GENERAL NOTES

1. ALL PANELS SHOWN 84 CIRCUIT SHALL CONSIST OF THE FOLLOWING: FIRST SECTION WITH 42 POLES, MAIN BREAKER AND FEED THROUGH LUGS; SECOND SECTION WITH 42 POLES AND MAIN LUGS ONLY OF SAME AMPACITY OF FIRST SECTION.

Branch Panel: 1N-PL1

Location: LER L002B **Supply From:** 1N-DL1 **Mounting:** Surface **Enclosure:** Type 1
Volts: 120/208 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: 10,000 **Mains Type:** Copper **Mains Rating:** 225 A **MCB Rating:** 150 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	Receptacle LER-2 L002B-2	20 A	1	360 W	1600					1	20 A	Receptacle LER-2 L002B-2	2
3	Receptacle LER-2 L002B-2	20 A	1			10800	90 W			2	20 A	Receptacle LER-2 L002B-2	4
5	Receptacle LER-2 L002B-2	20 A	2					90 W	90 W	--	--	--	6
7	--	--	--	90 W	0 W					1	20 A	Spare	8
9	Receptacle LER-2 L002B-2	20 A	2			90 W	0 W			1	20 A	Spare	10
11	--	--	--					90 W	0 W	1	20 A	Spare	12
13	Spare	20 A	1	0 W	0 W					1	20 A	Spare	14
15	Space	--	--			0 W	0 W			1	20 A	Spare	16
17	Space	--	--					0 W	0 W	--	--	Space	18
19	Space	--	--	0 W	0 W					--	--	Space	20
21	Space	--	--			0 W	0 W			--	--	Space	22
23	Space	--	--					0 W	0 W	--	--	Space	24
25	Space	--	--	0 W	0 W					--	--	Space	26
27	Space	--	--			0 W	0 W			--	--	Space	28
29	Space	--	--					0 W	0 W	--	--	Space	30
31	Space	--	--	0 W	0 W					--	--	Space	32
33	Space	--	--			0 W	0 W			--	--	Space	34
35	Space	--	--					0 W	0 W	--	--	Space	36
37	Space	--	--	0 W	0 W					--	--	Space	38
39	Space	--	--			0 W	0 W			--	--	Space	40
41	Space	--	--					0 W	0 W	--	--	Space	42
			Total Load:	2050 W		10980 W		270 W					
			Total Amps:	19 A		94 A		2 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Receptacle	13300 W	87.59%	11650 W		
				Total Conn. Load:	13300 W
				Total Est. Demand:	11650 W
				Total Conn. Current:	37 A
				Total Est. Demand Current:	32 A

Notes:

