GENERAL NOTES:

1. FOR SINGLE LINE DIAGRAM SEE DWGS E2.10.30, E2.10.31 & E2.10.32.

DISTRIBUTION PANEL TA-2DP1(FUTURE) — MEZZ LVL (SOUTH)

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - EMRG. [ ] -NORMAL. [X] -TECH. 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | MOUNTING [ ] -SURFACE [X] - FREE STAND.
MAINS: 800 A 65,000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 /
ALL BREAKERS ARE 3 POLE UON | 800 A. MAIN BKR. WITH: [ ] - SHUNT TRIP [ ] - ADJ. TRIP-G.F.P.

CKT. NO.	TRIP AMP	USED FOR	COL. #1 VOLT - AMPS		COL. #2 VOLT - AMPS	USED FOR	TRIP AMP	CKT. NO.
1	125	TA-2T1 XFMR / TA-2PP1 BEAM LINE 1A TU (FUTURE)	52832		40000	WELDING REC-TA-2WR1 BEAM LINE 1A TU 480V,60A,Single Twistlock	60	2
3	125	TA-2T2 XFMR / TA-2PP2 BEAM LINE 1B TU (FUTURE)	52832		40000	WELDING REC-TA-2WR2 BEAM LINE 1B TU 480V,60A,Single Twistlock	60	4
5	125	TA-2T3 XFMR / TA-2PP3 BEAM LINE 3 TU (FUTURE)	52832		40000	WELDING REC-TA-2WR3 BEAM LINE 3 TU 480V,60A,Single Twistlock	60	6
7	125	TA-2T4 XFMR / TA-2PP4 BEAM LINE 5 TD (FUTURE)	52832		40000	WELDING REC-TA-2WR4 BEAM LINE 5 TD 480V,60A,Single Twistlock	60	8
9	125	TA-2T5 XFMR / TA-2PP5 BEAM LINE 7 BU (FUTURE)	52832		40000	WELDING REC-TA-2WR5 BEAM LINE 7 BU 480V,60A,Single Twistlock	60	10
11	125	SPARE	–		–	SPARE	60	12
13	60	SPARE	–		–	SPARE	60	14
15	60	SPARE	–		–	SPACE	–	16
17	–		–		–	–	–	18

PHASE TOTALS COL. #1: 264160
PHASE TOTALS COL. #2: 200000
PHASE TOTAL VA: 464160
TOTAL CONNECTED 464 KVA 558 AMPS

DISTRIBUTION PANEL TA-2DP2(FUTURE) — MEZZ LVL (NORTH)

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - EMRG. [ ] -NORMAL. [X] -TECH. 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | MOUNTING [ ] -SURFACE [X] - FREE STAND.
MAINS: 800 A 65,000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 /
ALL BREAKERS ARE 3 POLE UON | 800 A. MAIN BKR. WITH: [ ] - SHUNT TRIP [ ] - ADJ. TRIP -G.F.P.

CKT. NO.	TRIP AMP	USED FOR	COL. #1 VOLT - AMPS		COL. #2 VOLT - AMPS	USED FOR	TRIP AMP	CKT. NO.
1	125	TA-2T13 XFMR / TA-2PP7 BEAM LINE 14A BD (FUTURE)	52832		40000	WELDING REC TA-2WR7(FUT) BEAM LINE 14A BD 480V,60A,Single Twistlock	60	2
3	125	TA-2T14 XFMR / TA-2PP8 BEAM LINE 14B BD (FUTURE)	52832		40000	WELDING REC TA-2WR8(FUT) BEAM LINE 14B BD 480V,60A,Single Twistlock	60	4
5	125	TA-2T15 XFMR / TA-2PP9 BEAM LINE 15 BD (FUTURE)	52832		40000	WELDING REC TA-2WR9(FUT) BEAM LINE 15 BD 480V,60A,Single Twistlock	60	6
7	125	TA-2T16 XFMR / TA-2PP6 BEAM LINE 16A BU (FUTURE)	52832		40000	WELDING REC TA-2WR6(FUT) BEAM LINE 16A BU 480V,60A,Single Twistlock	60	8
9	125	SPARE	–		–	SPARE	60	10
11	125	SPARE	–		–	SPARE	60	12
13	60	SPARE	–		–	SPACE	–	14
15	–	SPACE	–		–	SPACE	–	16
17	–		–		–	–	–	18

PHASE TOTALS COL. #1: 211328
PHASE TOTALS COL. #2: 160000
PHASE TOTAL VA: 371328
TOTAL CONNECTED 371 KVA 447 AMPS

DISTRIBUTION PANEL TA-2DP3(FUTURE) — MEZZ LVL (SOUTH)

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - EMRG. [X] -NORMAL. [X] -TECH. 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | MOUNTING [ ] -SURFACE [X] - FREE STAND.
MAINS: 400 A 65,000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 /
ALL BREAKERS ARE 3 POLE UON | 400 A. MAIN BKR. WITH: [ ] - SHUNT TRIP [ ] - ADJ. TRIP-G.F.P.

