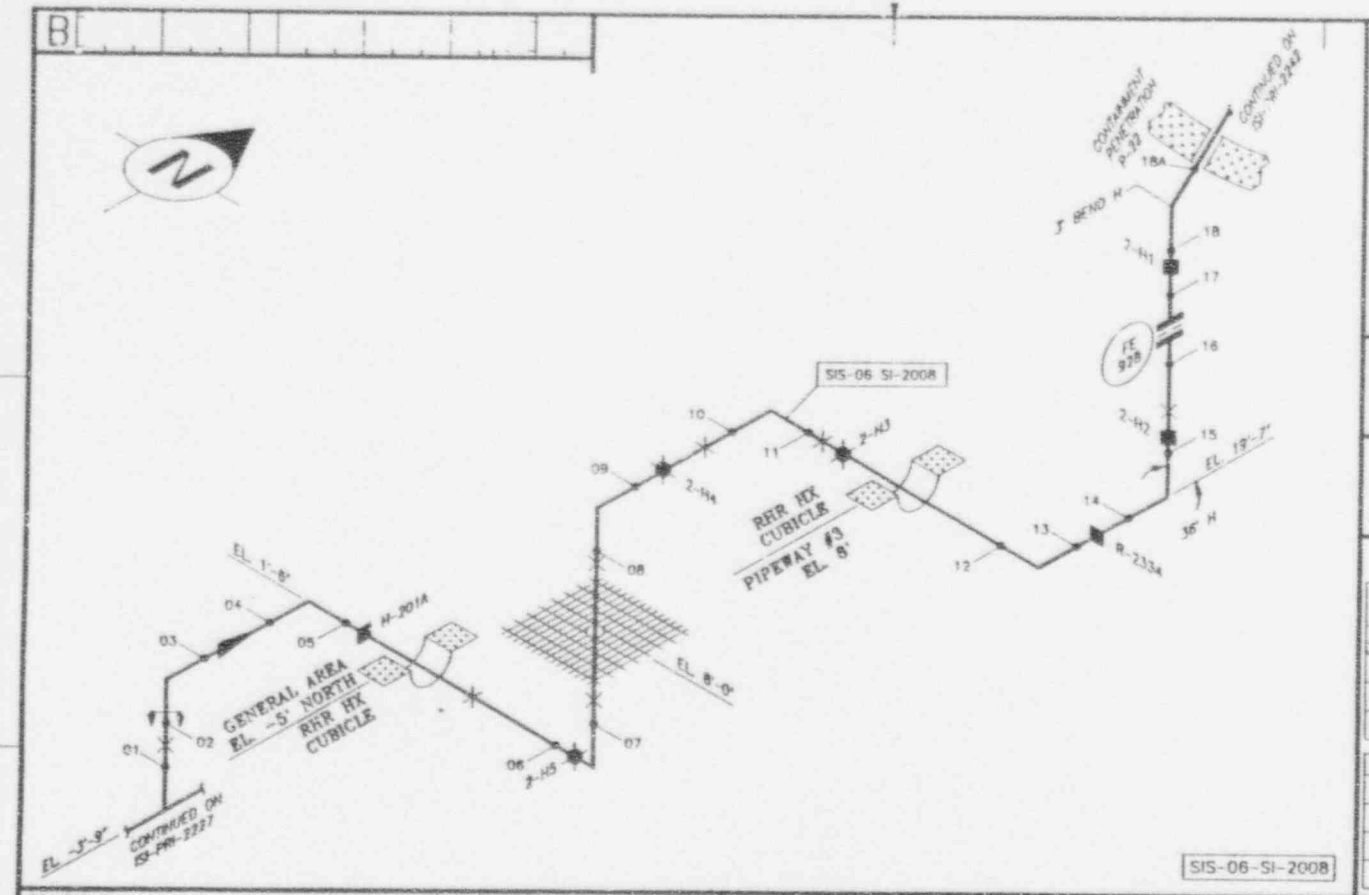
PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR TO
REACTOR PRESSURE VESSEL

DRAWING NO. ISI-PRI-2240

B | PB | 02 | MSIL | 183 | 028 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: PIPEWAY #3/RHR HX CUBICLE
ELEV.: -3' TO 19'
HP AREA: 137, 119, 113

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-204
REF. P&ID: 110E029, SH. 1
REF PID 110E035 SH 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SEE CLASS-CC				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
8.000	0.280	A312 TP304	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	MEL'D
2			05/06/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJN	
1			07/07/93	REVISED PER WALKDOWN	KTC	XAB	JBB	

MICROFORM NO. 271422
CADFILE NO. PRI2241.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

DRAWN BLJ	DATE 12/15/90	APPRV'D	DATE
CHECKED CTP	06/25/91	APPRV'D	
DRAFT'G KCD	07/08/91	APPRV'D RMS	10/31/91

WISCONSIN ELECTRIC

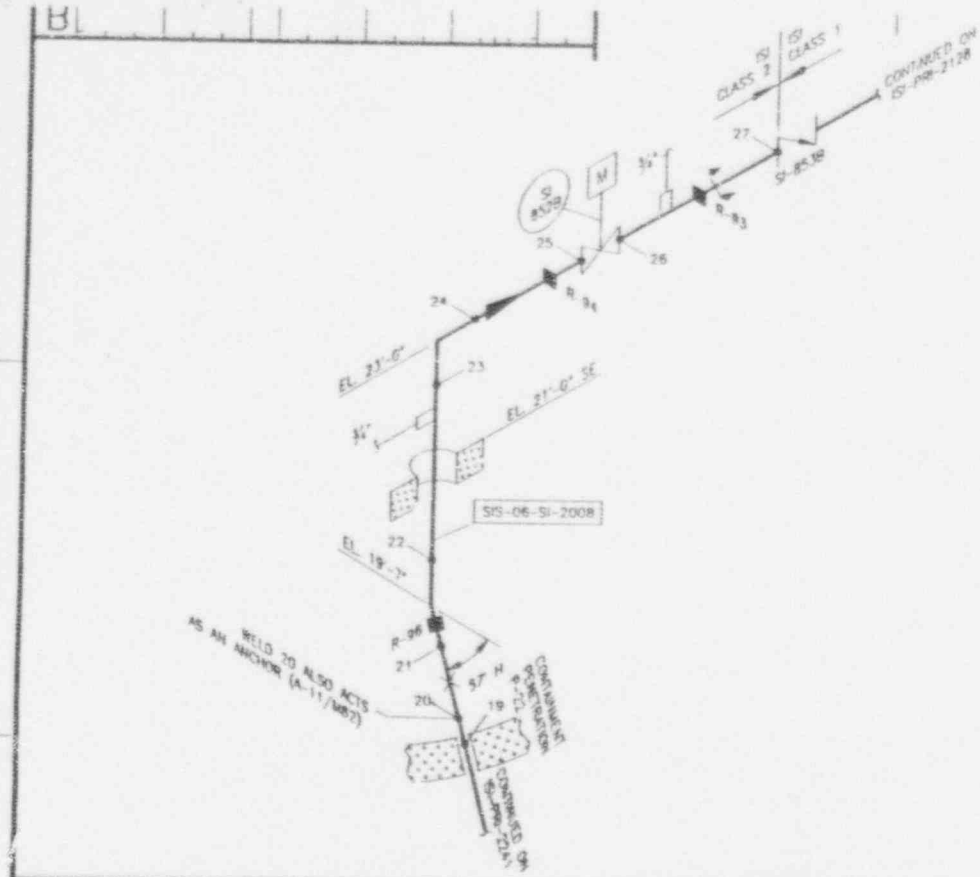
PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR TO
RPV INJECTION

DRAWING NO. ISI-PRI-2241

B | PB | 02 | MSIL | 183 | 029 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



SIS-06-SI-2008

DRAWING NOTES

LOCATION

BLDG.: CONTAINMENT
ROOM, AREA: GENERAL AREA SE
ELEV.: 19' TO 23'
HP AREA: 403B, 404B

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-236
REF. P&ID: 11OE075, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN		OPERATING	
	°F	PSIG	°F	PSIG
SE-25UR-05				
SE-06UR-02				

COMPONA	NOMTHICK	MATEPIAL	CALSTD
6.000	0.280	A312 TP304	N/A
6.000	0.562	A378 TP316	4-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJW	
1			07/07/92	REVISED PER WALKDOWN	KTG	WAB	JRB	

MICROFORM NO. 271423
CADFILE NO. PRI2242.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

DRAWN DLJ	DATE 11/10/90	APPRV'D	DATE
CHECKED CTP	06/25/91	APPRV'D	
DRAFTG KTG	07/08/91	APPRV'D GPS	10/21/91

WISCONSIN ELECTRIC

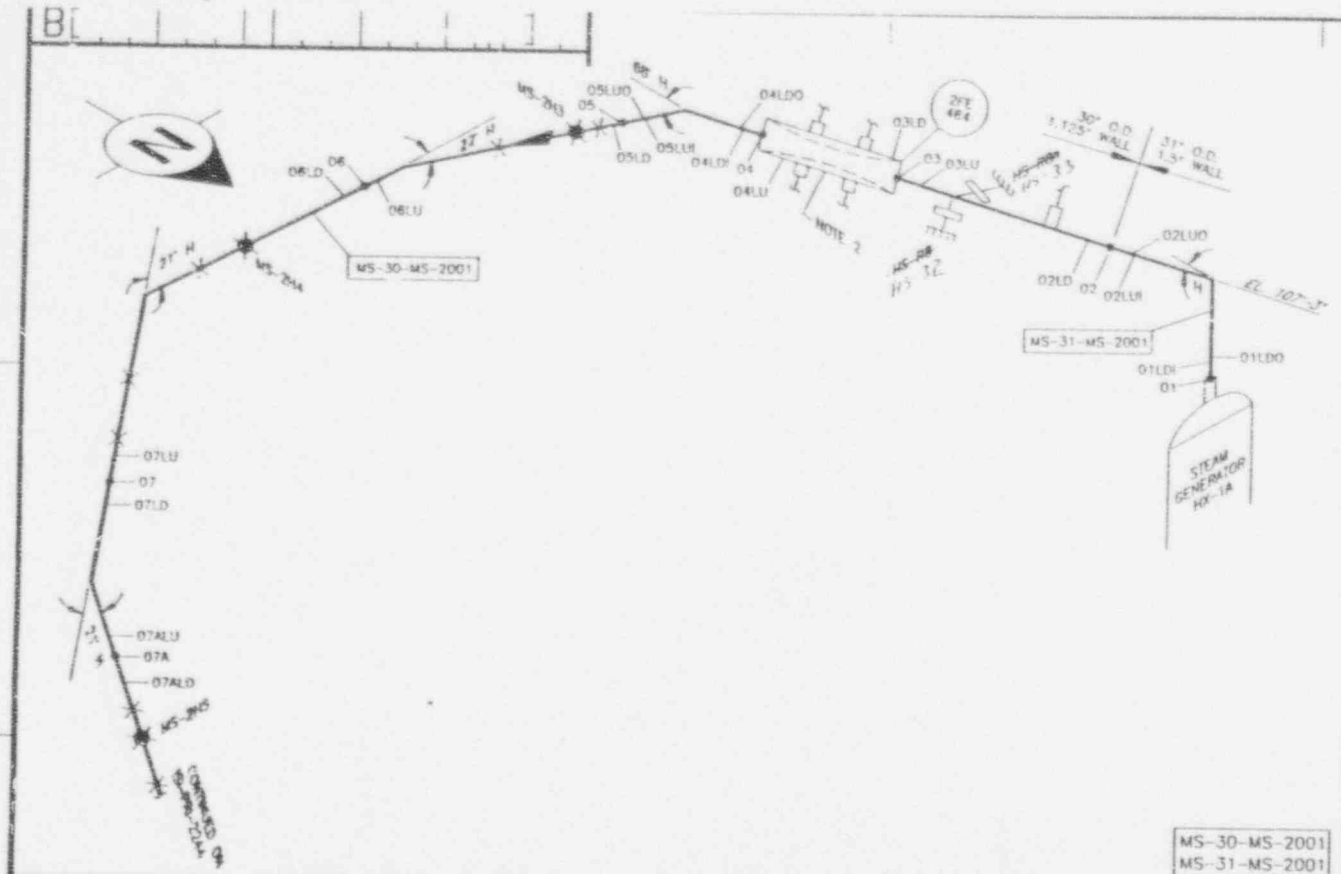
PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR TO
RPV INJECTION

DRAWING NO. ISI-PRI-2242

B | PB | 02 | MSIL | 183 | 030 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



MS-30-MS-2001
MS-31-MS-2001

DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.
2. PIPE SPEC – ASTM 155.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: GENERAL AREA
ELEV.: 107'
HP AREA: 401C, 401D

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-208
REF. P&ID: M-2201, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
EB-01				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
30.000	1.125	A155 KC 70	45-PTB
31.000	1.500	A155 KC 70	44-PTB

REVISIONS

REV NO.	ZONE	PROJ ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	WELD
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. @PD-DMC-92-082	PPL	PPL	DJM	
1			07/07/92	REVISED PER WALKDOWN	RTG	WAB	JRB	

MICROFORM NO. 271424
CADFILE NO. PRI2243.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T3.4.1
MOD.: NONE

DRAWN RTG	DATE 02/03/91	APPRV'D	DATE
CHECKED CTP	08/26/91	APPRV'D	
DRAFT'G RTG	07/05/91	APPRV'D GPS	10/01/91

WISCONSIN ELECTRIC

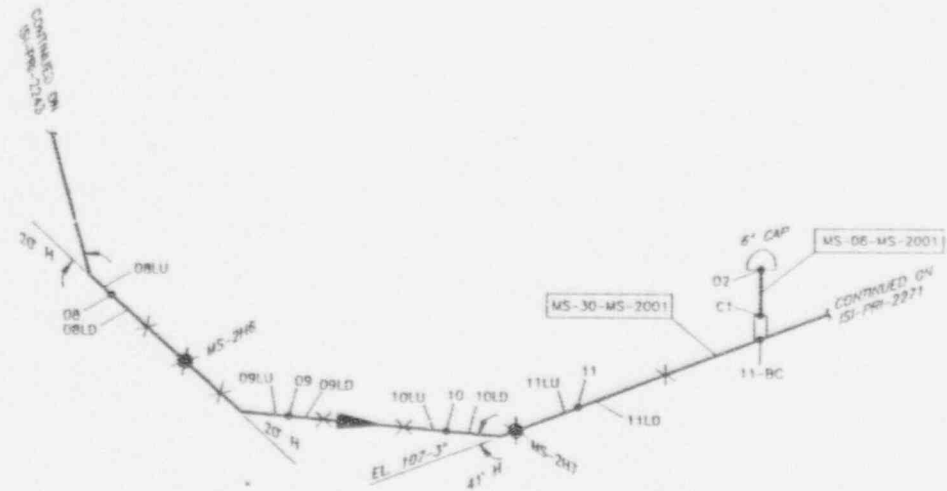
PRIMARY ISI ISOMETRIC
PBNP Unit 2
LOOP 'A' MAIN STEAM
INSIDE CONTAINMENT

DRAWING NO. ISI-PRI-2243

B | PB | 02 | MMSL | 183 | 001 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: GENERAL AREA
ELEV.: 107'
HP AREA: 401B

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-208
REF. P&ID: M-2201, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
EB-01				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
6.000	0.280	A-106	N/A
30.000	1.125	A155 KC 70	45-PTB

MS-06-MS-2001
MS-30-MS-2001

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO FUS RECT. TRANS. #PB-DWG-97-087	PPL	PPL	DJM	
1			07/07/92	REVISED PER WALKDOWN	KTG	WAB	JRB	

MICROFORM NO. 271425
CADFILE NO. PRI2244.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T3.4.1
MOD.: NONE

DRAWN KTG	DATE 03/05/91	APPRV'D	DATE
CHECKED CTP	06/26/91	APPRV'D	
DRAFT'G KTG	07/08/91	APPRV'D GPS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
LOOP 'A' MAIN STEAM
INSIDE CONTAINMENT

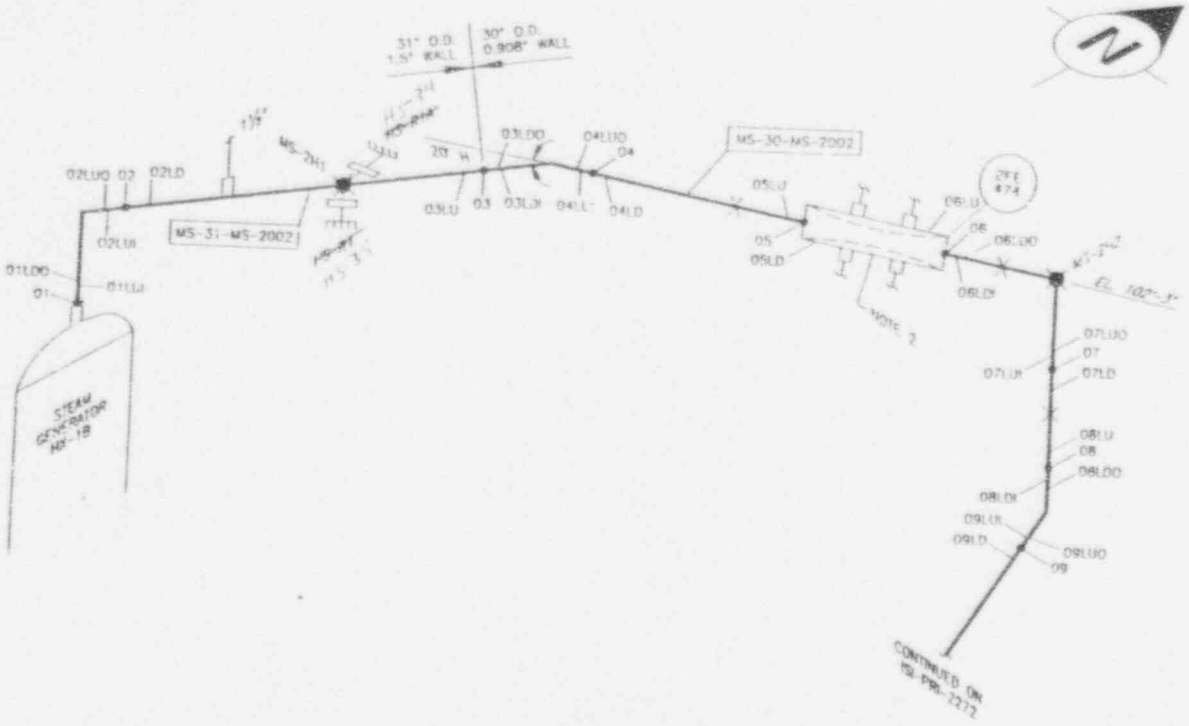
DRAWING NO. ISI-PRI-2244

B | PB | 02 | MMSL | 183 | 002 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



