Entergy

125V DC STATION BATTERY "A" SIZING and VOLTAGE DROP
JAF-CALC-02609 Rev. 2

LOC/ w/LOOP

Computed by: A. Barton
Checked by: B. Marks

LOCA w/ LOOP — Load Voltage & Current (Seconds; 900 RPM at 5.5th)

Source Panel	Load	Start Time	Stop Time	3.56th Voltage	3.56th Current	3.58th Voltage	3.58th Current	3.6th Voltage	3.6th Current	3.9th Voltage	3.9th Current	4th Voltage	4th Current	4.4th Voltage	4.4th Current	5th Voltage	5th Current	5.5th Voltage	5.5th Current	6th Voltage	6th Current	6.2nd Voltage	6.2nd Current	6.3rd Voltage	6.3rd Current	6.54th Voltage	6.54th Current	6.6th Voltage	6.6th Current	7th Voltage	7th Current	7.2nd Voltage	7.2nd Current	7.3rd Voltage	7.3rd Current	7.4th Voltage	7.4th Current	8.2nd Voltage	8.2nd Current	8.3rd Voltage	8.3rd Current	8.4rd Voltage	8.4rd Current	8.5th Voltage	8.5th Current	8.9th Voltage	8.9th Current	9th Voltage	9th Current	9.2nd Voltage	9.2nd Current	10th Voltage	10th Current	10.2nd Voltage	10.2nd Current	11th Voltage	11th Current	11.2nd Voltage	11.2nd Current	12.2nd Voltage	12.2nd Current	13.1st Voltage	13.1st Current	13.2nd Voltage	13.2nd Current
BATTERY 71SB-1				113.22	638.39	113.24	636.72	112.57	702.75	112.57	702.75	112.58	702.04	113.51	612.60	113.86	581.04	113.86	530.21	114.04	565.99	114.29	546.25	114.29	546.25	114.45	533.18	114.48	531.31	115.31	458.91	115.34	454.49	115.99	364.66	115.27	464.21	115.26	466.21	115.26	466.13	114.74	510.54	115.44	441.44	115.44	441.44	115.24	469.18	115.24	469.16	115.53	428.66	115.73	400.52	115.73	400.54	115.73	400.52	115.73	400.52	115.98	366.79	115.99	364.23
71BCB-2A				111.27	638.39	111.29	636.72	110.42	702.75	110.42	702.75	110.43	702.04	111.64	612.60	112.09	581.04	112.24	530.21	112.31	565.99	112.62	546.25	112.62	546.25	112.82	533.18	112.85	531.31	113.91	458.91	113.95	454.49	114.88	364.66	113.85	464.21	113.83	466.21	113.83	466.13	113.18	510.54	114.09	441.44	114.09	441.44	113.80	469.18	113.80	469.16	114.22	428.66	114.51	400.52	114.51	400.54	114.51	400.52	114.51	400.52	114.86	366.79	114.88	364.23
A02	71LPERDC1 Emer Ltg Pnl	0.1st sec	7.2nd sec	107.38	16.09	107.41	16.09	106.57	15.96	106.57	15.96	106.58	15.97	107.74	16.14	108.18	16.20	108.32	16.23	108.39	16.24	108.69	16.28	108.69	16.28	108.88	16.31	108.91	16.32	109.93	16.47	109.97	16.47																														
A03	71LPERDC2 Emer Ltg Pnl	0.1st sec	7.2nd sec	106.35	9.01	106.37	9.01	105.54	8.94	105.54	8.94	105.55	8.94	106.70	9.04	107.13	9.07	107.28	9.09	107.34	9.09	107.64	9.12	107.64	9.12	107.84	9.13	107.86	9.14	108.87	9.22	108.92	9.23																														
A04	Panel 71DC-A4			107.96	54.17	108.09	52.43	103.01	121.63	103.01	121.63	103.01	121.63	104.20	121.94	104.64	122.05	104.80	122.09	104.86	122.11	106.56	99.31	106.56	99.31	107.24	91.58	107.38	89.77	112.75	19.04	112.22	28.41	112.80	34.12	105.83	131.54	105.84	131.01	105.85	130.94	102.57	173.90	107.57	106.80	107.57	106.80	107.29	106.72	107.29	106.72	110.14	66.95	110.43	66.79	110.43	66.79	110.43	66.80	110.43	66.80	112.79	33.80	112.53	38.52
