NEXT ASS'Y | FINAL ASS'Y

PANEL B2EDA

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - LTG. [ ] - RECEPT. [X] -POWER NEMA 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | PANEL B2EDA | MOUNTING [X] -SURFACE [ ] - FLUSH [ ] -COLUMN
MAINS: 600 A 30000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 [ ] 480 /
600 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				600			6540						2
3	50	3	PANEL B2EA		600			3890		PANEL 1E1A	3	100	4
5						300			3630				6
7				6360			1390						8
9	100	3	PANEL B1E5A		4030			3180		PANEL 1E3A	3	30	10
11						4330			2290				12
13				3500			16667						14
15	100	3	PANEL 3E5A		1000			16667		B1UPS 50 KVA	3	80	16
17						1440			16667				18
19				5000			16667						20
21	225	3	PANEL 5EDA		5000			16667		B2UPS 50kVA	3	80	22
23						5000			16667				24
25				19584									26
27	400	3	3EMCCA		19584					SPACE			28
29						19584							30
31							10000						32
33								10000		B2ETA-30KVA	3	50	34
35									10000				36
37													38
39													40
41													42

	A	B	C
PHASE TOTALS COL. #1	35044	30214	30654
PHASE TOTALS COL. #2	51264	50404	49254
PHASE TOTAL VA	86308	80618	79908

TOTAL 3 PHASE CONNECTED 247 KVA 297 AMPS

file: panelsch_1_2b

PANEL B1SHOPDPA

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - LTG. [ ] - RECEPT. [X] -POWER NEMA 1
TYPE: [ ] - 3P3W [X] - 3P4W [x] - WITH GRD. BAR | PANEL B1SHOPDPA | MOUNTING [X] -SURFACE [ ] - FLUSH [ ] -COLUMN
MAINS: 1200 A 25000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 [ ] 480 /
800 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				10000			3300						2
3	100	3	PANEL B1MESHOP1		10000			3300		PANEL B1VACCUM1	3	100	4
5						10000			3300				6
7				13300			4320						8
9	100	3	PANEL B1MAGSHOP1		13300			4320		OVERHEAD ROLL UP DOOR	3	20	10
11						13300			4320				12
13				58000			4320						14
15	225	3	PANEL B1RFSHOP1		58000			4320		OVERHEAD ROLL UP DOOR	3	20	16
17						58000			4320				18
19				71000									20
21	400	3	PANEL B1PSUPPLY1		71000					SPARE	3	225	22
23						71000							24
25													26
27										SPARE	3	100	28
29													30
31													32
33													34
35													36
37													38
39													40
41													42

	A	B	C
PHASE TOTALS COL. #1	152300	152300	152300
PHASE TOTALS COL. #2	11940	11940	11940
PHASE TOTAL VA	164240	164240	164240

TOTAL 3 PHASE CONNECTED 493 KVA 593 AMPS

file panelsch_2_2b

PANEL B1DPK

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - LTG. [ ] - RECEPT. [X] -POWER NEMA 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | PANEL B1DPK | MOUNTING [X] -SURFACE [ ] - FLUSH [ ] -COLUMN
MAINS: 800 A 35000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 [ ] 480 /
600 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				50000									2
3	225	3	TRANSFORMER-B1TKA		50000					SPARE	3	100	4
5			150 kVA			50000							6
7				50000									8
9	225	3	TRNASFORMER-B1TKB		50000					SPARE	3	60	10
11			150 kVA			50000							12
13													14
15													16
17													18
19													20
21													22
23													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	100000	100000	100000
PHASE TOTALS COL. #2	0	0	0
PHASE TOTAL VA	100000	100000	100000