MS-30-MS-2002
MS-31-MS-2002

DRAWING NOTES

1. ALL PIPING OF THIS DRAWING IS INSULATED.
2. PIPE SPEC - ASTM 155.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: GENERAL AREA NE
ELEV.: 94' TO 102'
HP AREA: 401A

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-208
REF. P&ID: M-2201, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
EB-01				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
30.000	0.908	A155 KC 70	N/A
31.000	1.500	A155 KC 70	N/A

REVISIONS

REV NO.	ZONE	PBU. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/06/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-93-002	PPL	PPL	BJN	
1			07/07/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271426
CADFILE NO. PRI2245.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T3.4.1
MOD.: NONE

DRAWN KTG	DATE 02/03/91	APPRV'D	DATE
CHECKED CTP	06/26/91	APPRV'D	
DRAFT'G XIG	07/08/91	APPRV'D GSF	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
LOOP 'B' MAIN STEAM
INSIDE CONTAINMENT

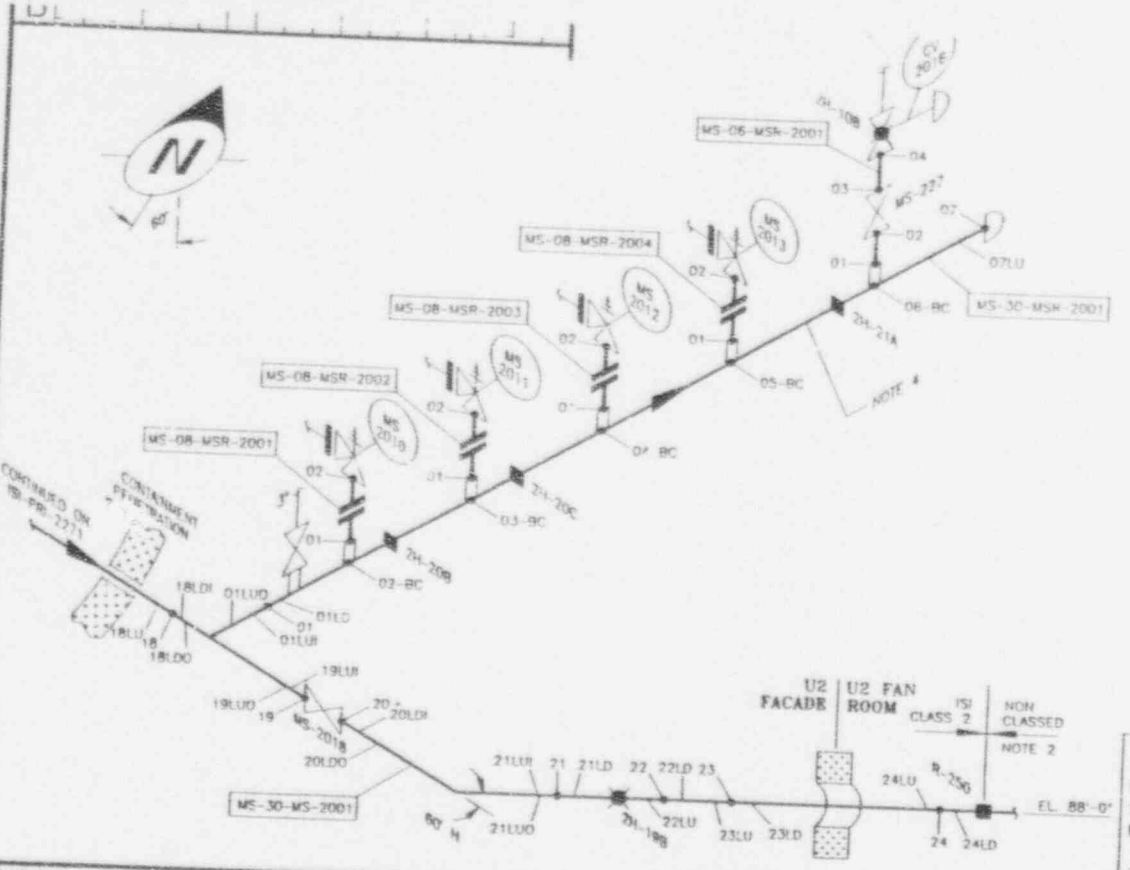
DRAWING NO. ISI-PRI-2245

B | PB | 02 | MMSL | 183 | 003 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



MS-06-MSR-2001
MS-08-MSR-2001
MS-08-MSR-2002
MS-08-MSR-2003
MS-08-MSR-2004
MS-30-MS-2001
MS-30-MSR-2001

1. ALL PIPING ON THIS DRAWING IS INSULATED.
2. ISI CLASS ENDS AT R-250.
3. EXAM METHOD "S" RT.
4. 1.5" NOMINAL THICKNESS.

LOCATION

BLDG.: AUXILIARY ~~BUILDING~~ FUEL AUX.
ROOM/AREA: ~~FACADE~~ U2 FAN ROOM
ELEV.: 88'
MP AREA: 536, 273

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-207
REF. P&ID: M-2201, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN		OPERATING	
	°F	PSIG	°F	PSIG
EB01				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
6.000	0.280	A106	N/A
8.000	VARIABLE	A106	NOTE 3
30.000	0.908	A155 KC 70	46-PTB
30.000	1.500	A155 KC 70	47-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	
1			07/07/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271427
CADFILE NO. PRI2246.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T3.4.1
MOD.: NONE

DRAWN DLJ	DATE 12/30/90	APPRV'D	DATE
CHECKED CTP	07/10/91	APPRV'D	
DRAFT'G KTG	07/14/91	APPRV'D DBS	10/01/91

WISCONSIN ELECTRIC

PSE

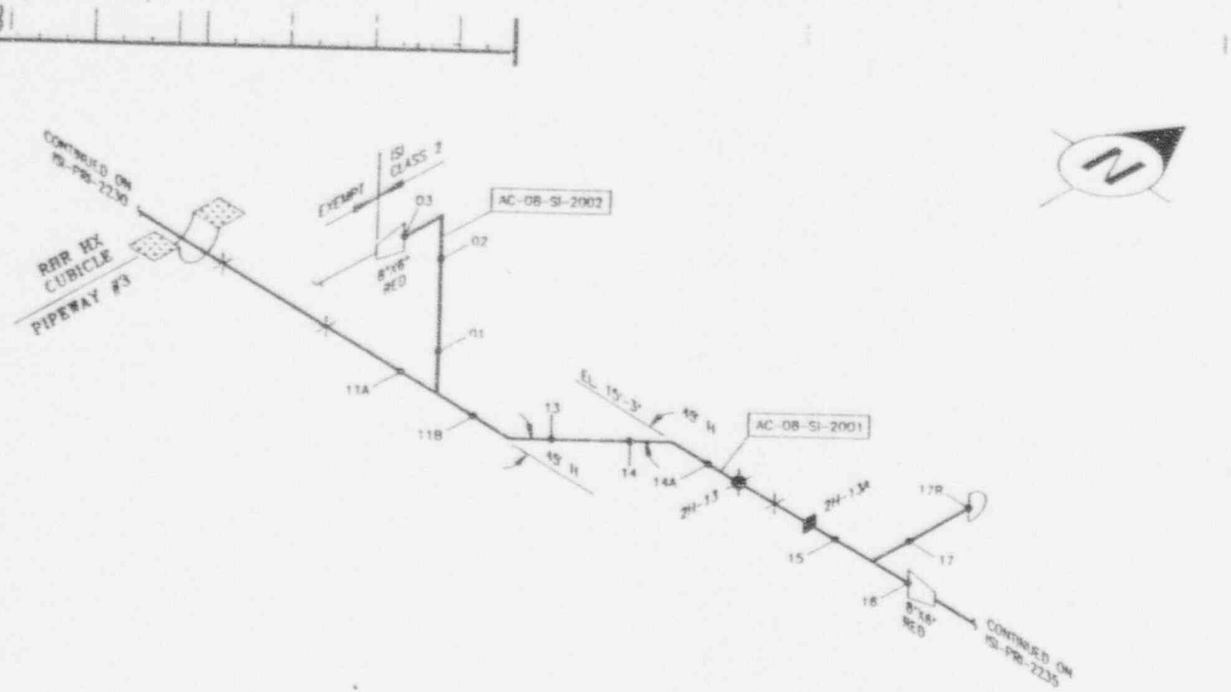
PRIMARY ISI ISOMETRIC
PaNP Unit 2
LOOP 'A' MAIN STEAM
OUTSIDE CONTAINMENT

DRAWING NO. ISI-PRI-2246

B | PB | 02 | MMSL | 183004 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: PIPEWAY #3
ELEV.: 13' TO 17'
HP AREA: 137

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-234
REF. P&ID: 110E079, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SEE NOTE 04				

COMPOSN	NOMTHICK	MATERIAL	CALSTD
8.000	0.322	A312 TP304	N/A

AC-08-SI-2001
AC-08-SI-2002

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	INIT'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PD-DWG-92-082	PPL	PPL	DJM	
1			07/07/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271428
CADFILE NO. PRI2247.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	KTG	01/15/91	APPRV'D	
CHECKED	CTP	07/18/91	APPRV'D	
DRAFT'G	KTG	07/14/91	APPRV'D	10/01/91

WISCONSIN ELECTRIC

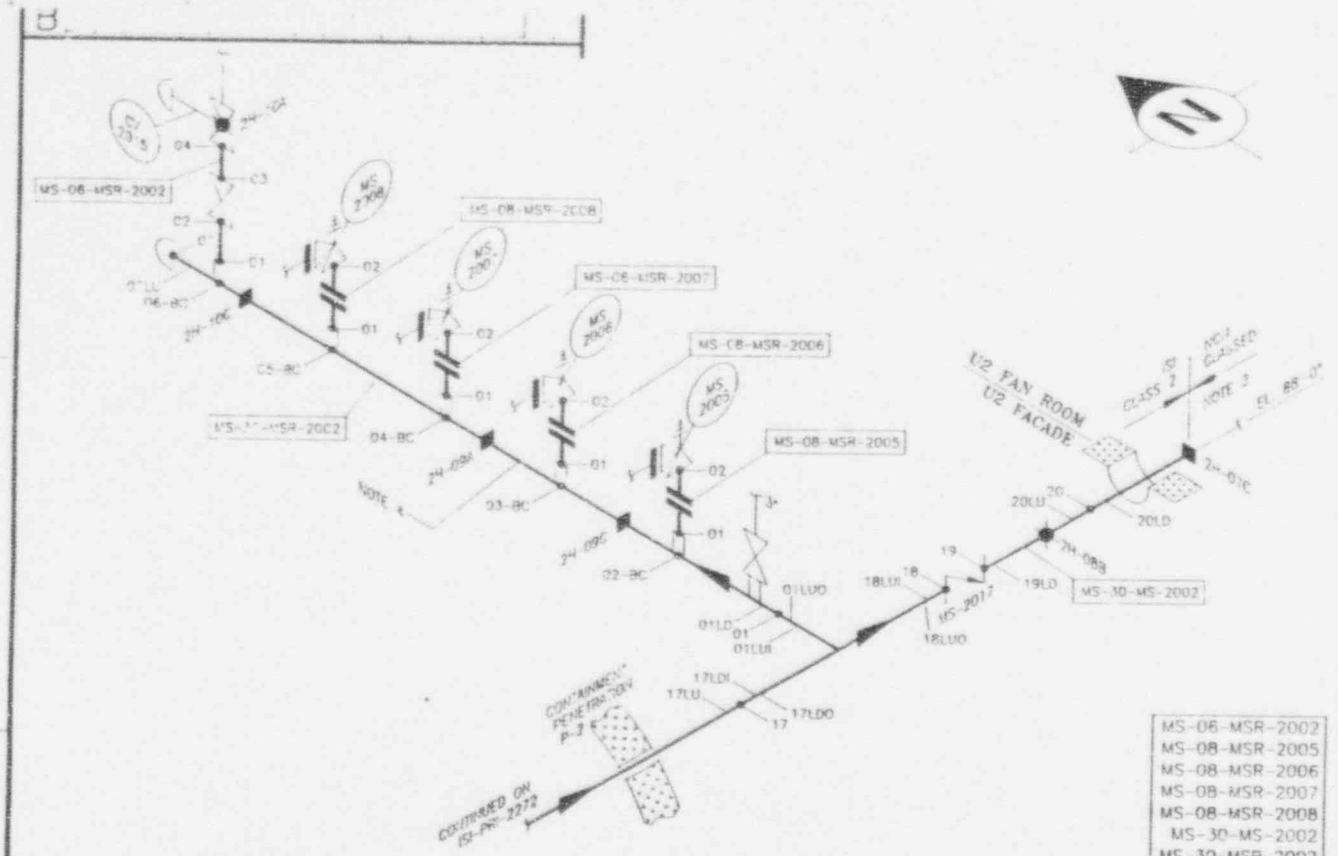
PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR TO
'B' SI PUMP SUCTION

DRAWING NO. ISI-PRI-2247

B | PB | 02 | MSI | L | 183 | 031 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



MS-08-MSR-2002
MS-08-MSR-2005
MS-08-MSR-2006
MS-08-MSR-2007
MS-08-MSR-2008
MS-30-MS-2002
MS-30-MSR-2002

GENERAL NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.
2. ISI CLASS ENDS AT 24-01C.
3. EXAM METHOD: S.R.
4. 1.5" NOMINAL THICKNESS.

LOCATION

CLOG.: AUXILIARY ~~CAISSON~~
ROOM AREA: ~~CAISSON~~ U2 FAN ROOM
ELEV.: 88'
HP AREA: 536, 272

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-207
REF. P&ID: M-2201, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN T	DESIGN PSIG	OPERATING T	OPERATING PSIG
F601				

COMPONA	NOMTHICK	MATERIAL	CALSTD
6.000	0.280	A106	LATER
8.000	VARIABLE	A106	LATER
30.000	0.908	A155 KC 70	LATER
30.000	1.500	A155 KC 70	LATER

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	MEL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	
1			07/07/92	REVISED PER WALKDOWN	KTC	WAR	JBB	

MICROFORM NO. 271429
CADFILE NO. PRI2248.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T3.4.1
MOD.: NONE

DRAWN DLJ	DATE 12/30/90	APPRV'D	DATE
CHECKED CTP	07/10/91	APPRV'D	
DRAFT'G KTG	07/14/91	APPRV'D GPS	10/01/91

WISCONSIN ELECTRIC

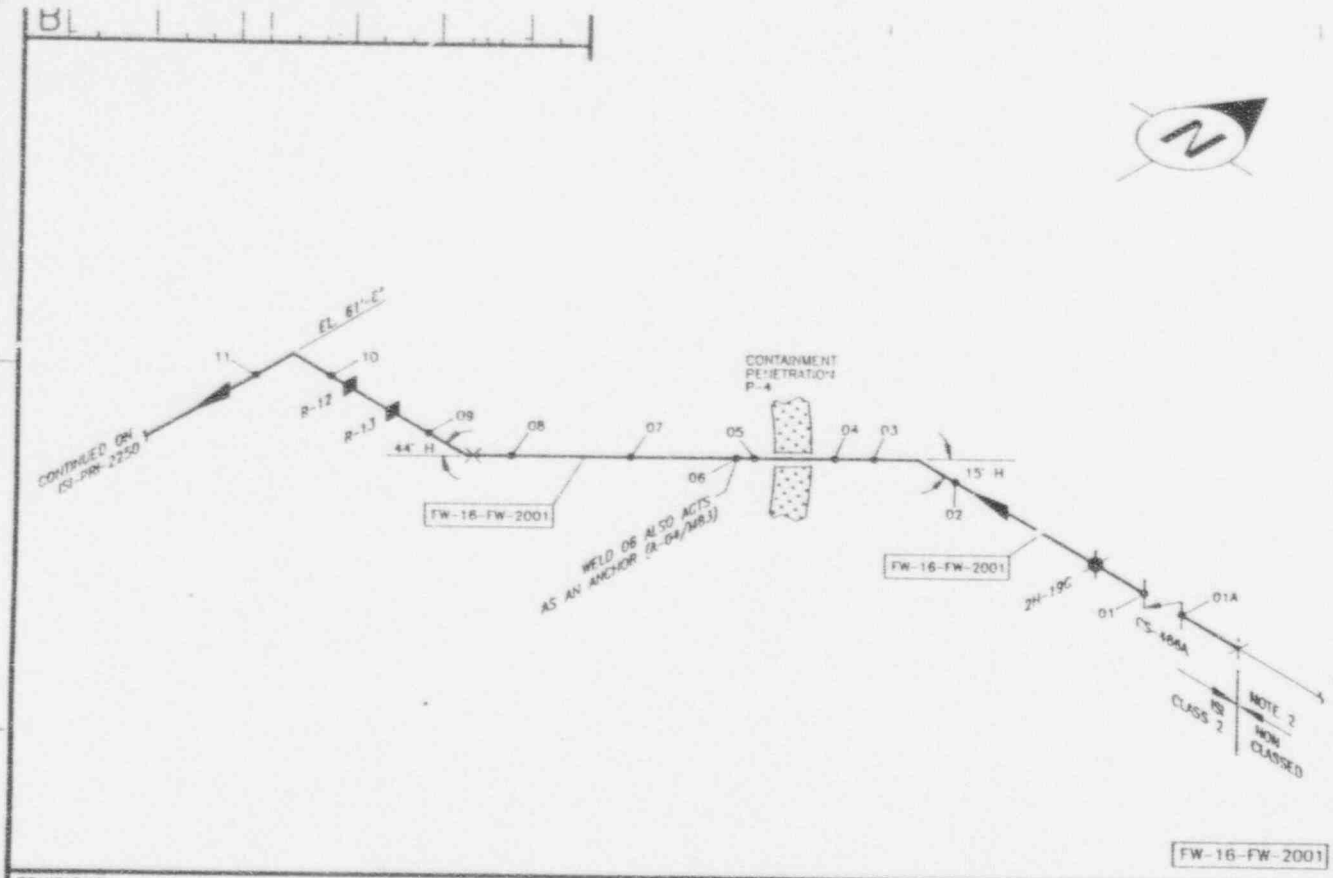
PRIMARY ISI ISOMETRIC
PBNP Unit 2
LOOP 'B' MAIN STEAM
OUTSIDE CONTAINMENT

DRAWING NO. ISI-PRI-2248

B | PB | 02 | MMSL | 183 | 005 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.
2. ISI CLASS ENDS AT RESTRAINT.