CKT. NO.	TRIP AMP	USED FOR	COL. #1 VOLT - AMPS		COL. #2 VOLT - AMPS	USED FOR	TRIP AMP	CKT. NO.
1	50	TA-2T7-30KVA XFMR / TA-2CPP1 BEAM LINE 1A TU (FUTURE)	18840		–	SPARE	30	2
3	50	TA-2T8-30KVA XFMR / TA-2CPP2 BEAM LINE 1B TU (FUTURE)	18840		–	SPACE	–	4
5	50	TA-2T9-30KVA XFMR / TA-2CPP3 BEAM LINE 3 TU (FUTURE)	18840		–	SPARE	30	6
7	50	TA-2T10-30KVA XFMR / TA-2CPP4 BEAM LINE 5 TD (FUTURE)	18840		–	SPACE	–	8
9	50	TA-2T11-30KVA XFMR / TA-2CPP5 BEAM LINE 7 BU (FUTURE)	18840		–	SPARE	60	10
11	50	SPARE	–		–	–	–	12
13	–	–	–		–	–	–	14
15	–	–	–		–	–	–	16
17	–	–	–		–	–	–	18

PHASE TOTALS COL. #1: 94200
PHASE TOTALS COL. #2: 0
PHASE TOTAL VA: 94200
TOTAL CONNECTED 94 KVA 113 AMPS

DISTRIBUTION PANEL TA-2DP4(FUTURE) — MEZZ LVL (NORTH)

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - EMRG. [X] -NORMAL. [ ] -TECH. 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | MOUNTING [ ] -SURFACE [X] - FREE STAND.
MAINS: 400 A 65,000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 /
ALL BREAKERS ARE 3 POLE UON | 400 A. MAIN BKR. WITH: [ ] - SHUNT TRIP [ ] - ADJ. TRIP-G.F.P.

CKT. NO.	TRIP AMP	USED FOR	COL. #1 VOLT - AMPS		COL. #2 VOLT - AMPS	USED FOR	TRIP AMP	CKT. NO.
1	50	TA-2T19 XFMR / TA-2CPP7 BEAM LINE 14A BD (FUTURE)	18840		18840	TA-2T22 XFMR / TA-2CPP6 BEAM LINE 16A BU (FUTURE)	50	2
3	50	TA-2T20 XFMR / TA-2CPP8 BEAM LINE 14B BD (FUTURE)	18840		–	SPARE	50	4
5	50	TA-2T21 XFMR / TA-2CPP9 BEAM LINE15 BD (FUTURE)	18840		–	SPARE	50	6
7	50	SPARE			–	SPACE	–	8
9						–	–	10
11					–			12
13			–		–		–	14
15			–		–		–	16
17	–		–		–	–	–	18

PHASE TOTALS COL. #1: 56520
PHASE TOTALS COL. #2: 18840
PHASE TOTAL VA: 75360
TOTAL CONNECTED 75 KVA 91 AMPS

DISTRIBUTION PANEL TA-2DP5(FUTURE) — MEZZ LVL (NORTH)

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - EMRG. [X] -NORMAL. [ ] -TECH. 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | MOUNTING [ ] -SURFACE [X] - FREE STAND.
MAINS: 400 A 65,000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 /
ALL BREAKERS ARE 3 POLE UON | 400 A. MAIN BKR. WITH: [ ] - SHUNT TRIP [ ] - ADJ. TRIP-G.F.P.

CKT. NO.	TRIP AMP	USED FOR	COL. #1 VOLT - AMPS		COL. #2 VOLT - AMPS	USED FOR	TRIP AMP	CKT. NO.
1	25	TO CHOPPER XXX	15000		15000	TO CHOPPER XXX	25	2
3	25	TO CHOPPER XXX	15000		15000	TO CHOPPER XXX	25	2
5	25	DISK CHOPPER XXX	15000		15000	DISK CHOPPER XXX	25	6
7	25	DISK CHOPPER XXX	15000		15000	DISK CHOPPER XXX	25	8
9	25	DISK CHOPPER XXX	15000		15000	DISK CHOPPER XXX	25	10
11	25	DISK CHOPPER XXX	15000		15000	DISK CHOPPER XXX	25	12
13	25	SPARE	–		–	SPARE	20	14
15	25	SPARE	–		–	SPARE	30	16
17	–	SPACE	–		–	–	–	18