A05	71LPEADC1 Emer Ltg Pnl	0.1st sec	7.2nd sec	105.11	17.27	105.14	17.28	104.31	17.14	104.31	17.14	104.32	17.14	105.46	17.33	105.89	17.40	106.03	17.42	106.09	17.43	106.39	17.48	106.39	17.48	106.58	17.51	106.61	17.52	107.61	17.68	107.65	17.69																														
A06	71BMCC-3			109.22	15.75	109.24	15.74	108.36	15.86	108.36	15.86	108.37	15.86	109.60	15.70	110.06	15.63	110.21	15.61	110.28	15.61	110.59	15.56	110.59	15.56	110.80	15.54	110.83	15.53	111.91	15.39	111.95	15.39	112.89	15.27	111.85	15.40	111.83	15.40	111.83	15.40	111.16	15.49	112.09	15.37	112.09	15.37	111.80	15.41	111.80	15.41	112.22	15.35	112.52	15.32	112.52	15.32	112.52	15.32	112.52	15.32	112.87	15.27	113.84	8.03
A07	71LPESWDC1 Emer Ltg Pnl	0.1st sec	7.2nd sec	109.27	6.79	109.29	6.79	108.44	6.74	108.44	6.74	108.45	6.74	109.63	6.81	110.07	6.84	110.23	6.85	110.29	6.85	110.59	6.87	110.59	6.87	110.79	6.89	110.82	6.89	111.86	6.95	111.90	6.95																														
B02	Panel 71DC-A1			110.73	10.50	110.76	10.50	109.89	10.44	109.89	10.44	109.90	10.44	111.10	10.53	111.55	10.56	109.64	190.06	111.77	10.57	112.08	10.60	112.08	10.60	112.28	10.60	112.31	10.62	113.36	10.69	113.41	10.70	114.33	10.77	113.31	10.69	113.29	10.69	113.29	10.69	112.64	10.64	113.54	10.71	113.54	10.71	113.26	10.69	113.26	10.69	113.67	10.72	113.96	10.74	113.96	10.74	113.96	10.74	113.96	10.74	114.31	10.76	114.33	10.77
B03	Panel 71DC-A2			108.10	50.75	108.12	50.76	107.27	50.43	107.27	50.43	109.51	14.67	110.72	14.74	111.17	14.76	108.32	16.23	109.59	43.54	109.98	42.21	109.98	42.21	110.18	42.27	110.21	42.28	111.24	42.60	112.41	24.66	113.34	24.63	112.31	24.66	112.29	24.67	112.29	24.67	111.64	24.69	112.55	24.66	112.55	24.66	112.26	24.67	112.26	24.67	112.68	24.65	112.97	24.64	112.97	24.64	112.97	24.64	112.97	24.64	113.32	24.63	113.34	24.63
B04	Panel 71DC-A3			110.23	38.40	110.25	38.41	109.39	38.13	109.39	38.13	109.40	38.14	110.59	38.52	111.89	7.22	108.30	7.22	112.11	7.23	112.29	12.26	112.29	12.26	112.63	7.25	112.66	7.25	113.71	7.29	113.76	7.29	114.68	7.33	113.66	7.29	113.64	7.29	113.64	7.29	112.98	7.26	113.89	7.30	113.89	7.30	113.60	7.29	113.60	7.29	114.02	7.30	114.31	7.31	114.31	7.31	114.31	7.31	114.31	7.31	114.66	7.33	114.68	7.33
B05	71BMCC-1			107.32	80.72	107.34	80.70	106.47	80.66	106.47	80.66	104.77	115.68	105.95	116.12	106.39	116.32	112.24	0.02	108.75	72.70	109.07	72.47	109.07	72.47	109.28	72.35	109.31	72.31	110.40	71.60	110.45	71.57	111.40	70.98	110.35	71.65	110.33	71.65	110.33	71.65	109.65	72.09	110.59	71.48	110.59	71.48	108.96	98.87	108.96	98.85	109.38	98.75	111.02	71.20	111.02	71.22	111.02	71.20	111.02	71.20	111.38	70.97	111.41	70.98
B06	71LPE1 Emer Ltg Pnl	0.1st sec	7.2nd sec	109.05	10.71	109.08	10.71	108.23	10.63	108.23	10.63	108.23	10.63	109.41	10.74	109.86	10.79	106.03	17.42	110.07	10.81	110.38	10.84	110.38	10.84	110.58	10.86	110.61	10.86	111.64	10.96	107.65	17.69																														