LOCATION

BLDG.: CONTAINMENT/~~AUXILIARY~~ *Fuel Bldg*
ROOM/AREA: GENERAL AREA/~~TURBINE~~
ELEV.: 81'
HP AREA: 402A, 536

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-211
REF. ISO: BECHTEL P-212
REF. P&ID: M-2201, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
EA09				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
16.000	0.843	A106 GR. B	34-PTB

REVISIONS

REV NO.	ZONE	PROJ. NO.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			07/07/93	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271430
CADFILE NO. PRI2249.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T3.3
MOD.: NONE

DRAWN DLJ	DATE 11/11/90	APPRV'D	DATE
CHECKED CTP	07/10/91	APPRV'D	
DRAFT'G KTG	07/14/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

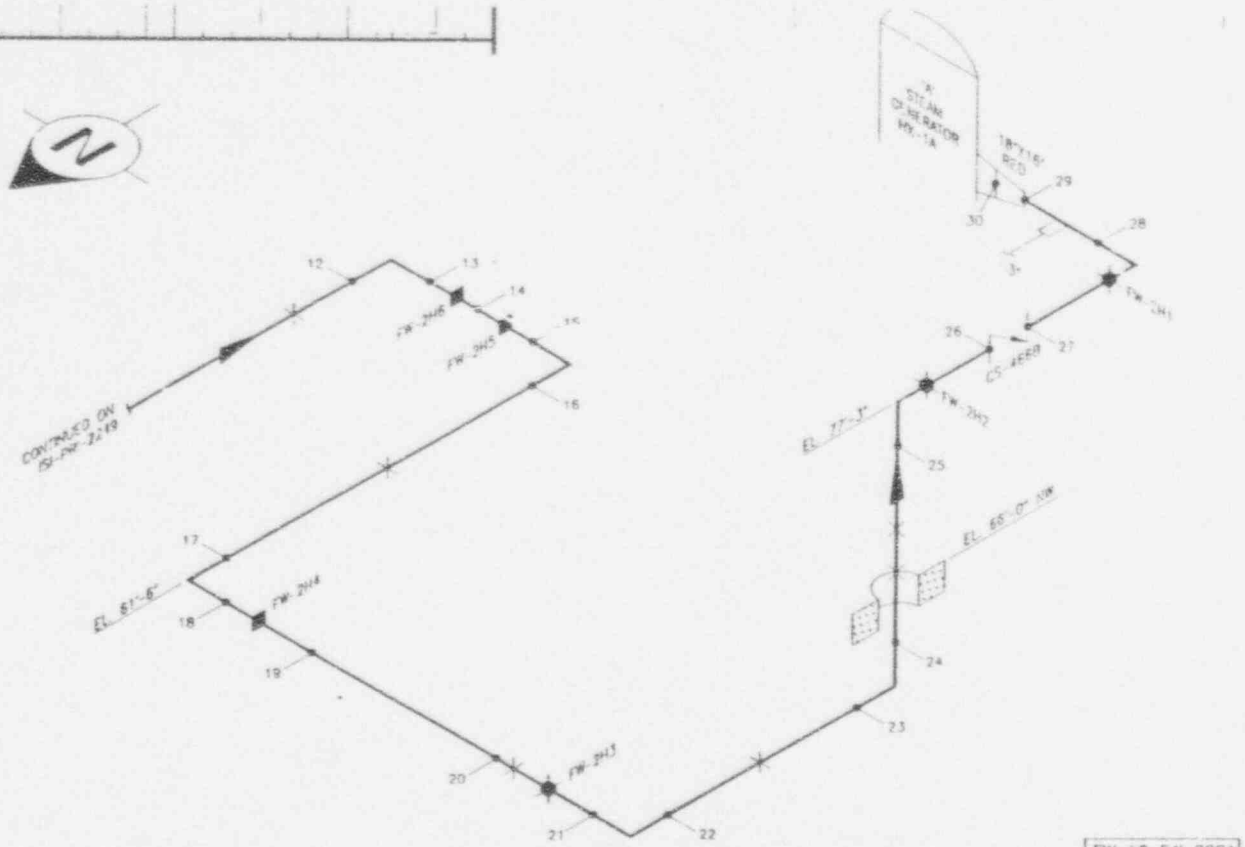
PRIMARY ISI ISOMETRIC
PBNP Unit 2
FEEDWATER
LOOP 'A'

DRAWING NO. ISI-PRI-2249

B | PB | 02 | M | FWL | 183 | 002 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



FW-16-FW-2001

NOTES:
1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: GENERAL AREA
ELEV.: 61' TO 78'
HP AREA: 4010, 4020, 4024

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-212
REF. P&ID: M-2202, SH. 2

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
EB09				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
16.000	0.843	A106 GR. B	34-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/06/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	
1			07/07/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271431
CADFILE NO. PRI2250.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T3.3
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	DLJ	11/11/90		
CHECKED	CTP	07/10/91	APPRV'D	
DRAFT'G	KTG	07/14/91	APPRV'D	10/01/91

WISCONSIN ELECTRIC

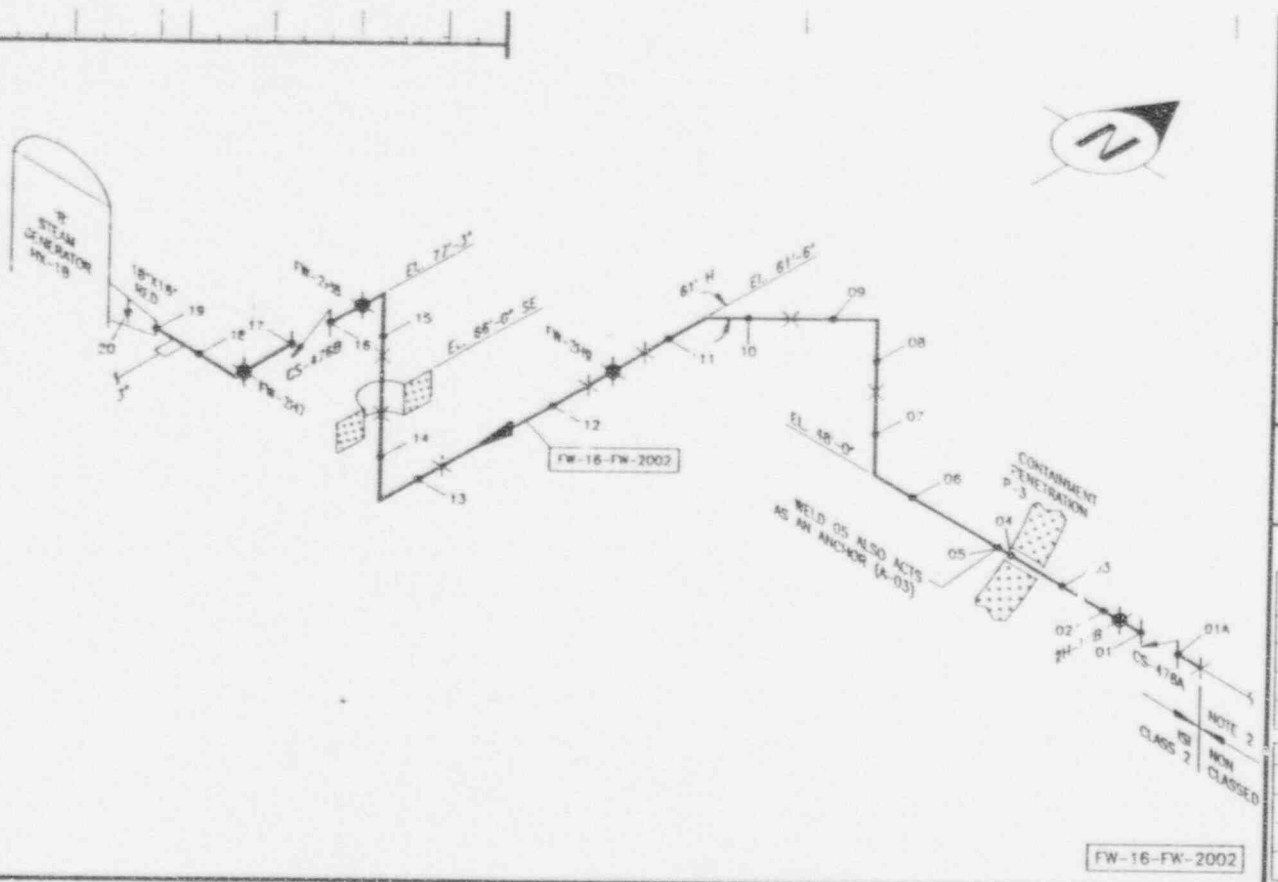
PRIMARY ISI ISOMETRIC
PBNP Unit 2
FEEDWATER
LOOP 'A'

DRAWING NO. ISI-PRI-2250

B | PB | 02 | M | FWL | 183 | 003 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.
2. ISI CLASS ENDS AT RESTRAINT.

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: GENERAL AREA
ELEV.: 48' TO 78'
HP AREA: 401B, 402B, 402A

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-211
REF. ISO: BECHTEL P-212
REF. P&ID: M-2202, SH. 2

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
EA-1				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
16.000	0.843	A106 GR. B	34-PTB

FW-16-FW-2002

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJW	
1			07/07/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271432
CADFILE NO. PRI2251.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T3.3
MOD.: NONE

DRAWN DLJ	DATE 11/11/90	APPRV'D	DATE
CHECKED CTP	07/10/91	APPRV'D	
DRAFT'D KTG	07/14/91	APPRV'D GPS	10/21/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
FEEDWATER
LOOP 'B'

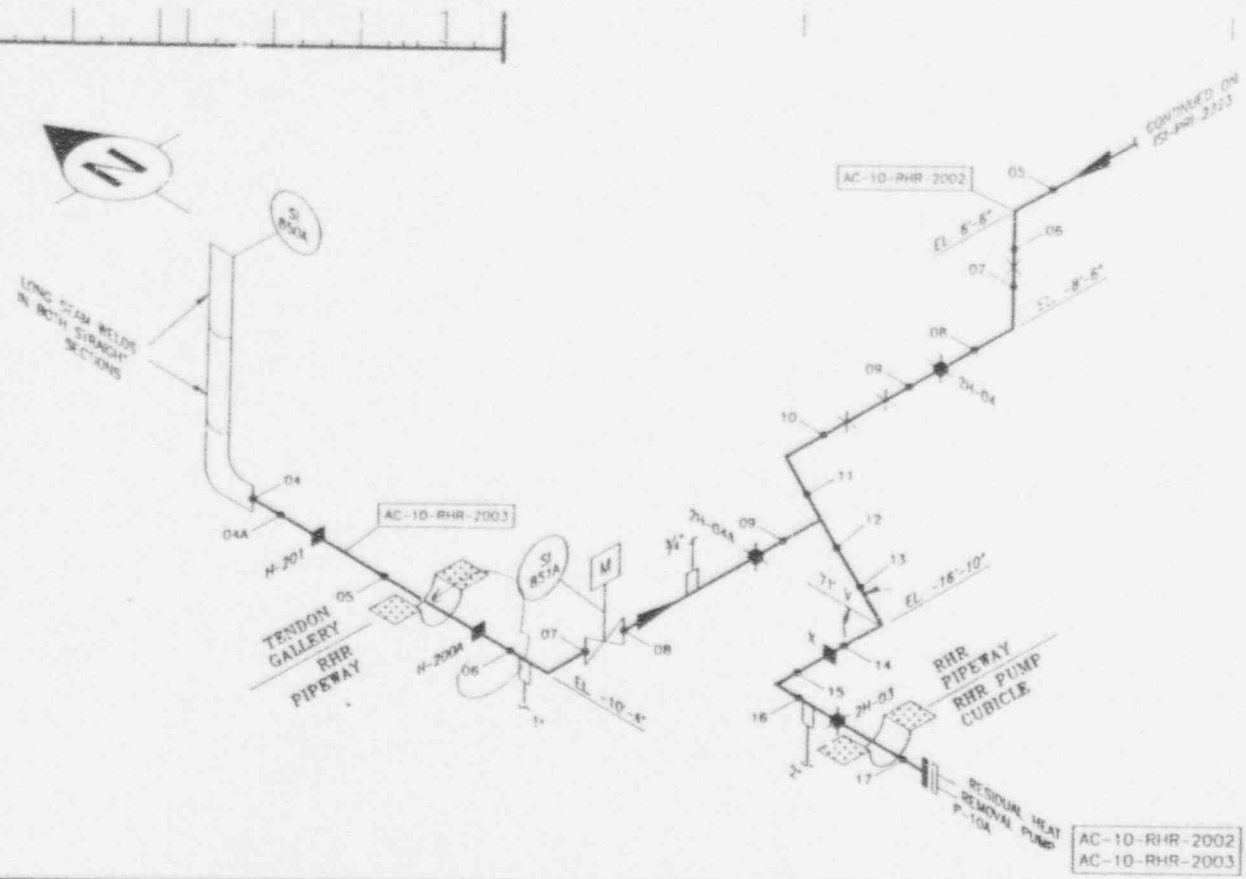
DRAWING NO. ISI-PRI-2251

B | PB | 02 | MFWL | 183 | 004 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: RHR PIPEWAY/'A' RHR PUMP
ELEV.: -16' TO 8'
HT. AREA: 110, 111, 108

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-232
REF. P&ID: 110E029, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
A-CODE CL				

COMPDNA	NOMTHICK	MATERIAL	CALSTD
10.000	0.365	A312 TP304	N/A

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/06/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	/L	PPL	DJM	
1			07/07/92	REVISED PER WALKDOWN	KTG	WKB	JBB	

REVISIONS

MICROFORM NO. 271433
CADFILE NO. PRI2252.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.3.3
MOD.: NONE

DRAWN KTG	DATE 01/14/91	APPRV'D	DATE
CHECKED CTP	07/10/91	APPRV'D	
DRAFT'S KTG	07/14/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR PUMP 'A' SUCTION FROM CONT. SUMP & LOOP 'A' HOT LEG

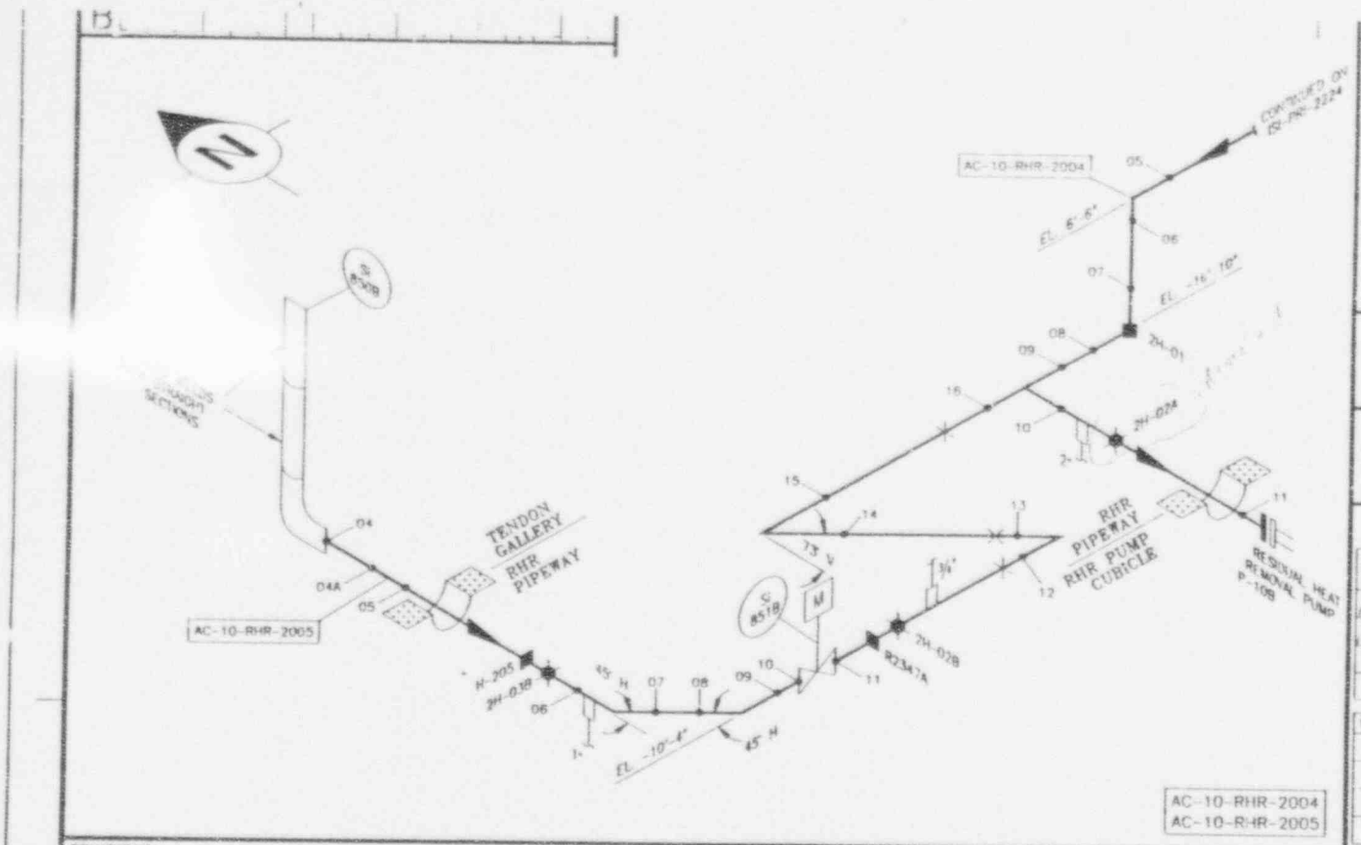
DRAWING NO. ISI-PRI-2252

B | PB | 02 | MRHL | 183 | 015 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM, AREA: RHR PIPEWAY/'B' RHR PUMP
ELEV.: -16' TO 6'
HP AREA: 410, 411, 109