Branch Panel: 1N-PL2

Location: LER L002B **Supply From:** 1N-DL1 **Mounting:** Surface **Enclosure:** Type 1
Volts: 120/208 Wye **wt:** 3 **Wires:** 4
A.I.C. Rating: 10,000 **Mains Type:** Copper **Mains Rating:** 225 A **MCB Rating:** 150 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	Receptacle SG015-2 L009-2	20 A	1	2220	680 W					1	20 A	Receptacle SG015-2 L009-2	2
3	Receptacle SG015-2 L009-2	20 A	1			1000	1360			1	20 A	Receptacle SG015-2 L009-2	4
5	Receptacle SG015-2 L009-2	20 A	2					90 W	1000	1	20 A	Receptacle SG015-2 L009-2	6
7	--	--	--	90 W	500 W					2	20 A	Receptacle SG015-2 L009-2	8
9	Receptacle SG015-2 L009-2	20 A	1			1000	500 W			--	--	--	10
11	Receptacle SG015-2 L009-2	20 A	1					1000	500 W	2	20 A	Receptacle SG015-2 L009-2	12
13	Receptacle SG015-2 L009-2	20 A	1	1000	500 W					--	--	--	14
15	Receptacle SG015-2 L009-2	20 A	1			1000	1000			1	20 A	Receptacle SG015-2 L009-2	16
17	Spare	20 A	1					0 W	1000	1	20 A	Receptacle SG015-2 L009-2	18
19	Receptacle SG015-2 L009-2	20 A	2	500 W	1000					1	20 A	Receptacle SG015-2 L009-2	20
21	--	--	--			500 W	500 W			2	20 A	Receptacle SG015-2 L009-2	22
23	Receptacle SG015-2 L009-2	20 A	1					1000	500 W	--	--	--	24
25	Receptacle SG015-2 L009-2	20 A	2	500 W	500 W					1	20 A	Receptacle SG015-2 L009-2	26
27	--	--	--			500 W	1000			1	20 A	Receptacle SG015-2 L009-2	28
29	Receptacle SG015-2 L009-2	20 A	2					250 W	1000	1	20 A	Receptacle SG015-2 L009-2	30
31	--	--	--	250 W	1000					1	20 A	Receptacle SG015-2 L009-2	32
33	Receptacle SG015-2 L009-2	20 A	2			500 W	1000			1	20 A	Receptacle SG015-2 L009-2	34
35	--	--	--					500 W	1000	1	20 A	Receptacle SG015-2 L009-2	36
37	Receptacle SG015-2 L009-2	20 A	1	1000	1000					1	20 A	Receptacle SG015-2 L009-2	38
39	Receptacle SG015-2 L009-2	20 A	2			500 W	1000			1	20 A	Receptacle SG015-2 L009-2	40
41	--	--	--					500 W	1000	1	20 A	Receptacle SG015-2 L009-2	42
43	Receptacle SG015-2 L009-2	20 A	2	500 W	1000					1	20 A	Receptacle SG015-2 L009-2	44
45	--	--	--			500 W	250 W			2	20 A	Receptacle SG015-2 L009-2	46
47	Receptacle SG015-2 L009-2	20 A	1					500 W	250 W	--	--	--	48
49	Receptacle SG016-1 L006-1	20 A	1	500 W	500 W					1	20 A	Receptacle SG016-1 L006-1	50
51	Receptacle SG016-1 L006-1	20 A	1			500 W	500 W			1	20 A	Receptacle SG016-1 L006-1	52
53	Receptacle SG016-1 L006-1	20 A	1					500 W	500 W	1	20 A	Receptacle SG016-1 L006-1	54
55	Receptacle SG016-1 L006-1	20 A	1	500 W	500 W					1	20 A	Receptacle SG016-1 L006-1	56
57	Spare	20 A	1			0 W	0 W			1	20 A	Spare	58
59	Spare	20 A	1					0 W	0 W	1	20 A	Spare	60
61	Spare	20 A	1	0 W	0 W					1	20 A	Spare	62
63	Spare	20 A	1			0 W	0 W			1	20 A	Spare	64
65	Spare	20 A	1					0 W	0 W	1	20 A	Spare	66
67	Spare	20 A	1	0 W	0 W					--	--	Space	68
69	Space	--	--			0 W	0 W			--	--	Space	70
71	Space	--	--					0 W	0 W	--	--	Space	72
73	Space	--	--	0 W	0 W					--	--	Space	74
75	Space	--	--			0 W	0 W			--	--	Space	76
77	Space	--	--					0 W	0 W	--	--	Space	78
79	Space	--	--	0 W	0 W					--	--	Space	80
81	Space	--	--			0 W	0 W			--	--	Space	82
83	Space	--	--					0 W	0 W	--	--	Space	84
			Total Load:	14240 W		13110 W		11090 W					
			Total Amps:	121 A		112 A		92 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Receptacle	38440 W	63.01%	24220 W		
				Total Conn. Load:	38440 W
				Total Est. Demand:	24220 W
				Total Conn. Current:	107 A
				Total Est. Demand Current:	67 A

