PANEL 3SR1B

SUPPLY: [ ] – BOTT. [X] – TOP [ ] – LUGS [ ] –MAIN BKR. [ ] – LTG. [X] – RECEPT. [ ] –POWER NEMA 1

TYPE: [ ] – 3P3W [X] – 3P4W [X] – WITH GRD. BAR PANEL 3SR1B MOUNTING [X] –SURFACE [ ] – FLUSH [ ] –COLUMN

MAINS: 225 A 10000 A.I.C. VOLTAGE: [X] –120 / 208 [ ] –277 / 480 [ ] 480 /

175 A. MAIN BKR. WITH: [ ] – SHUNT TRIP [ ] – ADJ. TRIP [ ] –G.F.P.

CKT. NO.	TRIP	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	CKT. NO.
1	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	2
3	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	4
5	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	6
7	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	8
9	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	10
11	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	12
13	20	1	OFFICE RECEPTACLE	1200						SPARE	1	20	14
15	20	1	OFFICE RECEPTACLE		1200					SPARE	1	20	16
17	20	1	OFFICE RECEPTACLE			1200				SPARE	1	20	18
19	20	1	OFFICE RECEPTACLE	1200						SPARE	1	20	20
21	20	1	OFFICE RECEPTACLE		1200					SPARE	1	20	22
23	20	1	SPARE							SPARE	1	20	24
25	20	1	SPARE							SPARE	1	20	26
27	20	1	SPARE							SPARE	1	20	28
29	20	1	SPARE							SPARE	1	20	30
31	20	1	SPARE							SPARE	1	20	32
33	20	1	SPARE							SPARE	1	20	34
35	20	1	SPARE							SPARE	1	20	36
37	20	1	SPARE							SPARE	1	20	38
39	20	1	SPARE							SPARE	1	20	40
41	20	1	SPARE							SPARE	1	20	42

PHASE TOTALS COL. #1	4800	4800	3600
PHASE TOTALS COL. #2	2400	2400	2400
PHASE TOTAL VA	7200	7200	6000

TOTAL 3 PHASE CONNECTED 20 KVA 57 AMPS

file panelsch_34_2b

PANEL 3SR2A

SUPPLY: [ ] – BOTT. [X] – TOP [ ] – LUGS [X] –MAIN BKR. [ ] – LTG. [X] – RECEPT. [ ] –POWER NEMA 1

TYPE: [ ] – 3P3W [X] – 3P4W [X] – WITH GRD. BAR PANEL 3SR2A MOUNTING [X] –SURFACE [ ] – FLUSH [ ] –COLUMN

MAINS: 225 A 10,000 A.I.C. WITH FEED THROUGH LUGS VOLTAGE: [X] –120 / 208 [ ] –277 / 480 [ ] 480 /

225 A. MAIN BKR. WITH: [ ] – SHUNT TRIP [ ] – ADJ. TRIP [ ] –G.F.P.

CKT. NO.	TRIP	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	CKT. NO.
1	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	2
3	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	4
5	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	6
7	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	8
9	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	10
11	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	12
13	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	14
15	20	1	SPARE					1200		OFFICE RECEPTACLE	1	20	16
17	20	1	SPARE						1200	OFFICE RECEPTACLE	1	20	18
19	20	1	SPARE				1200			OFFICE RECEPTACLE	1	20	20
21	20	1	SPARE					1200		OFFICE RECEPTACLE	1	20	22
23	20	1	SPARE						1200	OFFICE RECEPTACLE	1	20	24
25	20	1	SPARE							SPARE	1	20	26
27	20	1	SPARE							SPARE	1	20	28
29	20	1	SPARE							SPARE	1	20	30
31	20	1	SPARE							SPARE	1	20	32
33	20	1	SPARE							SPARE	1	20	34
35	20	1	SPARE							SPARE	1	20	36
37	20	1	SPARE							SPARE	1	20	38
39	20	1	SPARE							SPARE	1	20	40
41	20	1	SPARE							SPARE	1	20	42