TOTAL 3 PHASE CONNECTED 300 KVA 361 AMPS

file panelsch_3_2b

ALL WORK WITHIN THIS AREA IS PART OF ALTERNATE BID 1C

PANEL 1LABDPA

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - LTG. [ ] - RECEPT. [X] -POWER NEMA 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | PANEL 1LABDPA | MOUNTING [X] -SURFACE [ ] - FLUSH [ ] -COLUMN
MAINS: 400 A 22000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 [X] 480 /
400 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				10000			10000						2
3	100	3	PANEL 1IONLAB1		10000			10000		PANEL 1PSUPPLY1	3	100	4
5						10000			10000				6
7				10000									8
9	100	3	PANEL 1MELAB1		10000					SPARE	3	60	10
11						10000							12
13				25000									14
15	100	3	TRANSFORMER 1LOWRFT1		25000					SPARE	3	100	16
17			75KVA			25000							18
19				10000									20
21	100	3	PANEL 1FOILLAB1		10000								22
23						10000							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	55000	55000	55000
PHASE TOTALS COL. #2	10000	10000	10000
PHASE TOTAL VA	65000	65000	65000

TOTAL 3 PHASE CONNECTED 195 KVA 235 AMPS

file panelsch_6_2b

PANEL B2DPA

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - LTG. [ ] - RECEPT. [X] -POWER NEMA 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | PANEL B2DPA | MOUNTING [X] -SURFACE [ ] - FLUSH [ ] -COLUMN
MAINS: 400 A 30000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 [ ] 480 /
400 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				1810			15000						2
3	100	3	PANEL B2L5A		2240			15000		TANSFORMER B2T5A	3	70	4
5						1520			15000	45KVA			6
7							9300						8
9	60	3	SPARE					9460		B2L1A	3	100	10
11									9450				12
13													14
15													16
17													18
19													20
21													22
23													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	1810	2240	1520
PHASE TOTALS COL. #2	24300	24460	24450
PHASE TOTAL VA	26110	26700	25970

TOTAL 3 PHASE CONNECTED 79 KVA 95 AMPS

file panelsch_7_2b

PANEL 2LABDPA

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - LTG. [ ] - RECEPT. [X] -POWER NEMA 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | PANEL 2LABDPA | MOUNTING [X] -SURFACE [ ] - FLUSH [ ] -COLUMN
MAINS: 800 A 22000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 [ ] 480 /
800 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				50000			50000						2
3	175	3	TRANSFORMER 2LABT1		50000			50000		TRANSFORMER 2LABT3	3	175	4
5			150KVA			50000			50000	150KVA			6
7				25000									8
9	225	3	PANEL 2VACUUMLAB1		25000								10
11						25000							12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37							55000						38
39								55000		LAB BUS DUCT A	3	400	40
41									55000				42

	A	B	C
PHASE TOTALS COL. #1	75000	75000	75000
PHASE TOTALS COL. #2	105000	105000	105000
PHASE TOTAL VA	180000	180000	180000

TOTAL 3 PHASE CONNECTED 540 KVA 650 AMPS

file panelsch_9_2b

ALL WORK WITHIN THIS AREA IS PART OF ALTERNATE BID 1D

PANEL 2LABDPC

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - LTG. [ ] - RECEPT. [X] -POWER NEMA 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | PANEL 2LABDPC | MOUNTING [X] -SURFACE [ ] - FLUSH [ ] -COLUMN
MAINS: 800 A 25000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 [ ] 480 /
600 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				50000									2
3	225	3	TRANSFORMER 2LABT2		50000								4
5			150KVA			50000							6
7													8
9													10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37							55000						38
39								55000		LAB BUS DUCT B	3	400	40
41									55000				42