Notes: 200% Neutral

Branch Panel: 1N-PL3

Location: LER L002B **Supply From:** 1N-DL1 **Mounting:** Surface **Enclosure:** Type 1
Volts: 120/208 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: 10,000 **Mains Type:** Copper **Mains Rating:** 225 A **MCB Rating:** 150 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	Receptacle SG019-2 L010-2	20 A	1	540 W	720 W					1	20 A	Receptacle SG019-2 L010-2	2
3	Receptacle SG019-2 L010-2	20 A	1			540 W	90 W			2	20 A	Receptacle SG019-2 L010-2	4
5	Receptacle SG019-2 L010-2	20 A	2					90 W	90 W	--	--	--	6
7	--	--	--	90 W	90 W					2	20 A	Receptacle SG019-2 L010-2	8
9	Receptacle SG019-2 L010-2	20 A	2			90 W	90 W			--	--	--	10
11	--	--	--					90 W	500 W	1	20 A	Power SG019-2 L010-2	12
13	Power SG019-2 L010-2	20 A	1	500 W	500 W					1	20 A	Power SG019-2 L010-2	14
15	Power SG019-2 L010-2	20 A	1			500 W	500 W			1	20 A	Power SG019-2 L010-2	16
17	Power SG019-2 L010-2	20 A	1					500 W	1500	2	20 A	Receptacle SG019-2 L010-2	18
19	Receptacle SG019-2 L010-2	20 A	2	1500	1500					--	--	--	20
21	--	--	--			1500	1500			2	20 A	Receptacle SG019-2 L010-2	22
23	Receptacle SG019-2 L010-2	20 A	1					180 W	1500	--	--	--	24
25	Spare	20 A	1	0 W	0 W					1	20 A	Spare	26
27	Spare	20 A	1			0 W	0 W			1	20 A	Spare	28
29	Spare	20 A	1					0 W	0 W	1	20 A	Spare	30
31	Spare	20 A	1	0 W	0 W					1	20 A	Spare	32
33	Spare	20 A	1			0 W	0 W			1	20 A	Spare	34
35	Space	--	--					0 W	0 W	--	--	Space	36
37	Space	--	--	0 W	0 W					--	--	Space	38
39	Space	--	--			0 W	0 W			--	--	Space	40
41	Space	--	--					0 W	0 W	--	--	Space	42
			Total Load:	5440 W		4810 W		4450 W					
			Total Amps:	46 A		41 A		37 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Power	3000 W	100.00%	3000 W		
Receptacle	11700 W	92.74%	10850 W	**Total Conn. Load:**	14700 W
				Total Est. Demand:	13850 W
				Total Conn. Current:	41 A
				Total Est. Demand Current:	38 A