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-232
REF. P&ID: 110E079, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN		OPERATING	
	°F	PSIG	°F	PSIG
[illegible]				
[illegible]				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
10.000	0.365	A312 TP304	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO PDS RET. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	
1			07/07/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271434
CADFILE NO. PRI2253.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.3.3
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	KTG	01/14/91	APPRV'D	
CHECKED	CTP	07/10/91	APPRV'D	
DRAFT'G	KTG	07/14/91	APPRV'D	GPS 10/01/91

WISCONSIN ELECTRIC

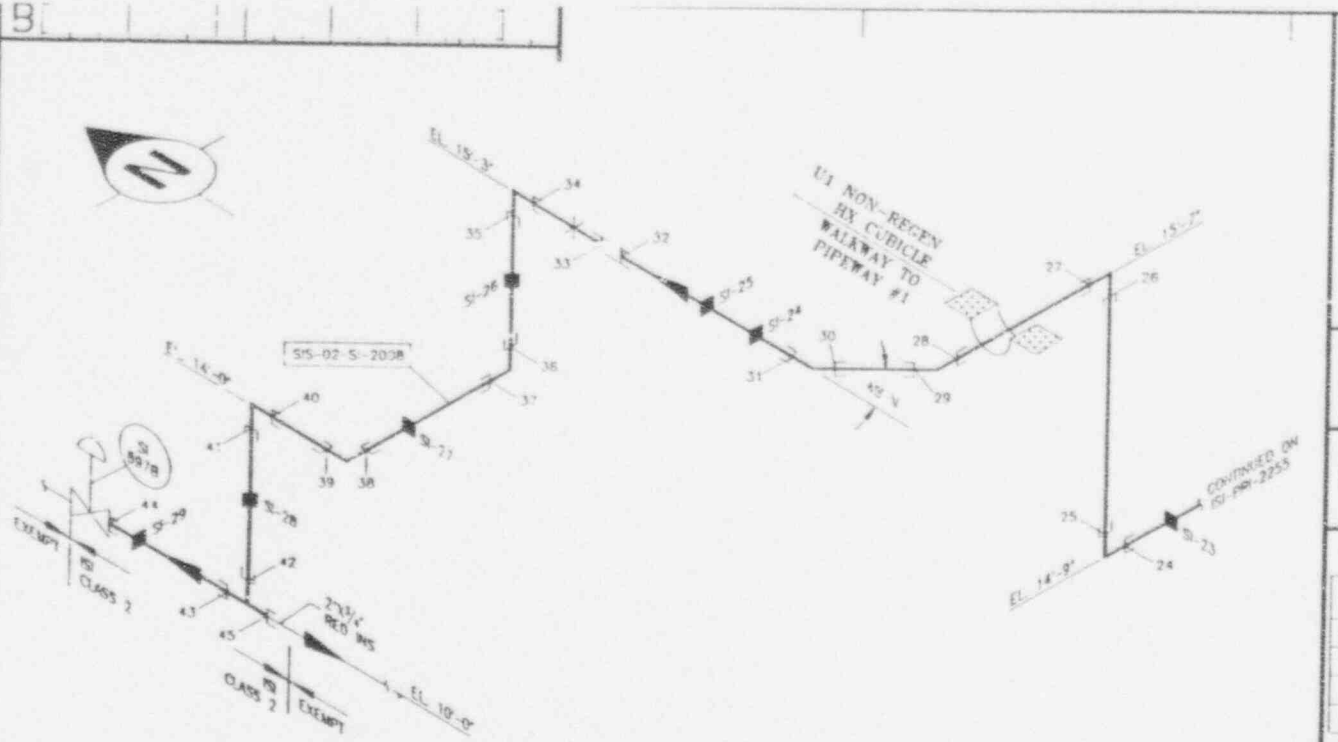
PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR PUMP 'B' SUCTION FROM
CONT. SUMP & LOOP 'B' HOT LEG

DRAWING NO. ISI-PRI-2253

B | PB | 02 | MRHL | 18 | 30 | 16 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: GEN. AREA/U1 NON-REGEN HX
ELEV.: 10' TO 15'
HP AREA: 142, 148

REFERENCE DRAWINGS

REF. ISO: WEST. 6570A & 6571A
REF. P&ID: 11DE035, SH. 2

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SI-1501R-04				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

SIS-02-SI-2008

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/06/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJN	
1			07/07/92	REVISED PER WALKDOWN	KTG	WAB	JRB	

MICROFORM NO. 271435
CADFILE NO. PRI2254.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	KTG	01/26/91	APPRV'D	
CHECKED	CTP	07/12/91	APPRV'D	
DRAFT'G	KTG	09/03/91	APPRV'D	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
SAFETY INJECTION PUMP P-15A
AND P-15B TEST LINE

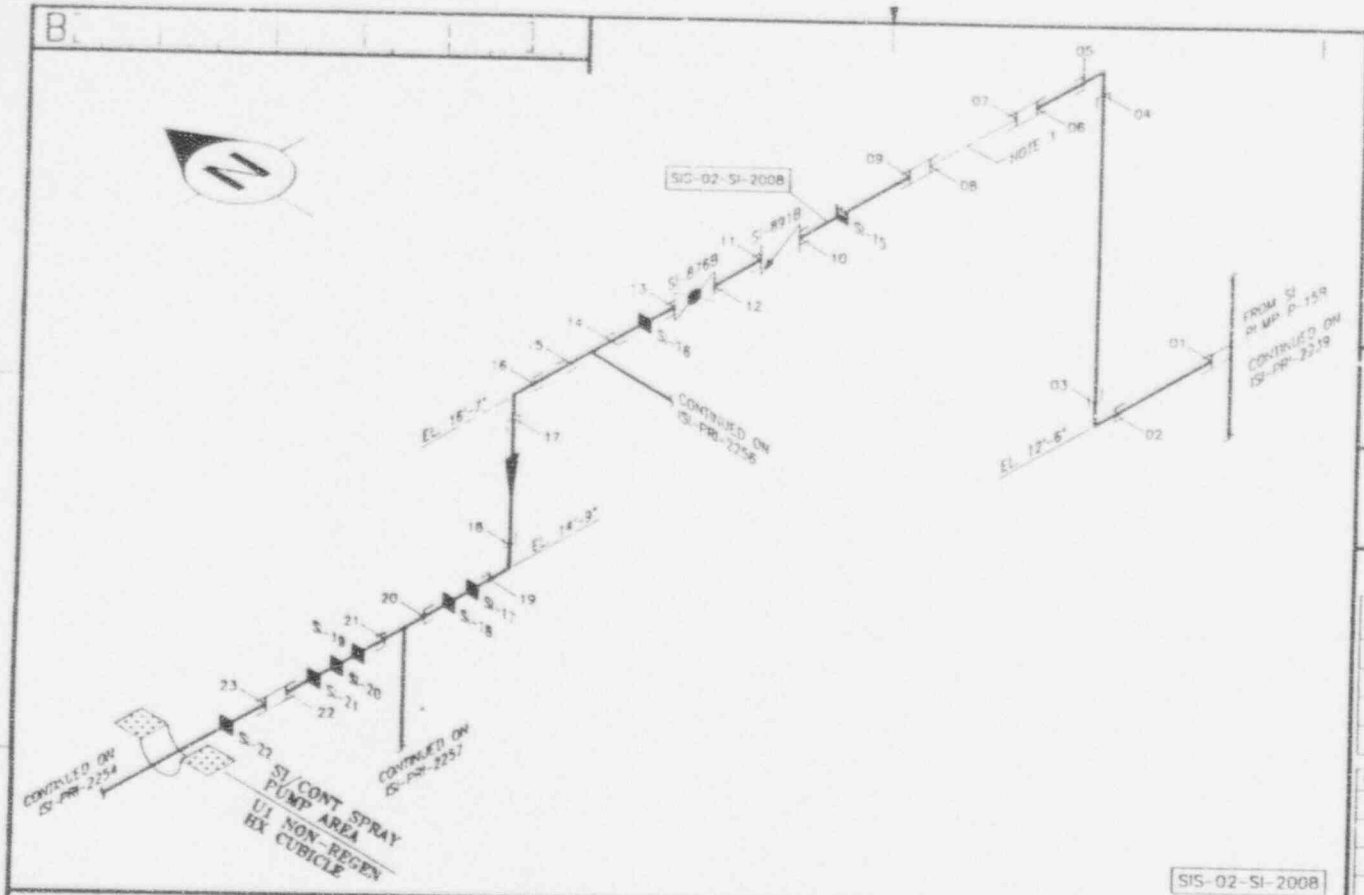
DRAWING NO. ISI-PRI-2254

B | PB | 02 | M | SIL | 183 | 048 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



SIS-02-SI-2008

DRAWING NOTES

1. RESTRICTING ORIFICE

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: GENERAL AREA
ELEV.: 12' TO 16'
HP AREA: 151A, 151B, 145

REFERENCE DRAWINGS

REF. ISO: 9ESF. 6571A & 6571B
REF. P&ID: 110E035, SH. 2

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SI-1501R-04				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO PDS REF. TRANS. SPS-DWG-93-082	PPL	PPL	DJN	
1			07/12/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271436
CADFILE NO. PRI2255.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.E.: T2.4
MOD.: NONE

DRAWN KTG	DATE 01/28/91	APPRV'D	DATE
CHECKED CTP	07/12/91	APPRV'D	
DRAFT'G KTG	09/03/91	APPRV'D GMS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
SAFETY INJECTION PUMP P-15B
TEST LINE

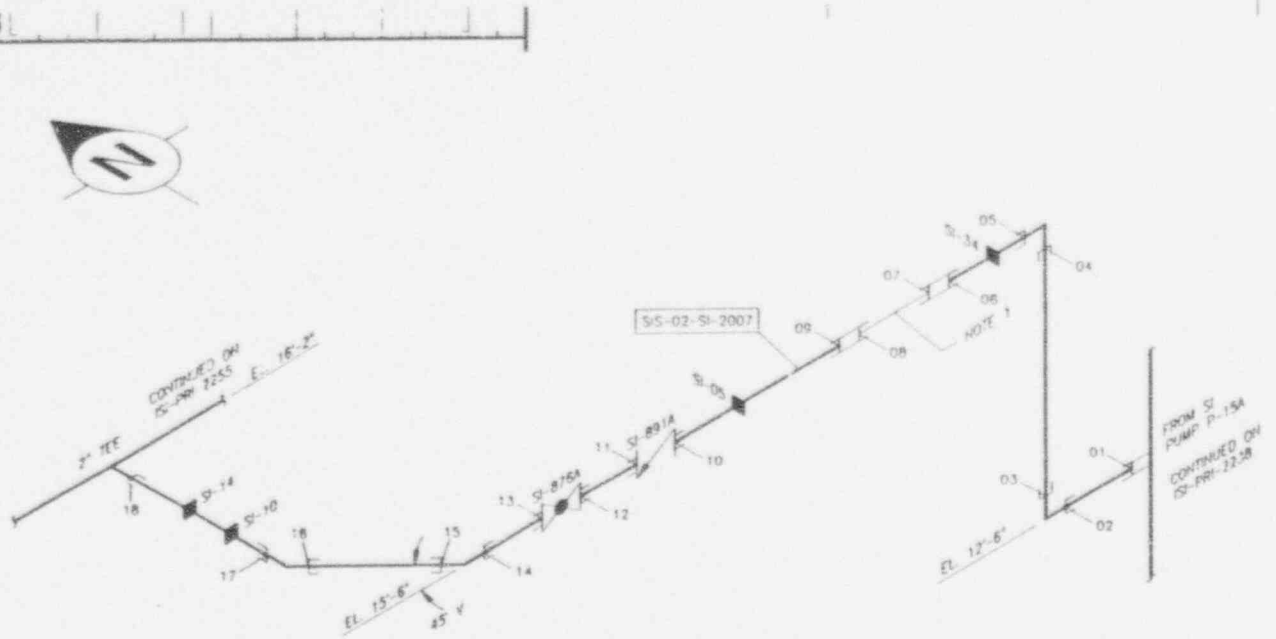
DRAWING NO. ISI-PRI-2255

B | PB | 02 | MSIL | 183032 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



SIS-02-SI-2007

DRAWING NOTES

1. RESTRICTING ORIFICE.

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: SI PUMP AREA
ELEV.: 12' TO 16'
HP AREA: 151A

REFERENCE DRAWINGS

REF. ISO: WEST. 65718
REF. P&ID: 110E035, SH. 2

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SI-1501R-04				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2		-	03/06/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			07/12/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271437
CADFILE NO. PRI2256.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

DRAWN KTG	DATE 01/28/91	APPRV'D	DATE
CHECKED CTP	07/12/91	APPRV'D	
DRAFT'G ETR	09/05/91	APPRV'D DPS	10/01/91

WISCONSIN ELECTRIC

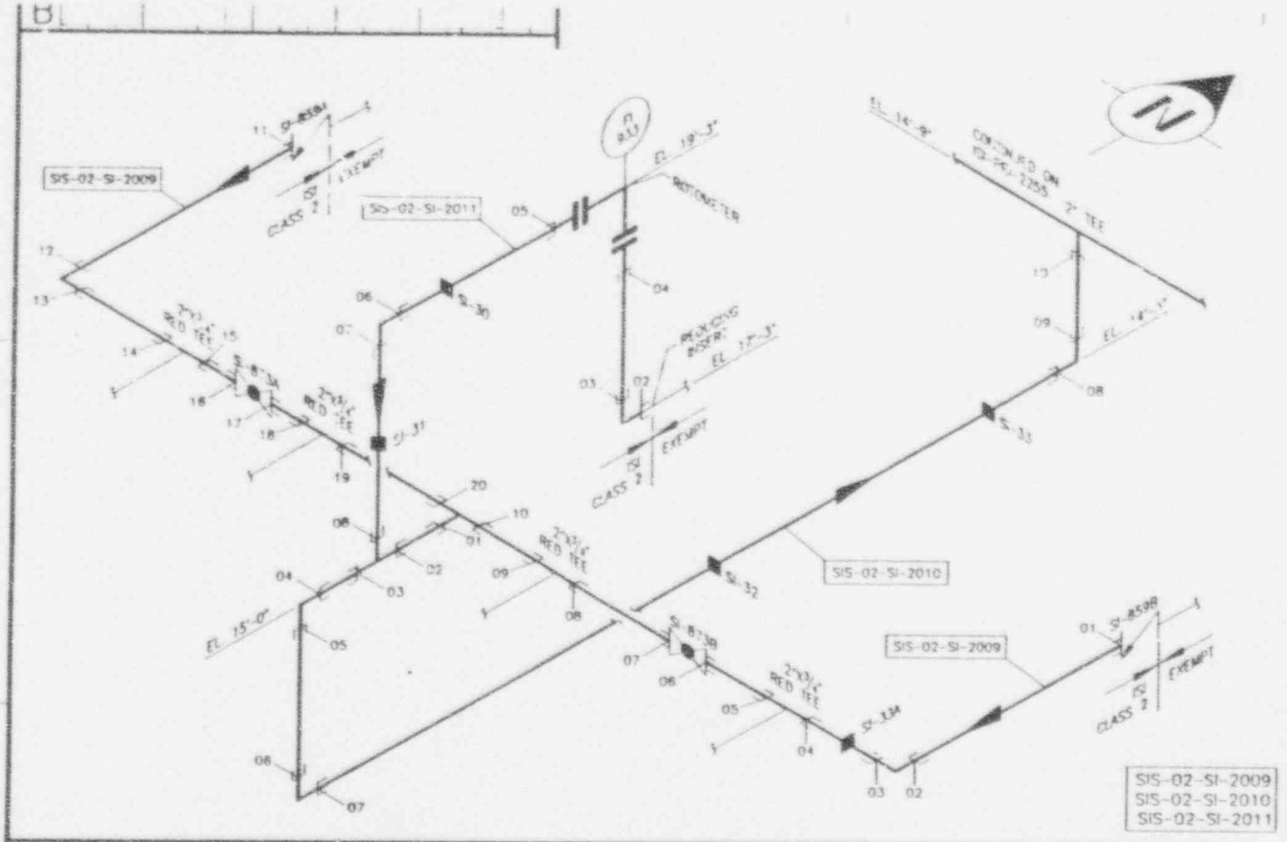
PRIMARY ISI ISOMETRIC
PBNP Unit 2
SAFETY INJECTION PUMP P-15A
TEST LINE

DRAWING NO. ISI-PRI-2256

B | PB | 02 | MSIL | 183 | 033 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