	A	B	C
PHASE TOTALS COL. #1	50000	50000	50000
PHASE TOTALS COL. #2	55000	55000	55000
PHASE TOTAL VA	105000	105000	105000

TOTAL 3 PHASE CONNECTED 315 KVA 379 AMPS

file panelsch_139_2b

ALL WORK WITHIN THIS AREA IS PART OF ALTERNATE BID 1D

PANEL 5EA

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - LTG. [ ] - RECEPT. [X] -POWER NEMA 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | PANEL 5EA | MOUNTING [X] -SURFACE [ ] - FLUSH [ ] -COLUMN
MAINS: 100 A 10000 A.I.C. | VOLTAGE: [X] -120 / 208 [ ] -277 / 480 [ ] 480 /
50 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	ELEVATION P1-P2 CAB LTG.	300			300			ELEVATION P3-P4 CAB LTG.	1	2	2
3	20	1	SPARE							SPARE	1	2	4
5	20	1	SPARE							SPARE	1	2	6
7	20	1	SPARE							SPARE	1	2	8
9	20	1	SPARE							SPARE	1	2	10
11			SPARE							SPARE			12
13			SPACE							SPACE			14
15			SPACE							SPACE			16
17			SPACE							SPACE			18
19			SPACE							SPACE			20
21			SPACE							SPACE			22
23			SPACE							SPACE			24
25			SPACE							SPACE			26
27			SPACE							SPACE			28
29			SPACE							SPACE			30
31													32
33													34
35													36
37													38
39													40
41													42

	A	B	C
PHASE TOTALS COL. #1	300	0	0
PHASE TOTALS COL. #2	300	0	0
PHASE TOTAL VA	600	0	0

TOTAL 3 PHASE CONNECTED 1 KVA 1 AMPS

file panelsch_163_2b

PANEL 3LABDPC

SUPPLY: [ ] - BOTT. [X] - TOP [ ] - LUGS [X] -MAIN BKR. | [ ] - LTG. [ ] - RECEPT. [X] -POWER NEMA 1
TYPE: [ ] - 3P3W [X] - 3P4W [X] - WITH GRD. BAR | PANEL 3LABDPC | MOUNTING [X] -SURFACE [ ] - FLUSH [ ] -COLUMN
MAINS: 800 A 22000 A.I.C. | VOLTAGE: [ ] -120 / 208 [X] -277 / 480 [ ] 480 /
600 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				50000									2
3	225	3	TRANSFORMER 3LABT2		50000								4
5			150KVA			50000							6
7													8
9													10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37							55000						38
39								55000		LAB BUS DUCT D	3	400	40
41									55000				42

	A	B	C
PHASE TOTALS COL. #1	50000	50000	50000
PHASE TOTALS COL. #2	55000	55000	55000
PHASE TOTAL VA	105000	105000	105000

TOTAL 3 PHASE CONNECTED 315 KVA 379 AMPS

file panelsch_5_2b

ALL WORK WITHIN THIS AREA IS PART OF ALTERNATE BID 1A

NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE AS TO THE ACCURACY, COMPLETENESS OR USEFULNESS OF THE INFORMATION OR STATEMENTS CONTAINED IN THESE DRAWINGS, OR THAT THE USE OR DISCLOSURE OF ANY INFORMATION, APPARATUS, METHOD, OR PROCESS DISCLOSED IN THESE DRAWINGS MAY NOT INFRINGE PRIVATE RIGHTS OF OTHERS. NO LIABILITY IS ASSUMED WITH RESPECT TO THE USE OF, OR FOR DAMAGES RESULTING FROM THE USE OF ANY INFORMATION, APPARATUS, METHOD, OR PROCESS DISCLOSED IN THESE DRAWINGS. DRAWINGS MADE AVAILABLE FOR INFORMATION TO BIDDER ARE NOT TO BE USED FOR OTHER PURPOSES AND ARE TO BE RETURNED UPON REQUEST OF THE FORWARDING CONTRACTOR.

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]	12/6/01	[signature]	12/01			[signature]	12/20/01	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: [seal: VICTOR G. STEFFY, REGISTERED ENGINEER, AGRICULTURE, COMMERCE, No. 00106009, STATE OF TENNESSEE] [signature] 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-A134

Knight/Jacobs SNS
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	48	49	50	PLANT	BLDG	FL	SH.	OF	TYPE	CLASS
3	E	X	X	8	8600		1	1	S	U
51	52	53			WBS					REV
NC	NA				1.8.3.14	E9.21.40				1

AutoCAD

Date: 11/29/2001 Time: 17:56:35
Username: BROWNJL
PHX-F_VOL2:PROJECTS\7000\700_CADD\TASK_28\740_PLOT\E9-21-40.DWG