PHASE TOTALS COL. #1	3600	2400	2400
PHASE TOTALS COL. #2	4800	4800	4800
PHASE TOTAL VA	8400	7200	7200

TOTAL 3 PHASE CONNECTED 23 KVA 63 AMPS

file panelsch_36_2b

PANEL 3SR2B

SUPPLY: [ ] – BOTT. [X] – TOP [X] – LUGS [ ] –MAIN BKR. [ ] – LTG. [X] – RECEPT. [ ] –POWER NEMA 1

TYPE: [ ] – 3P3W [X] – 3P4W [X] – WITH GRD. BAR PANEL 3SR2B MOUNTING [X] –SURFACE [ ] – FLUSH [ ] –COLUMN

MAINS: 225 A 10000 A.I.C. VOLTAGE: [X] –120 / 208 [ ] –277 / 480 [ ] 480 /

175 A. MAIN BKR. WITH: [ ] – SHUNT TRIP [ ] – ADJ. TRIP [ ] –G.F.P.

CKT. NO.	TRIP	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	CKT. NO.
1	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	2
3	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	4
5	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	6
7	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	8
9	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	10
11	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	12
13	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	14
15	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	16
17	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	18
19	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	20
21	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	22
23	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	24
25	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	26
27	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	28
29	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	30
31	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	32
33	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	34
35	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	36
37	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	38
39	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	40
41	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	42

PHASE TOTALS COL. #1	8400	8400	8400
PHASE TOTALS COL. #2	8400	8400	8400
PHASE TOTAL VA	16800	16800	16800

TOTAL 3 PHASE CONNECTED 50 KVA 140 AMPS

file panelsch_25_2b

PANEL 3SR3A

SUPPLY: [ ] – BOTT. [X] – TOP [ ] – LUGS [X] –MAIN BKR. [ ] – LTG. [ ] – RECEPT. [ ] –POWER NEMA 1

TYPE: [ ] – 3P3W [X] – 3P4W [X] – WITH GRD. BAR PANEL 3SR3A MOUNTING [ ] –SURFACE [ ] – FLUSH [ ] –COLUMN

MAINS: 225 A 10000 A.I.C. WITH FEED THROUGH LUGS VOLTAGE: [X] –120 / 208 [ ] –277 / 480 [ ] 480 /

225 A. MAIN BKR. WITH: [ ] – SHUNT TRIP [ ] – ADJ. TRIP [ ] –G.F.P.

CKT. NO.	TRIP	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	CKT. NO.
1	20	1	SPARE							SPARE	1	20	2
3	20	1	SPARE							SPARE	1	20	4
5	20	1	SPARE							SPARE	1	20	6
7	20	1	SPARE							SPARE	1	20	8
9	20	1	SPARE							SPARE	1	20	10
11	20	1	SPARE							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	20	1	SPARE							SPARE	1	20	26
27	20	1	SPARE							SPARE	1	20	28
29	20	1	SPARE							SPARE	1	20	30
31	20	1	SPARE							SPARE	1	20	32
33	20	1	SPARE							SPARE	1	20	34
35	20	1	SPARE							SPARE	1	20	36
37	20	1	SPARE							SPARE	1	20	38
39	20	1	SPARE							SPARE	1	20	40
41	20	1	SPARE							SPARE	1	20	42