PHASE TOTALS COL. #1: 90000
PHASE TOTALS COL. #2: 90000
PHASE TOTAL VA: 180000
TOTAL CONNECTED 180 KVA 217 AMPS

DISTRIBUTION PANEL TA-2DP6(FUTURE) — MEZZ LVL (SOUTH)

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - EMRG. [X] -NORMAL. [ ] -TECH. 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | MOUNTING [ ] -SURFACE [X] - FREE STAND.
MAINS: 400 A 65,000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 /
ALL BREAKERS ARE 3 POLE UON | 400 A. MAIN BKR. WITH: [ ] - SHUNT TRIP [ ] - ADJ. TRIP-G.F.P.

CKT. NO.	TRIP AMP	USED FOR	COL. #1 VOLT - AMPS		COL. #2 VOLT - AMPS	USED FOR	TRIP AMP	CKT. NO.
1	25	TO CHOPPER XXX	15000		15000	TO CHOPPER XXX	25	2
3	25	TO CHOPPER XXX	15000		15000	TO CHOPPER XXX	25	2
5	25	DISK CHOPPER XXX	15000		15000	DISK CHOPPER XXX	25	6
7	25	DISK CHOPPER XXX	15000		15000	DISK CHOPPER XXX	25	8
9	25	DISK CHOPPER XXX	15000		15000	DISK CHOPPER XXX	25	10
11	25	DISK CHOPPER XXX	15000		15000	DISK CHOPPER XXX	25	12
13	25	SPARE	–		–	SPARE	20	14
15	25	SPARE	–		–	SPARE	30	16
17	–	SPACE	–		–	SPACE	–	18

PHASE TOTALS COL. #1: 90000
PHASE TOTALS COL. #2: 90000
PHASE TOTAL VA: 180000
TOTAL CONNECTED 180 KVA 217 AMPS

DISTRIBUTION PANEL TA-2DP7(FUTURE) — (HIGH BAY)

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - EMRG. [X] -NORMAL. [ ] -TECH. 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | MOUNTING [ ] -SURFACE [X] - FREE STAND.
MAINS: 400 A 65,000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 /
ALL BREAKERS ARE 3 POLE UON | 400 A. MAIN BKR. WITH: [ ] - SHUNT TRIP [ ] - ADJ. TRIP-G.F.P.

CKT. NO.	TRIP AMP	USED FOR	COL. #1 VOLT - AMPS		COL. #2 VOLT - AMPS	USED FOR	TRIP AMP	CKT. NO.
1	25	TO CHOPPER XXX	15000		15000	TO CHOPPER XXX	25	2
3	25	TO CHOPPER XXX	15000		15000	TO CHOPPER XXX	25	2
5	25	DISK CHOPPER XXX	15000		15000	DISK CHOPPER XXX	25	6
7	25	DISK CHOPPER XXX	15000		15000	DISK CHOPPER XXX	25	8
9	25	DISK CHOPPER XXX	15000		15000	DISK CHOPPER XXX	25	10
11	25	DISK CHOPPER XXX	15000		15000	DISK CHOPPER XXX	25	12
13	25	SPARE	–		–	SPARE	20	14
15	–		–		–	–	–	16
17	–		–		–	–	–	18

PHASE TOTALS COL. #1: 90000
PHASE TOTALS COL. #2: 90000
PHASE TOTAL VA: 180000
TOTAL CONNECTED 180 KVA 217 AMPS

PANEL TA-3EL2 — (HIGH BAY)

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [X] - LTG. [ ] - RECEPT. [ ] - NEMA 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | MOUNTING [X] -SURFACE [ ] - FLUSH [ ] -COLUMN
MAINS: 100 A 14000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 [ ]
50 A. MAIN BKR. WITH: [ ] - SHUNT TRIP [ ] - ADJ. TRIP [ ] -G.F.P.

CKT. NO.	TRIP AMP	NO. OF POLES	USED FOR	COL. #1 VOLT - AMPS A	B	C		COL. #2 VOLT - AMPS A	B	C	USED FOR	NO. OF POLES	TRIP AMP	CKT. NO.
1	20	1	HIGH BAY LTS-NORTH	3240				1100			LVL4-LTS CL1-5D-H	1	20	2
3	20	1	HIGH BAY LTS-SOUTH		3240				600		LVL4-LTS CL5-15D-H	1	20	4
5	20	1	LVL3-LTS CL1-5D-H			1240				1080	LVL4-LTS CL15-16F	1	20	6
7	20	1	LVL3-LTS CL11-16D-H	1680							SPARE	1	20	8
9	20	1	LVL3-LTS CL6-11E-G		1230						SPARE	1	20	10
11	20	1	LVL5 LTS			630					SPARE	1	20	12
13	20	1	SPARE								SPARE	1	20	14
15	20	1	SPARE								SPARE	1	20	16
17	20	1	SPARE								SPARE	1	20	18
19	20	1	SPARE								SPARE	1	20	20
21	20	1	SPARE								SPARE	1	20	22
23	20	1	SPARE								SPARE	1	20	24
25														26
27														28
29														30
31														32
33														34
35														36
37														38
39														40
41														42