LOCATION

BLDG.: AUXILIARY
ROOM/AREA: SPRAY PUMP AREA
ELEV.: 14' TO 19'
HP AREA: 151B

REFERENCE DRAWINGS

REF. ISO: WEST. 6501A, 6502A, 6571B
REF. P&ID: 11OE035, SH. 3

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SI-1501R-04				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/06/93	INCORPORATED INTO PDS RET. TRANS. #PB-DWC-92-062	PPL	PPL	DJM	
1			07/12/93	REVISED PER WALKDOWN	KTC	WAB	JBB	

MICROFORM NO. 271438
CADFILE NO. PRI2257.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.L.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	KTG	01/27/91		
CHECKED	CTP	07/12/91	APPRV'D	
DRAFT'D	KTG	09/23/91	APPRV'D DSS	10/01/91

WISCONSIN ELECTRIC

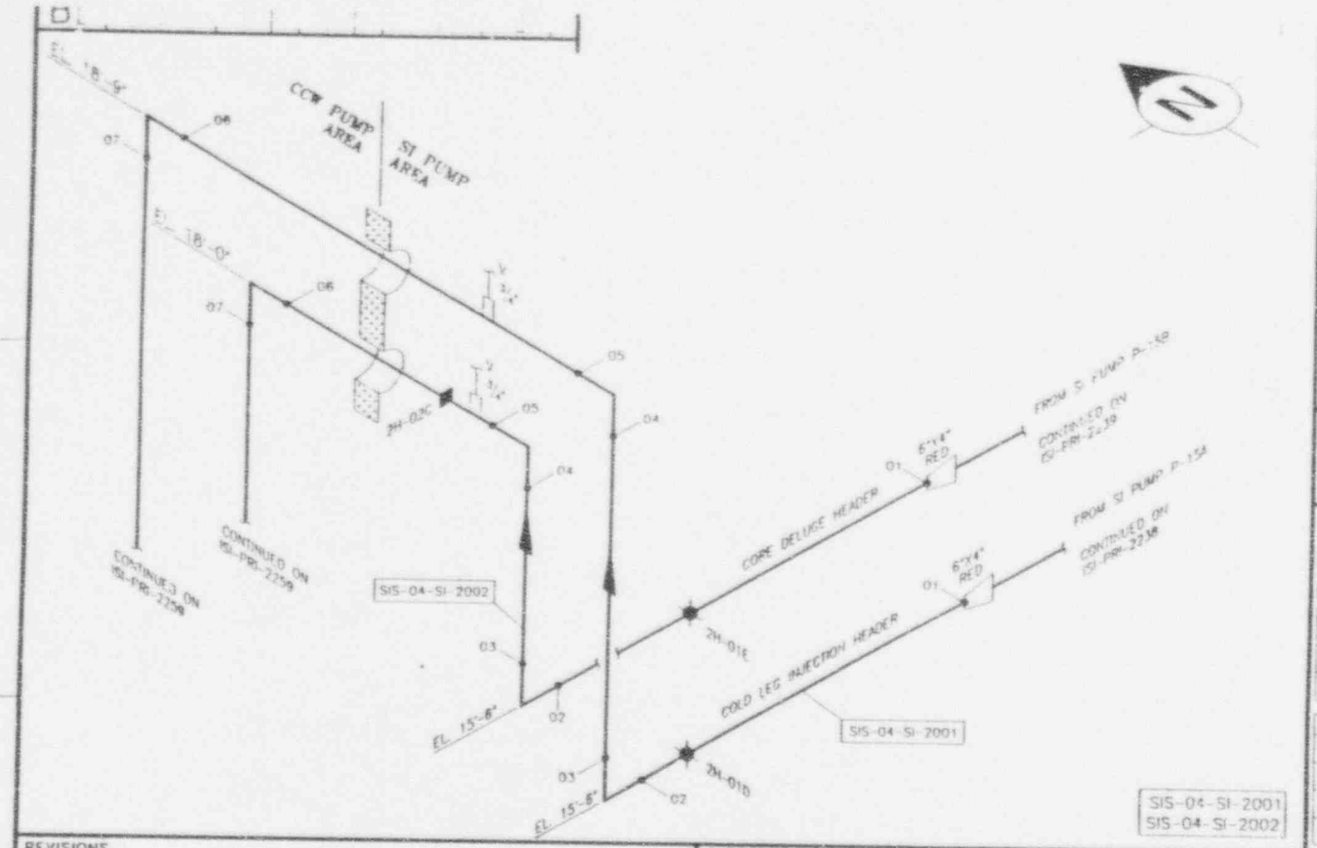
PRIMARY ISI ISOMETRIC
PBNP Unit 2
CONTAINMENT SPRAY PUMPS P-14A
AND P-14B TEST LINE

DRAWING NO. ISI-PRI-2257

B | PB | 02 | MSIL | 183034 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



SIS-04-SI-2001
SIS-04-SI-2002

LOCATION

BLDG: AUXILIARY
ROOM AREA: GENERAL AREA, S. PUMP AREA
ELEV.: 15' TO 18'
HP AREA: 14A, 15A

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-219
REF. ISO: BECHTEL P-220
REF. P&ID: 11013035, SH. 2

DESIGN DATA

PIPE CLASS	DESIGN T	DESIGN PSIG	OPERATING T	OPERATING PSIG
SI-1501R-02				
SI-1501R-03				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
4.000	0.337	A312 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	MFG'D
2			05/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJW	
1			07/12/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271439
CADFILE NO. PRI2258.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

DRAWN KTG	DATE 01/29/91	APPR'D	DATE	
CHECKED CTP	07/12/91	APPR'D		
DRAFT'G KTG	09/03/91	APPR'D GPS	10/01/91	

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
CORE DELUGE AND COLD LEG
INJECTION HEADER

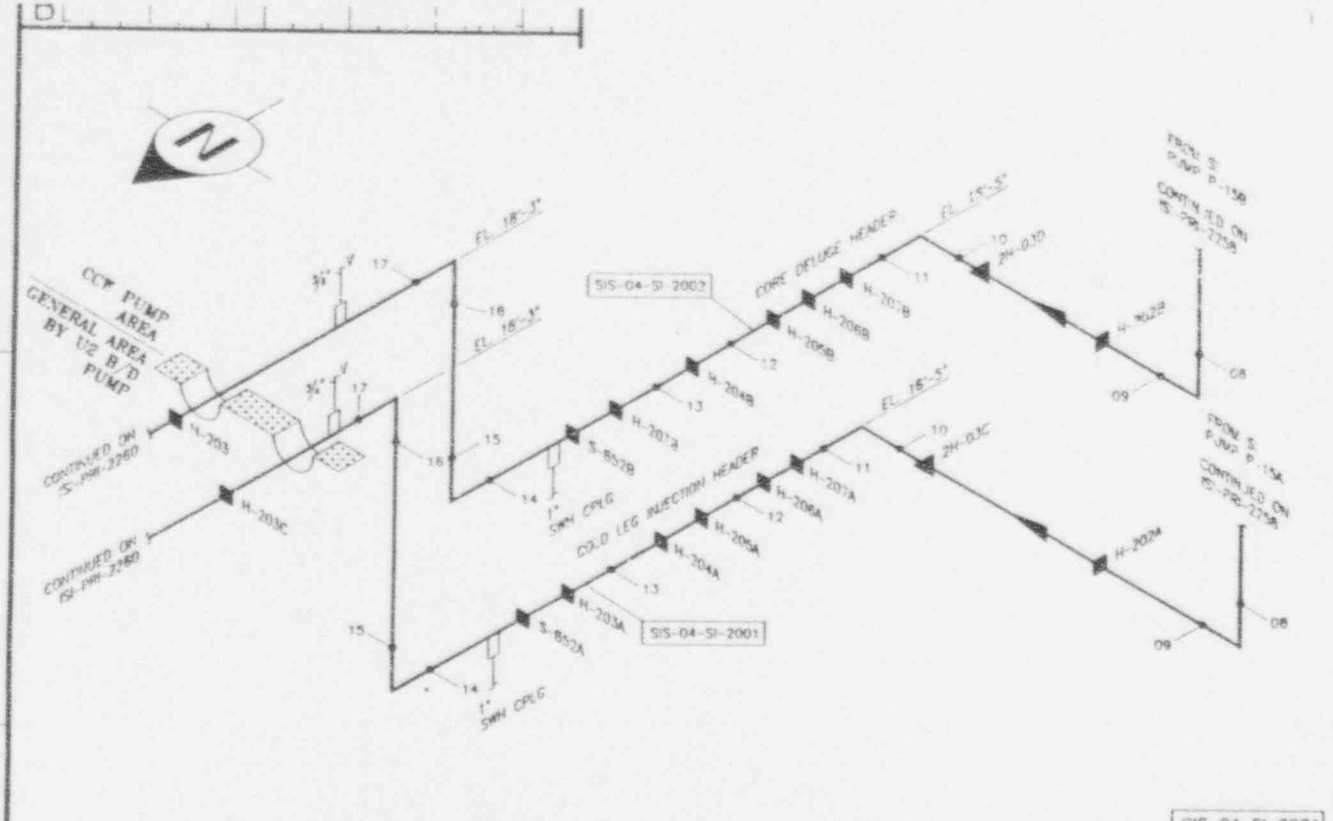
DRAWING NO. ISI-PRI-2258

B | PB | 02 | MSIL | 183035 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY


CCW PUMP AREA
GENERAL AREA BY 1/2 B/D PUMP
CONTINUED ON SI-PRI-2260
CONTINUED ON SI-PRI-2260
H-203
H-203C
H-203A
S-852A
S-852B
H-204A
H-204B
H-205A
H-205B
H-206A
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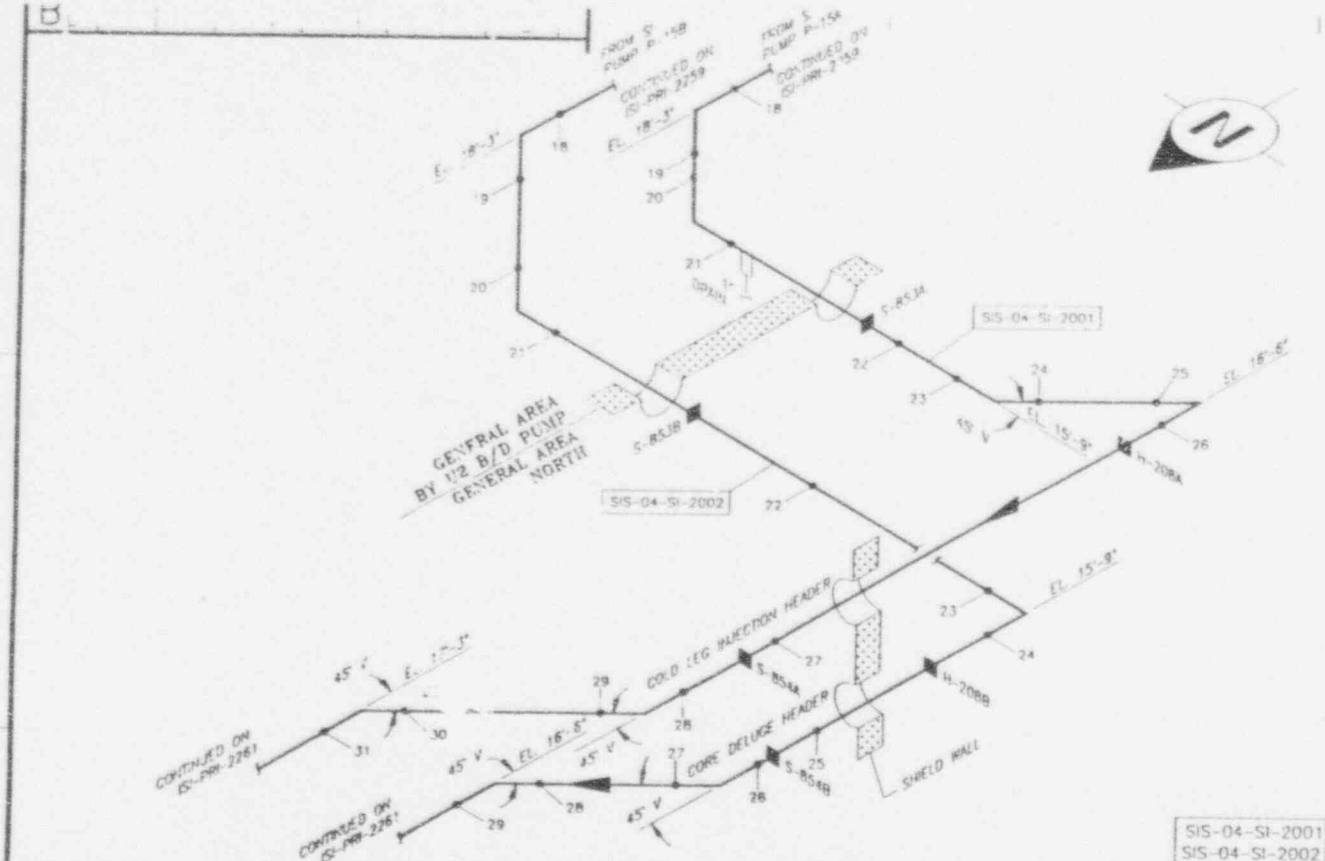


SIS-04-SI-2001
SIS-04-SI-2002

DRAWING NOTES

LOCATION

BLDG.: AUXILIARY
ROOM/AREA: GENERAL AREA
ELEV.: 15' TO 18'
HP AREA: 15R

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-219
REF. ISO: BECHTEL P-220
REF. P&ID: 110E035, SH. 2

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SI-1501R-02				
SI-1501R-03				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
4.000	0.337	A312 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPR'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. GPB-DWC-92-062	PPL	PPL	DJM	
1			07/13/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271441
CADFILE NO. PRI2260.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPR'D	DATE
DRAWN	KTG	01/27/91		
CHECKED	CTP	07/12/91	APPR'D	
DRAFT'G	KTG	09/05/91	APPR'D	
			GPS	10/01/91

WISCONSIN ELECTRIC

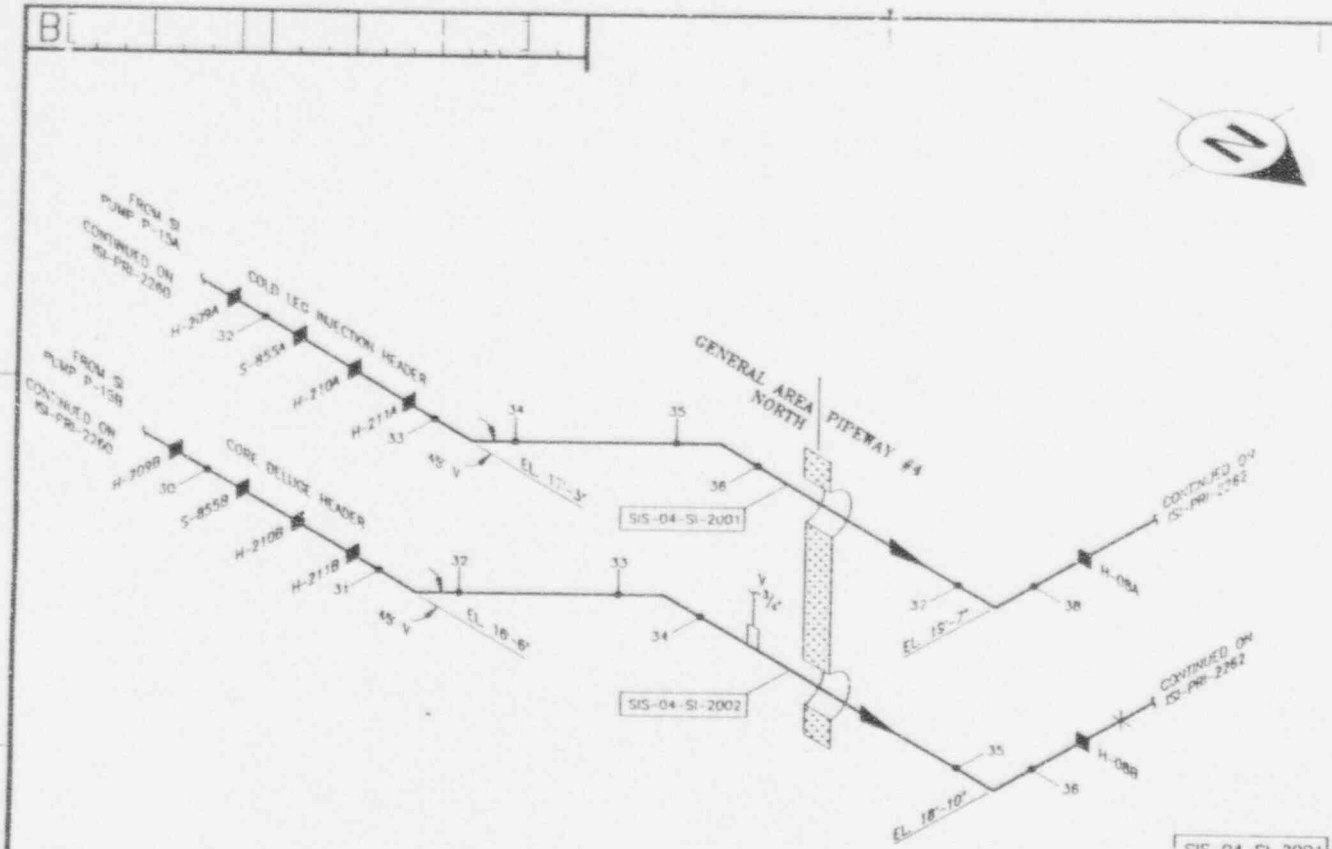
PRIMARY ISI ISOMETRIC
PBNP Unit 2
CORE DELUGE AND
COLD LEG INJECTION HEADER

DRAWING NO. ISI-PRI-2260

B | PB | 02 | M | S | I | L | 1 | 8 | 3 | 0 | 3 | 7 | 0 | 2

SCALE None RELEASE DATE

FOR INFORMATION ONLY



SIS-04-SI-2001
SIS-04-SI-2002

DRAWING NOTES

LOCATION

PLOG.: AUXILIARY
ROOM/AREA: GENERAL AREA/PIPEWAY #4
ELEV.: 16' TO 19'
HP AREA: 166, 162

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-219
REF. ISO: BECHTEL P-220
REF. P&ID: 110E035, SH. 2