PHASE TOTALS COL. #1	0	0	0
PHASE TOTALS COL. #2	0	0	0
PHASE TOTAL VA	0	0	0

TOTAL 3 PHASE CONNECTED 0 KVA 0 AMPS

file panelsch_37_2b

PANEL 3SR3B

SUPPLY: [ ] – BOTT. [X] – TOP [X] – LUGS [ ] –MAIN BKR. [ ] – LTG. [X] – RECEPT. [ ] –POWER NEMA 1

TYPE: [ ] – 3P3W [X] – 3P4W [X] – WITH GRD. BAR PANEL 3SR3B MOUNTING [X] –SURFACE [ ] – FLUSH [ ] –COLUMN

MAINS: 225 A 10000 A.I.C. VOLTAGE: [X] –120 / 208 [ ] –277 / 480 [ ] 480 /

175 A. MAIN BKR. WITH: [ ] – SHUNT TRIP [ ] – ADJ. TRIP [ ] –G.F.P.

CKT. NO.	TRIP	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	CKT. NO.
1	20	1	SPARE							SPARE	20	20	2
3	20	1	SPARE							SPARE	20	20	4
5	20	1	SPARE							SPARE	20	20	6
7	20	1	SPARE							SPARE	20	20	8
9	20	1	SPARE							SPARE	20	20	10
11	20	1	SPARE							SPARE	20	20	12
13	20	1	SPARE							SPARE	20	20	14
15	20	1	SPARE							SPARE	20	20	16
17	20	1	SPARE							SPARE	20	20	18
19	20	1	SPARE							SPARE	20	20	20
21	20	1	SPARE							SPARE	20	20	22
23	20	1	SPARE							SPARE	20	20	24
25	20	1	SPARE							SPARE	20	20	26
27	20	1	SPARE							SPARE	20	20	28
29	20	1	SPARE							SPARE	20	20	30
31	20	1	SPARE							SPARE	20	20	32
33	20	1	SPARE							SPARE	20	20	34
35	20	1	SPARE							SPARE	20	20	36
37	20	1	SPARE							SPARE	20	20	38
39	20	1	SPARE							SPARE	20	20	40
41	20	1	SPARE							SPARE	20	20	42

PHASE TOTALS COL. #1	0	0	0
PHASE TOTALS COL. #2	0	0	0
PHASE TOTAL VA	0	0	0

TOTAL 3 PHASE CONNECTED 0 KVA 0 AMPS

file panelsch_38_2b

PANEL 3SR5A

SUPPLY: [ ] – BOTT. [X] – TOP [ ] – LUGS [X] –MAIN BKR. [ ] – LTG. [X] – RECEPT. [ ] –POWER NEMA 1

TYPE: [ ] – 3P3W [X] – 3P4W [X] – WITH GRD. BAR PANEL 3SR5A MOUNTING [X] –SURFACE [ ] – FLUSH [ ] –COLUMN

MAINS: 2225 A 10000 A.I.C. VOLTAGE: [X] –120 / 208 [ ] –277 / 480 [ ] 480 /

225 A. MAIN BKR. WITH: [ ] – SHUNT TRIP [ ] – ADJ. TRIP [ ] –G.F.P.

CKT. NO.	TRIP	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	CKT. NO.
1	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	2
3	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	4
5	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	6
7	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	8
9	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	10
11	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	12
13	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	14
15	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	16
17	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	18
19	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	20
21	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	22
23	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	24
25	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	26
27	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	28
29	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	30
31	20	1	SPARE				1200			OFFICE RECEPTACLE	1	20	32
33	20	1	SPARE							SPARE	1	20	34
35	20	1	SPARE							SPARE	1	20	36
37	20	1	SPARE							SPARE	1	20	38
39	20	1	SPARE							SPARE	1	20	40
41	20	1	SPARE							SPARE	1	20	42