	A	B	C
PHASE TOTALS COL. #1	4920	4470	1870
PHASE TOTALS COL. #2	1100	600	1080
PHASE TOTAL VA	6020	5070	2950

TOTAL 3 PHASE CONNECTED 14 KVA 17 AMPS

DISTRIBUTION PANEL TA-3DP6A — (MANIPULATER GALLERY)

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - EMRG. [X] -NORMAL. [ ] -TECH. 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | MOUNTING [ ] -SURFACE [ ] - FREE STAND.
MAINS: 225 A 65000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 /
ALL BREAKERS ARE 3 POLE UON | 225 A. MAIN BKR. WITH: [ ] - SHUNT TRIP [ ] - ADJ. TRIP-G.F.P.

CKT. NO.	TRIP AMP	USED FOR	COL. #1 VOLT - AMPS		COL. #2 VOLT - AMPS	USED FOR	TRIP AMP	CKT. NO.
1		REFER TO MERRICK'S DWG# J1-15-30 &J1-16-30 FOR SCHEDULES	–		–			2
3								4
5								6
7								8
9							–	10
11	–		–		–	–	–	12
13	–		–		–	–	–	14
15	–		–		–	–	–	16
17	–		–		–	–	–	18

PHASE TOTALS COL. #1: 0
PHASE TOTALS COL. #2: 0
PHASE TOTAL VA: 0
TOTAL CONNECTED 0 KVA 0 AMPS

KEY SCHEDULE

TA-2DP1	TA-2DP2	TA-2DP3
TA-2DP4	TA-2DP5	TA-2DP6
TA-2DP7	TA-3EL2	TA-3DP6A

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THIS DOCUMENT CONTROLLED BY
CHANGE CONTROL SYSTEM 3
ENGINEERING PROCEDURE SNS-ENG-G001

REV	CHANGE TYPE	CHANGE CONTROL SYSTEM	CHANGE REQUEST NUMBER	DESCRIPTION	DSN	CHK	DEPT	DATE	PE	DATE	PJ	DATE	REQ	DATE	UTB	DATE	RPE	RPE NO	DATE
0				CERTIFIED FOR CONSTRUCTION – 10/26/01	HG	VGS			[signature]	11/15/01	RAD	11/14/01			[signature]	11/14/01	VGS	00106009	10/26/01

REVISION OR ISSUE PURPOSE | REVISION APPROVALS

ST	CV	EC	EE	EM	IE	M	PD	SE	AR
REW	–	WRS	AK	WRS	BWJ	–	MP	–	ED

SQUAD CHECK

RPE: VICTOR G. STEFFEN, REGISTERED ENGINEER, AGRICULTURE, COMMERCE, No. 00106009, STATE OF TENNESSEE [seal, signature] 11-13-01

DSN	H.GROVER	10/26/01
DRW	L. MAKOVSKY	10/26/01
CHK	V.STEFFEN	10/26/01
DEPT		
PE	[signature]	11/15/01
PJ	R.A. Dean	11/14/01
REQ		
UTB	[signature]	11/14/01

REV. 0 DATE 11-13-01
DRAWING APPROVALS

108030700-E8E-8700-A189

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Oak Ridge National Laboratory
managed for the DEPARTMENT OF ENERGY under
U.S. GOVERNMENT contract DE-AC05-000R22725
UT-BATTELLE, LLC, Oak Ridge, Tennessee

PROJECT NAME: SPALLATION NEUTRON SOURCE

TARGET BUILDING PANEL SCHEDULES SHEET 3

1	48	49	50	PLANT	BLDG	FL	SH.	OF	TYPE	CLASS
3	E	X	X	8	8700		1	1	S	U
51 NC		52 NA		53	WBS 1.8.3.7		E9.21.32			REV 0

NEXT ASS'Y: FINAL ASS'Y:

Date: 11/13/2001 Time: 11:21:10
Username: MAKOVSKYL
KOSFO_VOL2:PROJECTS\7000\700_CADD\TASK_5A\740_PLOT\E9-21-32.DWG

AutoCAD