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SI-1501R-02				
SI-1501R-03				

COMPOSA	NOMTHICK	MATERIAL	CALSTD
4.000	0.377	A312 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			07/12/92	REVISED PER WALKDOWN	KTG	WAB	JBS	

MICROFORM NO. 271442
CADFILE NO. PRI2261.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

DRAWN KTG	DATE 01/29/91	APPRV'D	DATE
CHECKED CTP	08/14/91	APPRV'D	
DRAFT'G KTG	09/07/91	APPRV'D CRS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
CORE DELUGE AND COLD LEG
INJECTION HEADER

DRAWING NO. ISI-PRI-2261

B | PB | 02 | MSIL | 183038 | 02

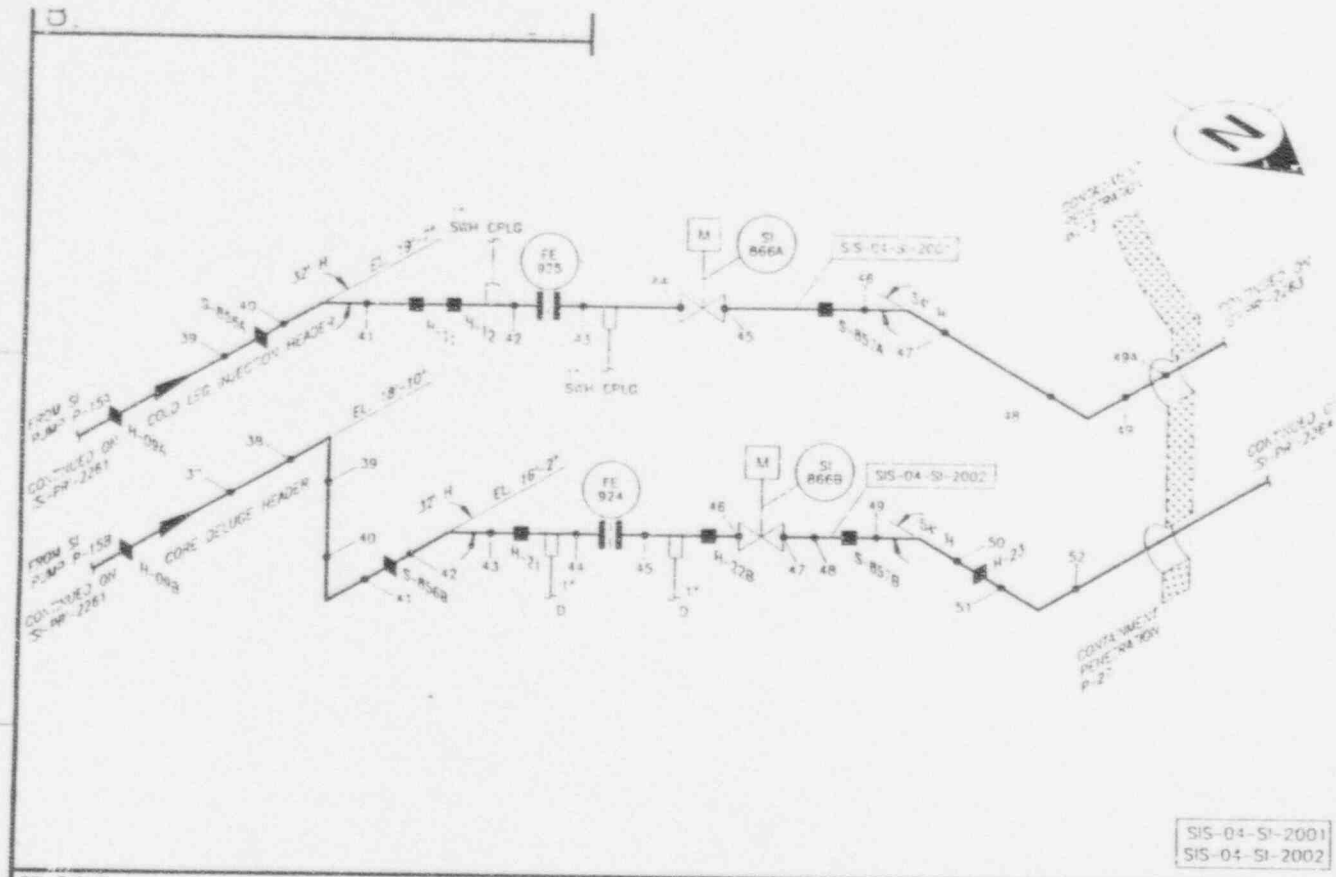
SCALE None RELEASE DATE

4 3 2 1

A B C

1 5 10

INFORMATION ONLY



SIS-04-SI-2001
SIS-04-SI-2002

DRAWING NOTES

LOCATION

BLDG: AUXILIARY
ROOM AREA: PIPEWAY #4
ELEV.: 8' TO 19'
HP AREA: 62

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-219
REF. ISO: BECHTEL P-220
REF. P&ID: 10E035, SH. 2

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SI-1501R-02				
SI-1501R-03				

COMPOA	NOMTHICK	MATERIAL	CA(S"D
4.000	0.377	A312 TP316	N/A
			27.07A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	MEL'D
2			05/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWC-93-062	PPL	PPL	DJM	
1			07/12/92	REVISED PER WALKDOWN	KTG	WAB	JSB	

		DATE		DATE
DRAWN	KTG	01/29/91	APPRV'D	
CHECKED	CTP	08/14/91	APPRV'D	
DRAFT'G	KTG	09/07/91	APPRV'D GPS	10/01/91

MICROFORM NO. 271443
CADFILE NO. PRI2262.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

WISCONSIN ELECTRIC

TSA

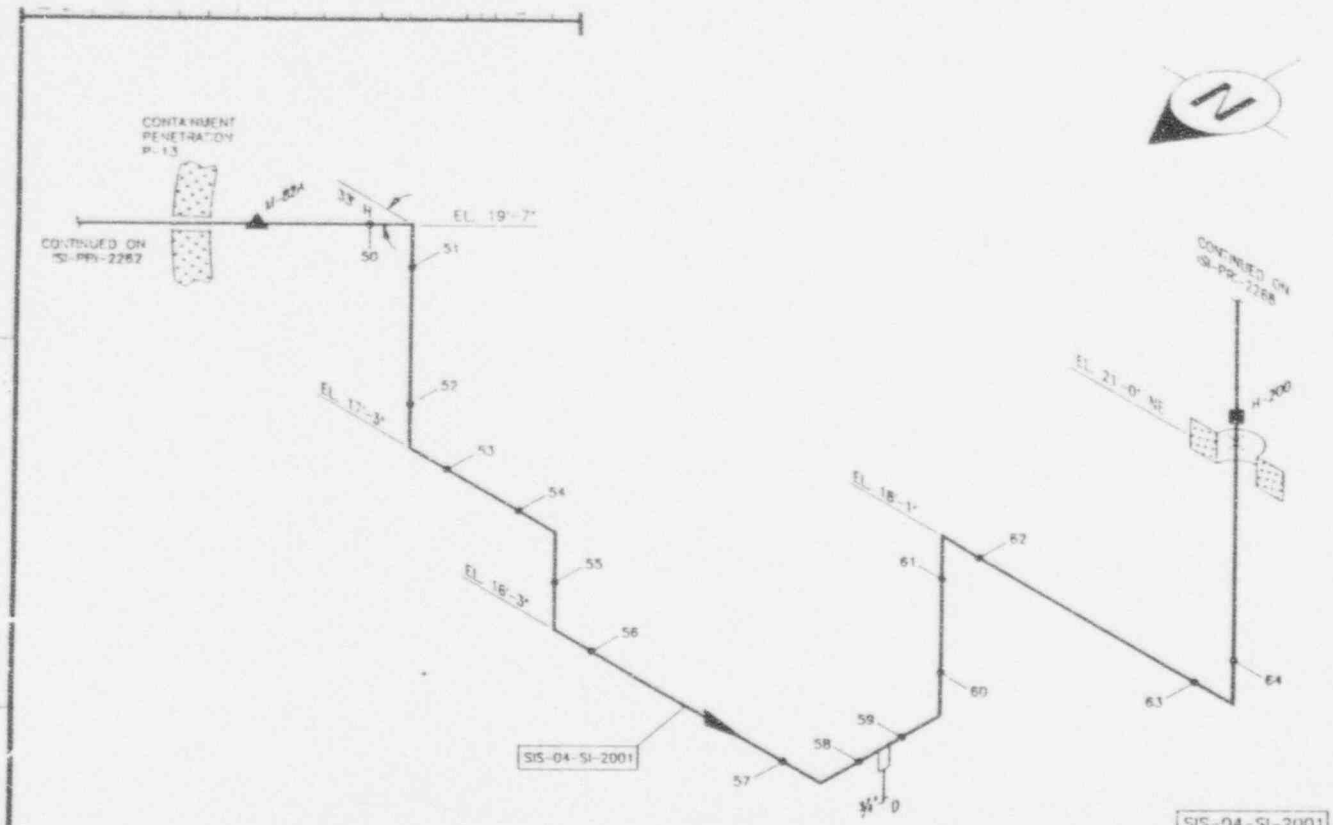
PRIMARY ISI ISOMETRIC
PBNP Unit 2
CORE DELUGE AND COLD LEG
INJECTION HEADERS

DRAWING NO. ISI-PRI-2262

B | PB | 02 | MSIL | 183039 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



LOCATION

BLDG.: CONTAINMENT
ROOM, AREA: GENERAL AREA
ELEV.: 16' TO 22'
HP AREA: 404A, 403A

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-219
REF. ISO: 1106035, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SI-1501R-02 C1				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
4.000	0.377	A312 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/95	INCORPORATED INTO PDS RET. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			07/13/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271444
CADFILE NO. PRI2263.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.J.: T2.4
MOD.: NONE

DRAWN KTG	DATE 01/29/91	APPRV'D	DATE
CHECKED CTP	08/14/91	APPRV'D	
DRAFT'G KTG	09/27/91	APPRV'D GPS	10/01/91

WISCONSIN ELECTRIC

TSE

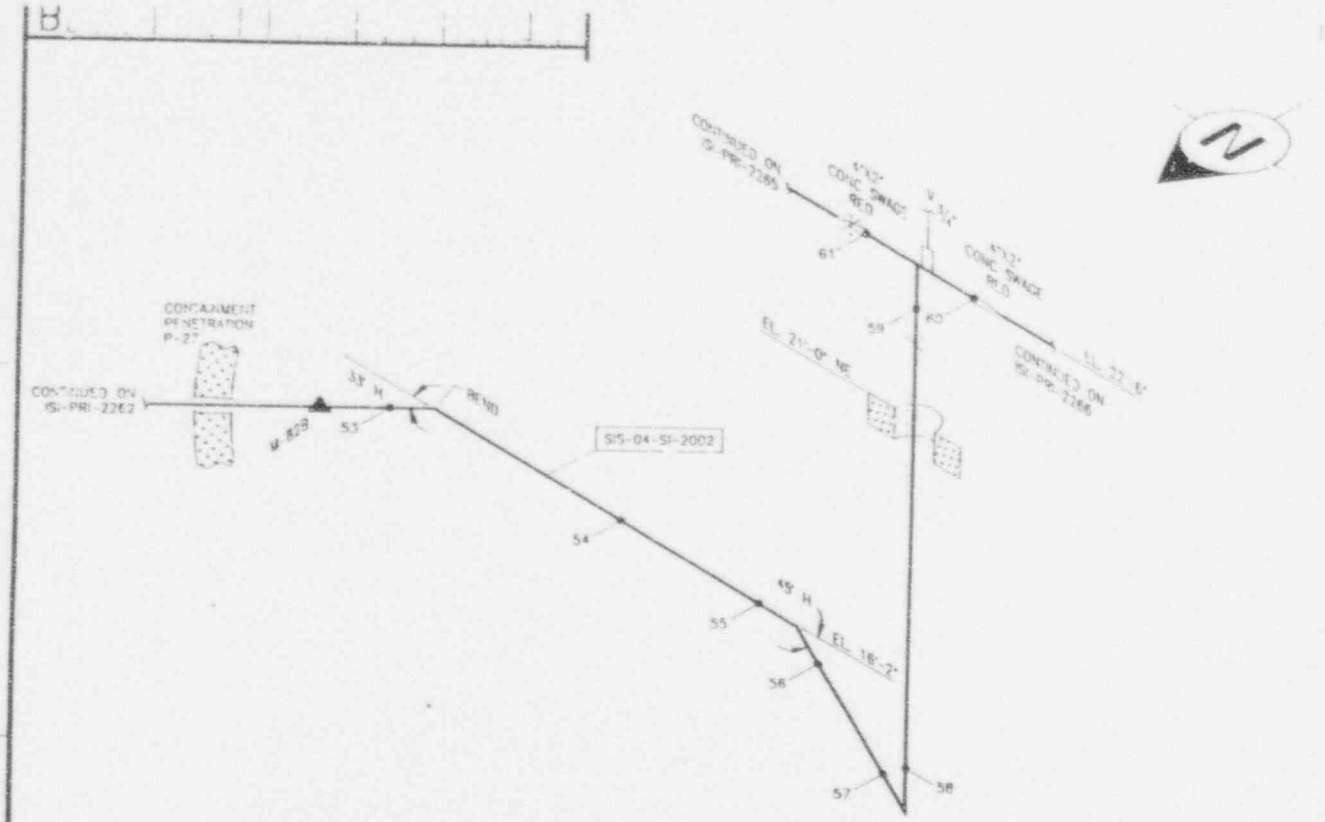
PRIMARY ISI ISOMETRIC
PBNP Unit 2
COLD LEG
INJECTION HEADER

DRAWING NO. ISI-PRI-2263

B PB 02 MSIL 183040 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



SIS-04-SI-2002

DRAWING NOTES

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: GENERAL AREA
ELEV.: 18' to 22'
HP AREA: 404A, 403A

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-220
REF. P&ID: 11DE035, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN		OPERATING	
	°F	PSIG	°F	PSIG
SI-1501R-02				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
4.000	0.377	A312 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			07/13/93	REVISED PER WALKDOWN	KTG	WAR	JBB	

MICROFORM NO. 271445
CADFILE NO. PRI2264.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	KTG	01/29/91		
CHECKED	CTP	08/14/91	APPRV'D	
DRAFT'G	KTG	09/07/91	APPRV'D	10/21/91

WISCONSIN ELECTRIC

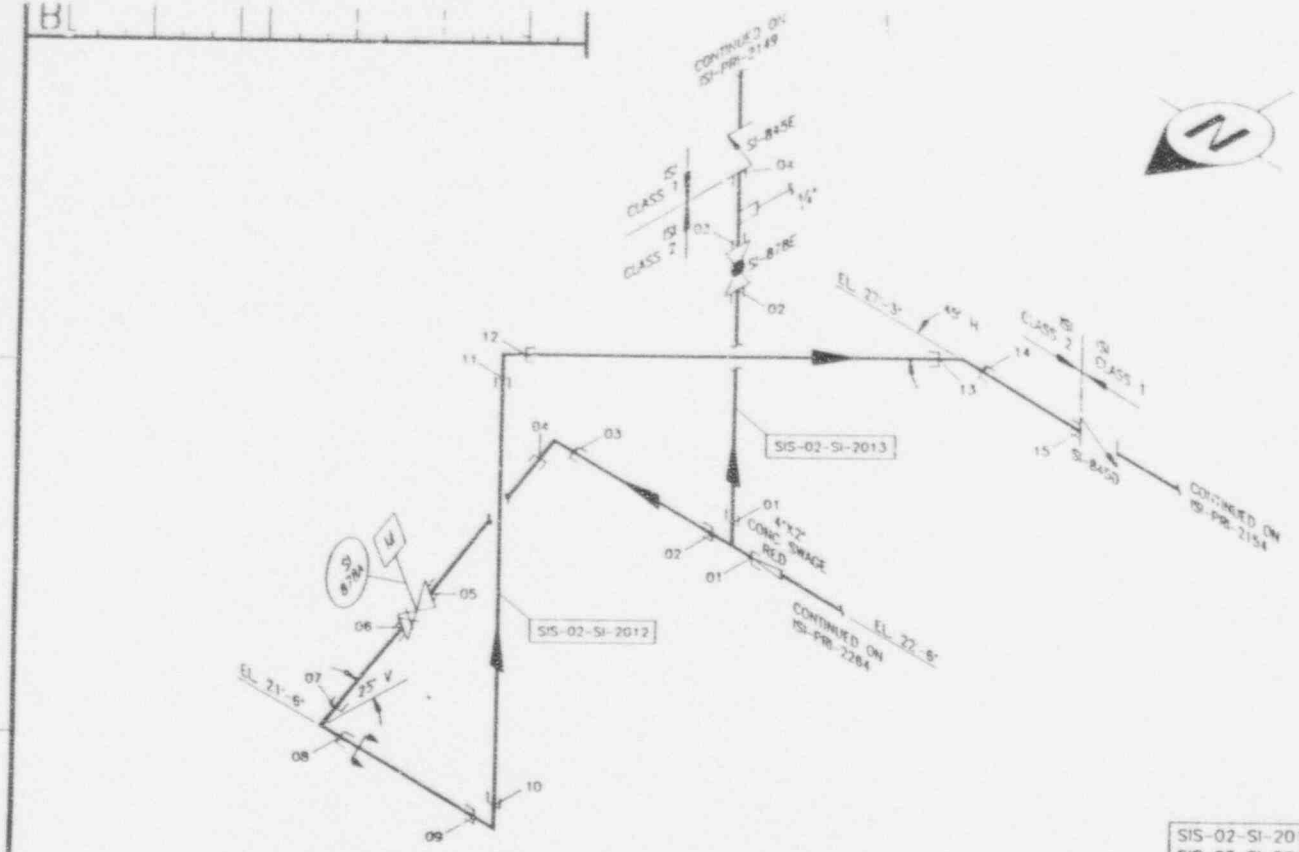
PRIMARY ISI ISOMETRIC
PBNP Unit 2
CORE DELUGE
HEADER