PHASE TOTALS COL. #1	6000	6000	6000
PHASE TOTALS COL. #2	7200	6000	6000
PHASE TOTAL VA	13200	12000	12000

TOTAL 3 PHASE CONNECTED 37 KVA 103 AMPS

file panelsch_40_2b

PANEL 3SR5B

SUPPLY: [ ] – BOTT. [X] – TOP [X] – LUGS [ ] –MAIN BKR. [ ] – LTG. [X] – RECEPT. [ ] –POWER NEMA 1

TYPE: [ ] – 3P3W [X] – 3P4W [X] – WITH GRD. BAR PANEL 3SR5B MOUNTING [X] –SURFACE [ ] – FLUSH [ ] –COLUMN

MAINS: 225 A 10000 A.I.C. VOLTAGE: [X] –120 / 208 [ ] –277 / 480 [ ] 480 /

175 A. MAIN BKR. WITH: [ ] – SHUNT TRIP [ ] – ADJ. TRIP [ ] –G.F.P.

CKT. NO.	TRIP	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	CKT. NO.
1	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	2
3	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	4
5	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	6
7	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	8
9	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	10
11	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	12
13	20	1	OFFICE RECEPTACLE	1200						SPARE	1	20	14
15	20	1	OFFICE RECEPTACLE		1200					SPARE	1	20	16
17	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	18
19	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	20
21	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	22
23	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	24
25	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	26
27	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	28
29	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	30
31	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	32
33	20	1	OFFICE RECEPTACLE		1200			1200		OFFICE RECEPTACLE	1	20	34
35	20	1	OFFICE RECEPTACLE			1200			1200	OFFICE RECEPTACLE	1	20	36
37	20	1	OFFICE RECEPTACLE	1200			1200			OFFICE RECEPTACLE	1	20	38
39	20	1	SPARE					1200		OFFICE RECEPTACLE	1	20	40
41	20	1	SPARE						1200	OFFICE RECEPTACLE	1	20	42

PHASE TOTALS COL. #1	8400	7200	7200
PHASE TOTALS COL. #2	7200	7200	8400
PHASE TOTAL VA	15600	14400	15600

TOTAL 3 PHASE CONNECTED 46 KVA 127 AMPS

file panelsch_41_2b

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SECTION AND DETAIL KEY: NUMBER OF SECTION OR DETAIL — DRAWING ON WHICH SECTION OR DETAIL IS SHOWN OR TAKEN

THIS DOCUMENT CONTROLLED BY CHANGE CONTROL SYSTEM 4 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	ST	CV	EC	EE	EM	IE	M	PD	SE	AR
1				CERTIFIED FOR CONSTRUCTION – 12/20/01	DD	RL			[signature]	12/01	[signature]	12/01			[signature]	12/26/01	VGS	106009	12/20/01	RW	AW	BWJ	PD	BWJ	BWJ	--	BWJ	--	ED
0	–	–	–	CERTIFIED FOR CONSTRUCTION – 05/15/2001	DD	RL			CLG	10/1/01	JS	08/21/01			JRL	10/8/01	VGS	106009	5/15/01	SC	AW	WRS	RL	WRS	BWJ	--	WRS	--	WAS

REVISION OR ISSUE PURPOSE — REVISION APPROVALS — SQUAD CHECK

RPE: VICTOR G. STEFFEN, REGISTERED ENGINEER, AGRICULTURE COMMERCE, No. 00106009, STATE OF TENNESSEE, 12-17-01

REV. 1 DATE 12-17-01

DRAWING APPROVALS		
DSN	D.DANIELSON	5/15/01
DRW	S. BARNETT	5/15/01
CHK	R.LENNIG	5/15/01
DEPT		
PE	C.GARREN	10/1/01
PJ	J. STELLERN	8/21/01
REQ		
UTB	J.LAWSON	10/8/01

108031400-E8E-8600-A139

Knight/Jacobs Joint Venture, 701 Scarboro Road, MS 8253, Oak Ridge, TN 37830, 865-241-9433, fax 865-241-3400

KNIGHT Knight Advanced Technology, 4710 East Elwood, Suite #9, Phoenix, AZ 85040

UT-BATTELLE — Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC, Oak Ridge, Tennessee

PROJECT NAME: SPALLATION NEUTRON SOURCE

CENTRAL LAB AND OFFICE BUILDING PANEL SCHEDULES

1 3	48 E	49 X	50 X	PLANT 8	BLDG 8600	FL	SH. 1	OF 1	TYPE S	CLASS U
51 NC	52 NA		53		WBS 1.8.3.14		E9.21.45			REV 1

NEXT ASS'Y: FINAL ASS'Y:

AutoCAD

Date: 05/04/2001 Time: 11:51:29 Username: GARCIAG PHX-F_VOL2:PROJECTS\7000\700_CADD\TASK_28\740_PLOT\E9-21-45.DWG