Notes: 200% Neutral

Branch Panel: 1N-PL4

Location: LER L002B **Supply From:** 1N-DL1 **Mounting:** Surface **Enclosure:** Type 1
Volts: 120/208 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: 10,000 **Mains Type:** Copper **Mains Rating:** 225 A **MCB Rating:** 150 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	Receptacle SG018-2 L012-2	20 A	1	360 W	180 W					1	20 A	Receptacle SG018-2 L012-2	2
3	Receptacle SG017-2 L013-2	20 A	1			180 W	1320			1	20 A	Receptacle SG017-2 L013-2	4
5	Receptacle SG017-2 L013-2	20 A	1					1320	90 W	2	20 A	Receptacle SG017-2 L013-2	6
7	Receptacle SG018-2 L012-2	20 A	1	180 W	90 W					--	--	--	8
9	Receptacle SG021-2 LOO8-2	20 A	1			180 W	720 W			1	20 A	Receptacle SG022-2 L007-2	10
11	Receptacle SG021-4 LOO8-4	20 A	1					500 W	180 W	1	20 A	Receptacle Room LOO8-2, LOO8-1	12
13	Receptacle SG021-4 LOO8-4	20 A	1	500 W	500 W					1	20 A	Receptacle SG021-4 LOO8-4	14
15	Receptacle SG021-4 LOO8-4	20 A	1			500 W	500 W			1	20 A	Receptacle SG021-4 LOO8-4	16
17	Receptacle SG021-4 LOO8-4	20 A	1					500 W	500 W	1	20 A	Receptacle SG021-4 LOO8-4	18
19	Receptacle SG021-4 LOO8-4	20 A	1	500 W	500 W					1	20 A	Receptacle SG021-4 LOO8-4	20
21	Receptacle SG018-2 L012-2	20 A	1			180 W	500 W			1	20 A	Receptacle SG021-4 LOO8-4	22
23	Receptacle SG017-2 L013-2	20 A	1					500 W	500 W	1	20 A	Receptacle SG017-2 L013-2	24
25	Receptacle SG017-2 L013-2	20 A	1	500 W	500 W					1	20 A	Receptacle SG017-2 L013-2	26
27	Spare	20 A	1			0 W	0 W			1	20 A	Spare	28
29	Spare	20 A	1					0 W	0 W	1	20 A	Spare	30
31	Spare	20 A	1	0 W	0 W					1	20 A	Spare	32
33	Spare	20 A	1			0 W	0 W			--	--	Space	34
35	Space	--	--					0 W	0 W	--	--	Space	36
37	Space	--	--	0 W	0 W					--	--	Space	38
39	Space	--	--			0 W	0 W			--	--	Space	40
41	Space	--	--					0 W	0 W	--	--	Space	42
			Total Load:	3810 W		4080 W		4090 W					
			Total Amps:	32 A		34 A		34 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Receptacle	11980 W	91.74%	10990 W		
				Total Conn. Load:	11980 W
				Total Est. Demand:	10990 W
				Total Conn. Current:	33 A
				Total Est. Demand Current:	31 A

Notes:

Branch Panel: 1N-PL5

Location: LER L002A **Supply From:** 1N-DL1 **Mounting:** Surface **Enclosure:** Type 1
Volts: 120/208 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: 10,000 **Mains Type:** Copper **Mains Rating:** 225 A **MCB Rating:** 150 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	Receptacle SG009-2 L016-2	20 A	1	360 W	500 W					1	20 A	Receptacle SG009-1 L016-1	2
3	Receptacle SG009-1 L016-1	20 A	1			500 W	500 W			1	20 A	Receptacle SG009-1 L016-1	4
5	Receptacle SG009-1 L016-1	20 A	1					500 W	500 W	1	20 A	Receptacle SG009-1 L016-1	6
7	Receptacle SG009-1 L016-1	20 A	1	500 W	500 W					1	20 A	Receptacle SG009-1 L016-1	8
9	Receptacle SG009-1 L016-1	20 A	1			500 W	1650			1	20 A	Receptacle SG009-2 L016-2	10
11	Receptacle SG009-1 L016-1	20 A	1					500 W	500 W	1	20 A	Receptacle SG009-1 L016-1	12
13	Receptacle SG009-1 L016-1	20 A	1	500 W	500 W					1	20 A	Receptacle SG009-1 L016-1	14
15	Receptacle SG009-1 L016-1	20 A	1			500 W	500 W			1	20 A	Receptacle SG009-1 L016-1	16
17	Receptacle SG009-1 L016-1	20 A	1					500 W	500 W	1	20 A	Receptacle SG009-1 L016-1	18
19	Receptacle SG003B SG003A-1 LO15-1	20 A	1	500 W	500 W					1	20 A	Receptacle SG004-1 L014-1	20
21	Receptacle SG003B SG003A-1 LO15-1	20 A	1			500 W	500 W			1	20 A	Receptacle SG004-1 L014-1	22
23	Receptacle SG003B SG003A-1 LO15-1	20 A	1					500 W	500 W	1	20 A	Receptacle SG004-1 L014-1	24
25	Receptacle SG009-2 L016-2	20 A	1	180 W	180 W					1	20 A	Receptacle SG009-2 L016-2	26
27	Receptacle SG003B SG003A-1 LO15-1	20 A	1			500 W	900 W			1	20 A	Receptacle SG004-2 L014-2	28
29	Receptacle SG009-2 L016-2	20 A	2					90 W	1560	1	20 A	Receptacle SG009-2 L016-2	30
31	--	--	--	90 W	540 W					1	20 A	Receptacle SG009-2 L016-2	32
33	Receptacle SG004-2 L014-2	20 A	2			90 W	360 W			1	20 A	Receptacle SG003B SG003A-2 LO15-2	34
35	--	--	--					90 W	540 W	1	20 A	Receptacle SG003B SG003A-2 LO15-2	36
37	Receptacle SG004-2 L014-2	20 A	1	1488	1488					1	20 A	Receptacle SG003B SG003A-2 LO15-2	38
39	Receptacle SG003B SG003A-2 LO15-2	20 A	1			1488	90 W			2	20 A	Receptacle SG003B SG003A-2 LO15-2	40
41	Receptacle SG003B SG003A-2 LO15-2	20 A	1					360 W	90 W	--	--	--	42
43	Receptacle SG003B SG003A-2 LO15-2	20 A	2	90 W	90 W					2	20 A	Receptacle SG003B SG003A-2 LO15-2	44
45	--	--	--			90 W	90 W			--	--	--	46
47	Receptacle SG003B SG003A-1 LO15-1	20 A	1					500 W	500 W	1	20 A	Receptacle SG003B SG003A-1 LO15-1	48
49	Receptacle SG003B SG003A-1 LO15-1	20 A	1	500 W	500 W					1	20 A	Receptacle SG003B SG003A-1 LO15-1	50
51	Receptacle SG004-1 L014-1	20 A	1			500 W	500 W			1	20 A	Receptacle SG004-1 L014-1	52
53	Receptacle SG004-1 L014-1	20 A	1					500 W	0 W	1	20 A	Spare	54
55	Spare	20 A	1	0 W	0 W					1	20 A	Spare	56
57	Spare	20 A	1			0 W	0 W			--	--	Space	58
59	Spare	20 A	1					0 W	0 W	--	--	Space	60
61	Spare	20 A	1	0 W	0 W					--	--	Space	62
63	Space	--	--			0 W	0 W			--	--	Space	64
65	Space	--	--					0 W	0 W	--	--	Space	66
67	Space	--	--	0 W	0 W					--	--	Space	68
69	Space	--	--			0 W	0 W			--	--	Space	70
71	Space	--	--					0 W	0 W	--	--	Space	72
73	Space	--	--	0 W	0 W					--	--	Space	74
75	Space	--	--			0 W	0 W			--	--	Space	76
77	Space	--	--					0 W	0 W	--	--	Space	78
79	Space	--	--	0 W	0 W					--	--	Space	80
81	Space	--	--			0 W	0 W			--	--	Space	82
83	Space	--	--					0 W	0 W	--	--	Space	84
			Total Load:	9006 W		9758 W		8230 W					
			Total Amps:	76 A		82 A		69 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Receptacle	26994 W	68.52%	18497 W		
				Total Conn. Load:	26994 W
				Total Est. Demand:	18497 W
				Total Conn. Current:	75 A
				Total Est. Demand Current:	51 A

Notes: 200% Neutral

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SEALS AND SIGNATURES

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REV. NO.	DESCRIPTION	BY	APVD	DATE
	ISSUED FOR CONSTRUCTION			07/03/12

Argonne NATIONAL LABORATORY

FMS
Facilities Management Services

PROJECT TITLE: ADVANCED PROTEIN CRYSTALLIZATION FACILITY, ARGONNE NATIONAL LABORATORY

PROJECT NO: 08541-00

DRAWING TITLE: POWER PANEL SCHEDULES

DESIGNED: DLW	A/E CADD FILE: E7.0.2	FACILITY NO(S)
DRAWN: DLW	A/E DWG. NO.: E7.0.2	
CHECKED: BRB	CAD NO:	
PROJECT MANAGER: ANL - JESSE ADAMS, DATE - 04/26/11	DWG STATE / BIND ORDER	
FACILITY DOCUMENT NUMBER: J446-101-W- E7.0.2		REV. NO.

Plot Date: 6/29/2012 1:18:20 PM