DRAWING NO. ISI-PRI-2264

B | PB | 02 | M | S | I | L | 18 | 30 | 41 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



SIS-02-SI-2012
SIS-02-SI-2013

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: N/A
ELEV.: 22' TO 28'
HP AREA: 403A

REFERENCE DRAWINGS

REF. ISO: WEST, 8595A
REF. P&ID: 11DE035, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SI-1501R-02				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	MEL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #P9-DWG-92-062	PPL	PPL	DJM	
1			07/12/93	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271446
CADFILE NO. PRI2265.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

DRAWN KTG	DATE 01/30/91	APPRV'D	DATE
CHECKED CTP	08/14/91	APPRV'D	
DRAFT'G KTG	09/07/91	APPRV'D GPS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
CORE DELUGE
HEADER

DRAWING NO. ISI-PRI-2265

B | PB | 02 | MSIL | 183042 | 02

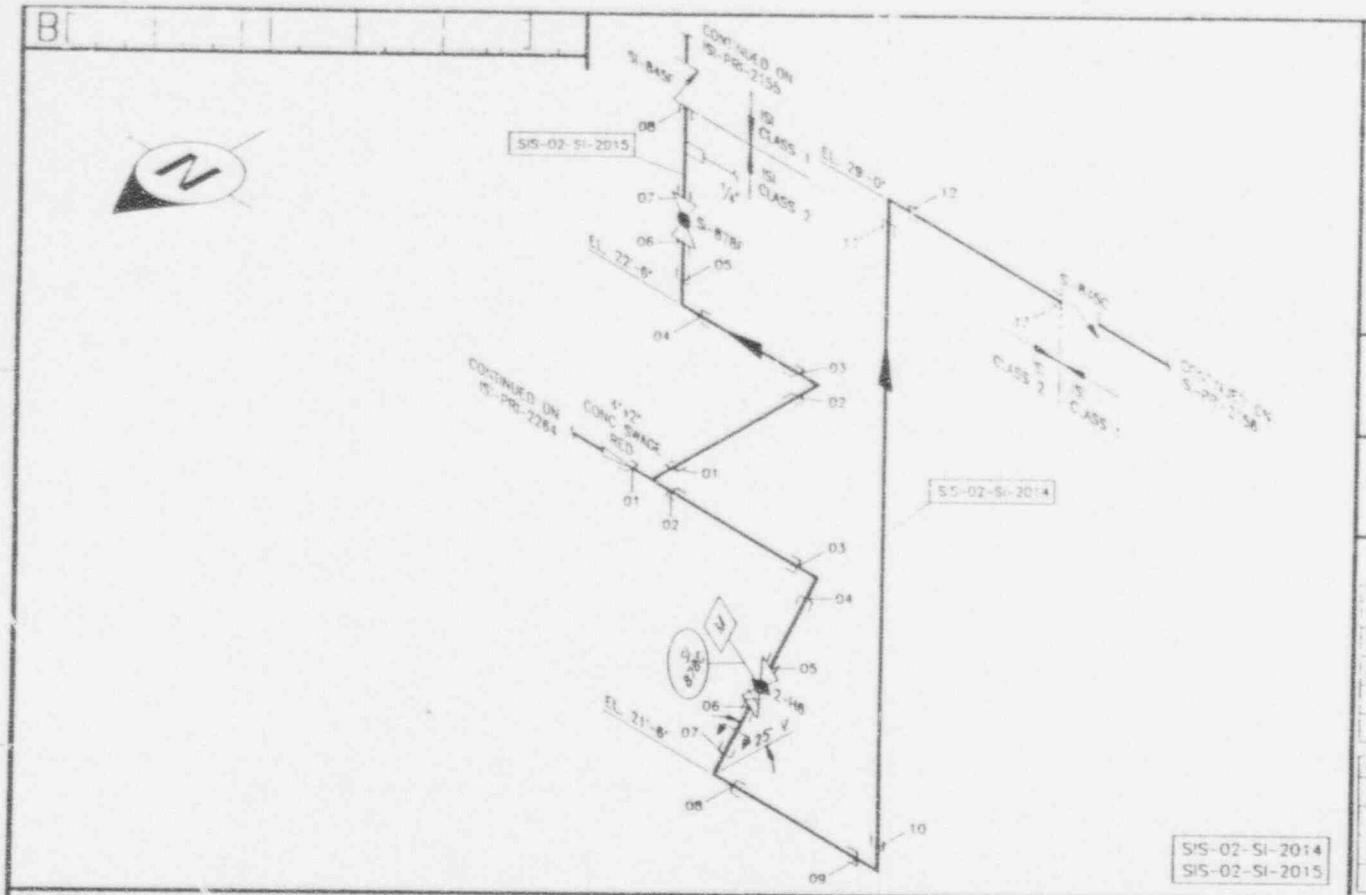
SCALE None

RELEASE DATE

4 3 2 1

C B A

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG: CONTAINMENT
ROOM/AREA: HLDA
ELEV.: 21' TO 29'
HP AREA: 40.3A

REFERENCE DRAWINGS

REF. ISO: WEST. 6601A
REF. P&ID: 11OE035, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN T	DESIGN PSIG	OPERATING T	OPERATING PSIG
SI-1501-R-02				

COMPDA	NOMTHICK	MATERIAL	CALSTD
2.000	0.344	A376 TP316	N/A

SIS-02-SI-2014
SIS-02-SI-2015

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TXAN: #PB-DWG-92-063	PPL	PPL	DJM	
1			07/12/92	REVISED PER WALKDOWN	KTC	WAB	JBB	

MICROFORM NO. 271447
CADFILE NO. PRI2266.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	KTG	01/31/91		
CHECKED	CTP	06/14/91	APPRV'D	
DRAFT'D	KTG	09/07/91	APPRV'D GPS	10/01/91

WISCONSIN ELECTRIC

TSE

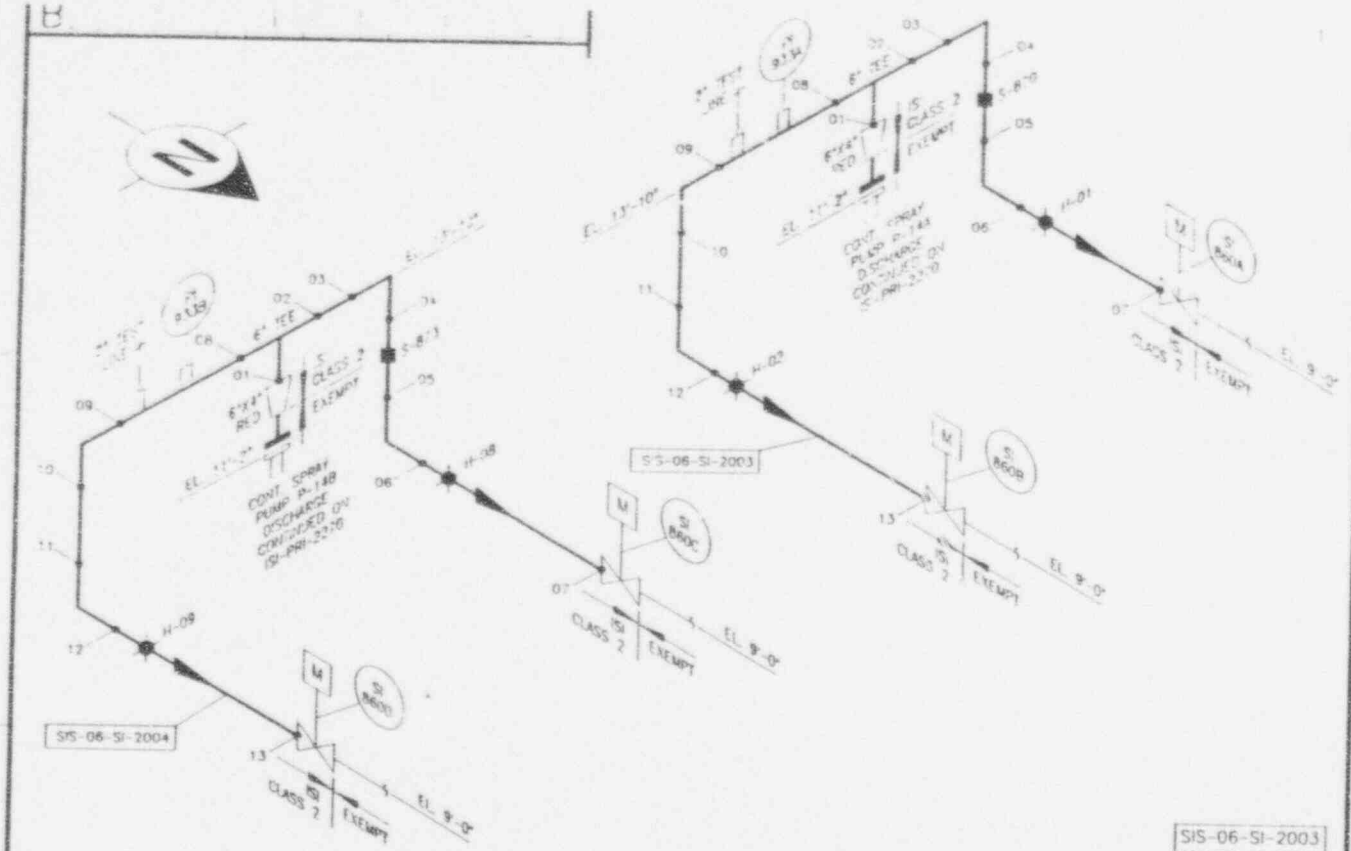
PRIMARY ISI ISOMETRIC
PBNP Unit 2
CORE DELUGE
HEADER

DRAWING NO. ISI-PRI-2266

B | PB | 02 | MSIL | 183 | 043 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG: AUXILIARY
ROOM, AREA: S. CONT. SPRAY PUMP ROOM
ELEV.: 8' TO 16'
HP AREA: 1518

REFERENCE DRAWINGS

REF. ISO: 8LCHTE, P-201
REF. ISO: 8LCHTE, P-231
REF. P&D: 1105075, SH. 3

DESIGN DATA

PIPE CLASS	DESIGN T	DESIGN PSIG	OPERATING T	OPERATING PSIG
SI-301R-01				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
6.000	0.280	A312 TP304	N.A.

SIS-06-SI-2003
SIS-06-SI-2004

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PS-DWG-92-082	PPL	PPL	DJM	
1			07/13/92	REVISED PER WALKDOWN	KTG	WAB	JRB	

MICROFORM NO. 271448
CADFILE NO. PRI2267.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: 12.4
MOD.: NONE

DRAWN	KTG	11/20/90	APPRV'D	DATE
CHECKED	CTP	08/14/91	APPRV'D	
DRAFT'G	KTG	09/01/91	APPRV'D	GRS 10/01/91

WISCONSIN ELECTRIC

TSE

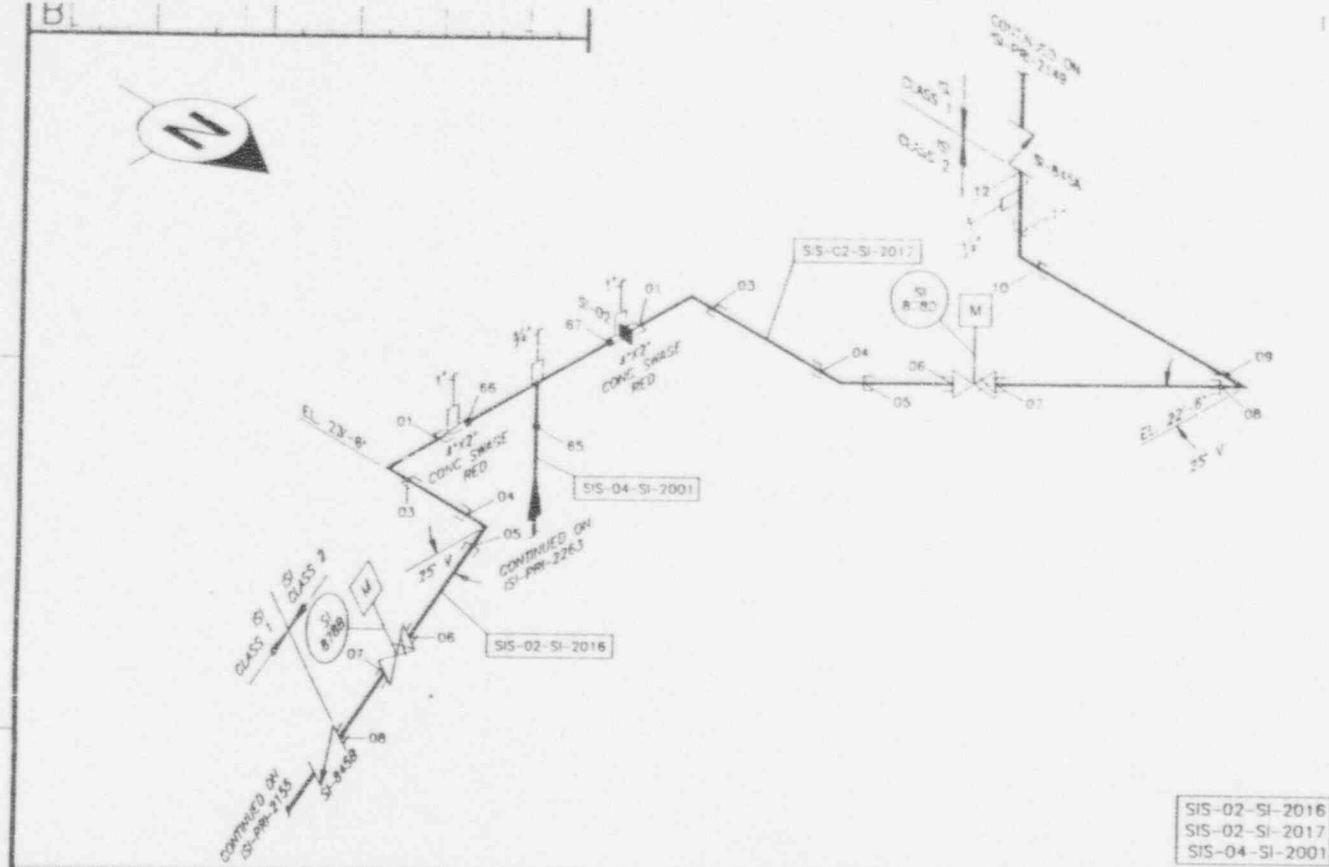
PRIMARY ISI ISOMETRIC
PBNP Unit 2
CONTAINMENT SPRAY PUMPS
P-14A AND P-14B DISCHARGE

DRAWING NO. ISI-PRI-2267

B | PB | 02 | M | SIL | 183 | 044 | 02

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG.: CONTAINMENT
ROOM/AREA: HLOA
ELEV.: 22' TO 23'
HP AREA: 403A

REFERENCE DRAWINGS

REF. ISO: WEST. 6602A & 6610A
REF. ISO: BECHTEL P-219
REF. P&ID: 11050DS, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SI-1501R-03				
[illegible]				

COMPDIA	NOMTHICK	MATERIAL	CAL STD
2.000	0.344	A376 TP316	N/A
4.000	0.377	A312 TP316	N/A

SIS-02-SI-2016
SIS-02-SI-2017
SIS-04-SI-2001

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWC-92-052	PPL	PPL	DJN	
1			07/13/92	REVISED PER WALKDOWN	KTG	WAB	JBB	

MICROFORM NO. 271449
CADFILE NO. PRI2268.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	KTG	01/31/91		
CHECKED	CTP	08/14/91	APPRV'D	
DRAFT'G	KTG	09/07/91	APPRV'D GRS	10/01/91

WISCONSIN ELECTRIC

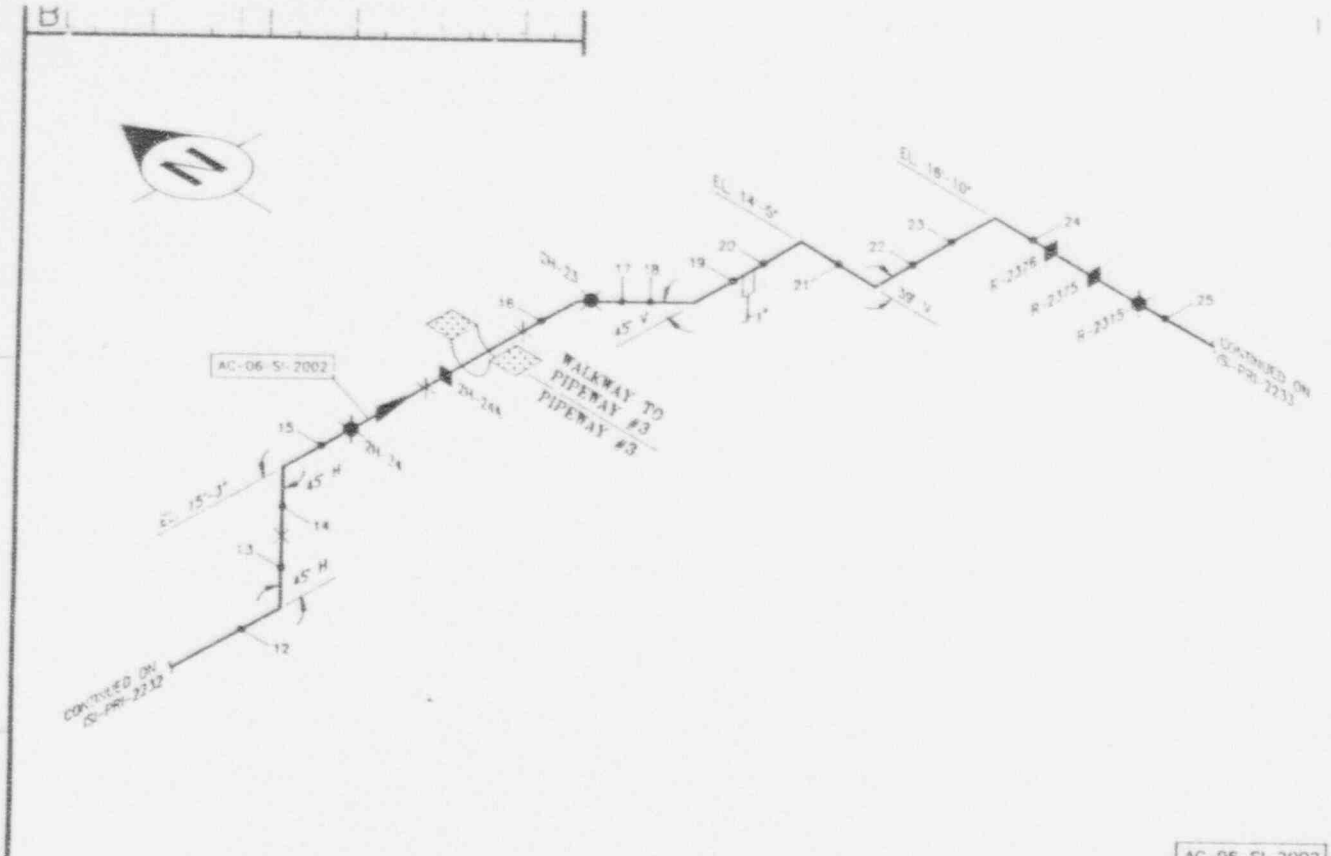
PRIMARY ISI ISOMETRIC
PBNP Unit 2
COLD LEG INJECTION
HEADER

DRAWING NO. ISI-PRI-2268

B | PB | 02 | M | S | I | L | 1 | 8 | 3 | 0 | 4 | 5 | 0 | 2

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

LOCATION

BLDG: AUXILIARY
ROOM/AREA: GENERAL AREA PIPEWAY #3
ELEV: 14' TO 16'
HP AREA: 1A2, 1J1

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-234
REF. P&ID: 11080Z9, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN T	DESIGN PSIG	OPERATING T	OPERATING PSIG
BLACK CS				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
6.000	0.280	A312 TP304	N/A

AC-06-SI-2002

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			03/08/93	INCORPORATED INTO P.C.'S REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJW	
1			07/13/92	REVISED PER WALKDOWN	KTG	WAB	JRB	

MICROFORM NO. 271450
CADFILE NO. PRI2269.DWG

VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

DRAWN KTG	DATE 01/15/91	APPRV'D	DATE
CHECKED CTP	08/14/91	APPRV'D	
DRAFT'G KTG	09/02/91	APPRV'D RBS	10/01/91

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
RHR TO
SI PUMP SUCTION

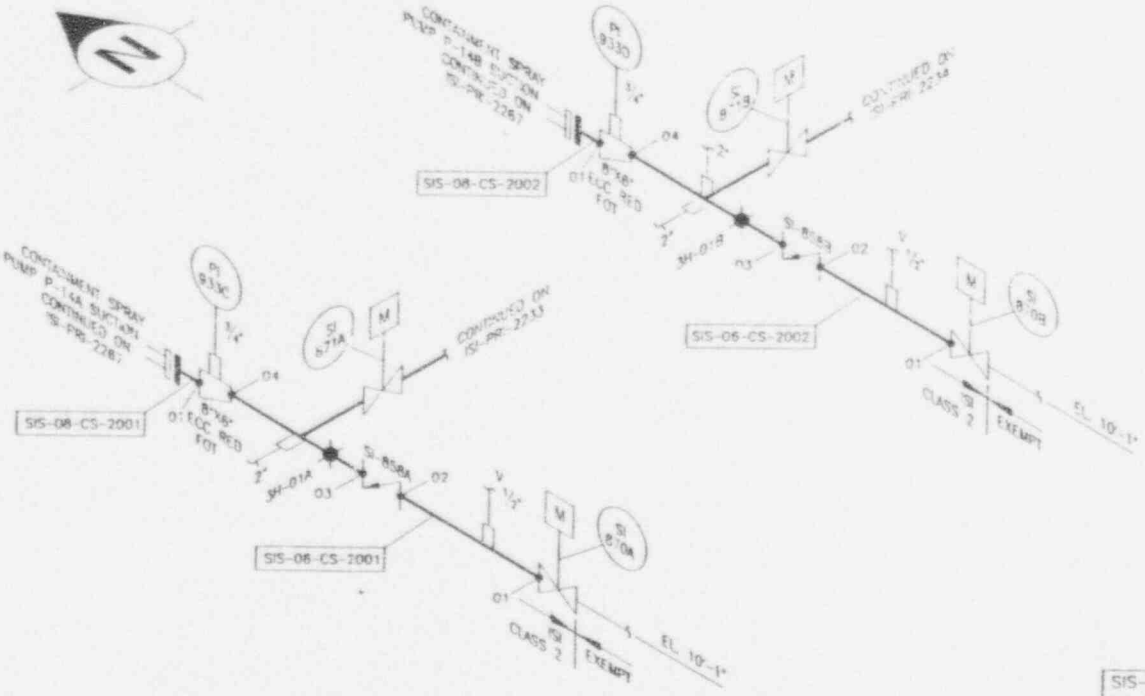
DRAWING NO. ISI-PRI-2269

B | PB | 02 | MSIL | 183046 | 02

SCALE None

RELEASE DATE

FOR INFORMATION ONLY



SIS-06-CS-2001
SIS-06-CS-2002
SIS-08-CS-2001
SIS-08-CS-2002

DRAWING NOTES

LOCATION

BLDG: AUXILIARY
ROOM AREA: CONT. SPRAY PUMP ROOM
ELEV.: 10'-10" 16'
HP AREA: 151B

REFERENCE DRAWINGS

REF. ISO: RECHTE, P-202
REF. P&ID: 11905035, SH. 3

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
SI-151R-03				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
8.000	0.134	A312 TP304	N/A
8.000	0.148	A312 TP304	N/A

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
2			05/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-062	PPL	PPL	DJM	
1			07/13/92	REVISED PER WALKDOWN	KTG	WAB	JBD	

MICROFORM NO. 271451
CADFILE NO. PRI2270.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T2.4
MOD.: NONE

DRAWN KTG	DATE 08/18/91	APPRV'D	DATE
CHECKED CTP	08/19/91	APPRV'D	
DRAFT'G KTG	08/19/91	APPRV'D GSS	10/21/91

WISCONSIN ELECTRIC

FSE

PRIMARY ISI ISOMETRIC
PBNP Unit 2
CONTAINMENT SPRAY PUMPS
P-14A AND P-14B SUCTION

DRAWING NO. ISI-PRI-2270

B | PB | 02 | M | S I L | 183 | 047 | 02

SCALE None RELEASE DATE

4 3 2 1

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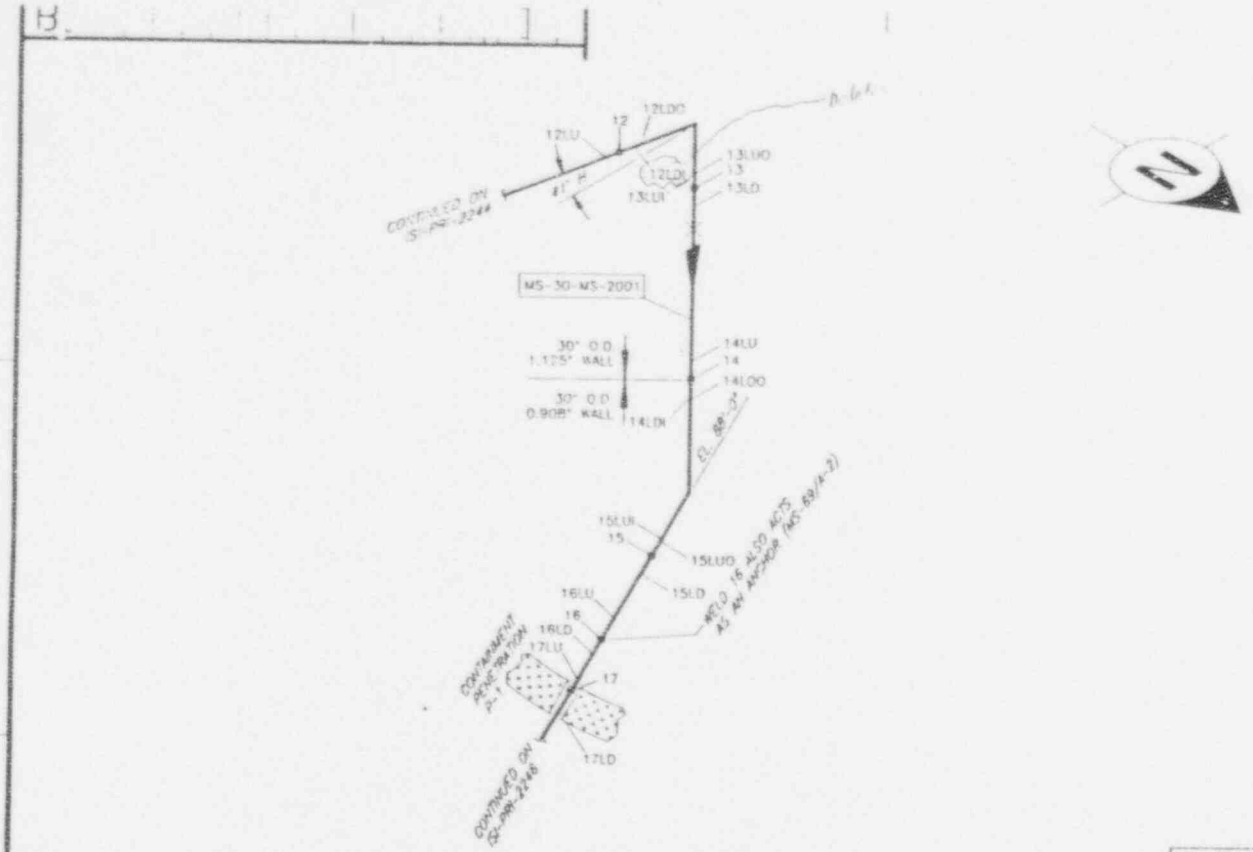
FOR INFORMATION ONLY



DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

JL20 - CONTAINMENT
PCOM AREA: GENERAL AREA
ELEV: BR TO "D"
HP AREA: 4018

REFERENCE DRAWINGS

REF. ISO: BECHTEL P-208
REF. P&ID: M-2201, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PS.G
EB-01				

COMPO.DIA	NOM.THICK	MATERIAL	CAL.STD
30.000	0.908	A155 KC 70	45-PTB
30.000	1.125	A155 KC 70	45-PTB

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
1			03/08/93	INCORPORATED INTO PDS REF. TRANS. #PB-DWG-92-082	PPL	PPL	DJM	

MICROFORM NO. 271452
CADFILE NO. PRI2271.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T3.4.1
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	KTG	07/13/92		
CHECKED	WAB	07/15/92	APPRV'D	
DRAFT'G	KTG	07/22/92	APPRV'D JPB	08/24/92

WISCONSIN ELECTRIC

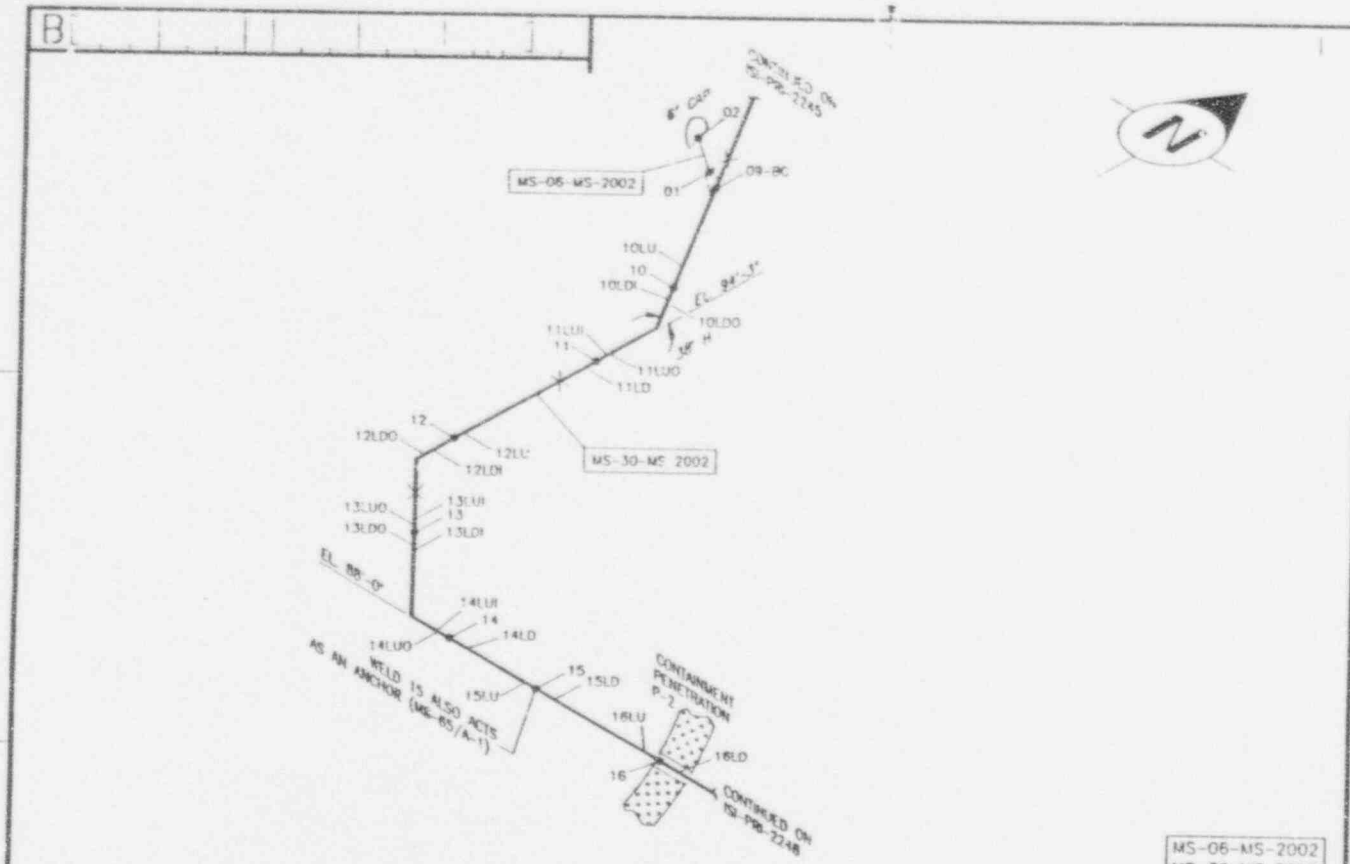
PRIMARY ISI ISOMETRIC
PBNP Unit 2
LOOP 'A' MAIN STEAM
INSIDE CONTAINMENT

DRAWING NO. ISI-PRI-2271

B | PB | 02 | MMSL | 183 | 006 | 01

SCALE None RELEASE DATE

FOR INFORMATION ONLY



DRAWING NOTES

1. ALL PIPING ON THIS DRAWING IS INSULATED.

LOCATION

BLDG.: CONTAINMENT
ROOM, AREA: GENERAL AREA NE
ELEV.: 88' TO 94'
HP AREA: 401A

REFERENCE DRAWINGS

REF. ISO: PACKTEL P-208
REF. P&ID: M-2201, SH. 1

DESIGN DATA

PIPE CLASS	DESIGN °F	DESIGN PSIG	OPERATING °F	OPERATING PSIG
EB-01				

COMPDIA	NOMTHICK	MATERIAL	CALSTD
6.000	0.280	A-106	N/A
30.000	0.908	A155 KC 70	46-PTB

MS-06-MS-2002
MS-30-MS-2002

REVISIONS

REV NO.	ZONE	PROJ. ID.	DATE	DESCRIPTION	DRAWN	CHK'D	APPRV'D	REL'D
1			03/08/93	INCORPORATED INTO PDS REV. TRANS. SPB-DWG-92-082	PPL	PPL	DJM	

MICROFORM NO. 271453
CADFILE NO. PRI2272.DWG
VENDOR: WISCONSIN ELECTRIC
T.F.I.: T3.4.1
MOD.: NONE

		DATE	APPRV'D	DATE
DRAWN	KTG	07/14/92		
CHECKED	WAB	07/15/92	APPRV'D	
DRAFT'D	KTG	07/22/92	APPRV'D JRS	08/24/92

WISCONSIN ELECTRIC

PRIMARY ISI ISOMETRIC
PBNP Unit 2
LOOP 'B' MAIN STEAM
INSIDE CONTAINMENT

DRAWING NO. ISI-PRI-2272

B PB 02MMSL1830070 1

SCALE None RELEASE DATE

FOR INFORMATION ONLY