C01	Panel 71DC-A5			108.08	35.32	108.10	35.31	107.22	35.49	107.22	35.49	107.22	35.49	108.45	35.24	108.91	35.16	112.10	1.12	109.13	35.11	109.45	35.05	109.45	35.05	109.66	35.02	109.69	35.01	110.76	34.81	110.81	34.80	114.04	9.25	113.02	9.19	113.00	9.18	113.00	9.18	112.35	9.15	113.26	9.20	113.26	9.20	112.97	9.18	112.97	9.18	113.39	9.21	113.67	9.23	113.67	9.23	113.67	9.23	113.67	9.23	114.02	9.25	114.05	9.25
C03	71UPS-1	0.1st sec	120 min	106.68	128.18	106.70	128.21	105.87	127.21	105.87	127.21	105.88	127.22	108.22	95.36	108.69	94.95	110.23	6.85	108.92	94.75	109.24	94.47	109.24	94.47	109.45	94.29	109.48	94.26	110.57	93.34	110.61	93.30	111.57	92.50	110.51	93.38	110.49	93.40	110.49	93.40	109.82	93.98	110.75	93.18	110.75	93.18	110.46	93.43	110.46	93.43	110.89	93.07	111.19	92.82	111.19	92.82	111.19	92.82	111.19	92.82	111.54	92.52	111.57	92.50
D01	31P-7A RFPT Oil Pump Motor	15th sec	120 min																																																														
	31P-7A RFPT Oil Pump Control	15th sec	120 min																																																													
	31P-7A Continuous Control	0 sec	15th sec	111.24	0.23	111.26	0.23	110.40	0.23	110.40	0.23	110.40	0.23	111.61	0.23	112.06	0.23	112.22	0.23	112.28	0.23	112.59	0.23	112.59	0.23	112.80	0.23	112.82	0.23	113.88	0.24	113.93	0.24	114.85	0.24	113.83	0.24	113.80	0.24	113.81	0.24	113.15	0.24	114.06	0.24	114.06	0.24	113.77	0.24	113.77	0.24	114.19	0.24	114.48	0.24	114.48	0.24	114.48	0.24	114.48	0.24	114.83	0.24	114.85	0.24
D02	94P-13 Seal Oil Pump Motor	0.1st sec	120 min	96.89	144.24	96.91	144.27	96.15	143.15	96.15	143.15	96.16	143.16	103.28	83.83	103.77	83.43	103.94	83.30	104.01	83.24	104.35	82.97	104.35	82.97	104.57	82.80	104.60	82.77	105.74	81.88	108.99	79.44	109.96	78.74	108.88	79.52	105.66	81.94	105.66	81.94	104.95	82.49	105.94	81.73	105.94	81.73	105.63	81.97	105.63	81.96	106.08	81.62	106.40	81.38	106.40	81.38	106.40	81.38	106.40	81.38	106.77	81.09	106.80	81.07
	94P-13 Seal Oil Pump Control	0.1st sec	120 min	108.52	1.30	108.54	1.30	107.69	1.29	107.69	1.29	107.70	1.29	108.88	1.30	109.32	1.31	109.47	1.31	109.53	1.31	109.83	1.31	109.83	1.31	110.03	1.32	110.06	1.32	111.09	1.33	111.14	1.33	112.04	1.34	111.04	1.33	111.02	1.33	111.02	1.33	110.38	1.32	111.27	1.33	111.27	1.33	110.99	1.33	110.99	1.33	111.39	1.33	111.68	1.34	111.68	1.34	111.68	1.34	111.68	1.34	112.02	1.34	112.04	1.34
	94P-13 Continuous Control	0 sec	0.1st sec																																																														
N/A	Continuous control	0 sec	120 min	111.27	18.97	111.29	18.98	110.42	18.83	110.42	18.83	110.43	18.83	111.64	19.04	112.09	19.11	112.24	19.14	112.31	19.15	112.62	19.20	112.62	19.20	112.82	19.24	112.85	19.24	113.91	19.42	113.43	19.34	114.35	19.50	113.33	19.33	113.83	19.41	113.83	19.41	113.18	19.30	114.09	19.45	114.09	19.45	113.80	19.41	113.80	19.41	114.22	19.48	114.51	19.53	114.51	19.53	114.51	19.53	114.51	19.53	114.86	19.59	114.88	19.59
71DC-A1				110.73	10.50	110.76	10.50	109.89	10.44	109.89	10.44	109.90	10.44	111.10	10.53	111.55	10.56	111.70	10.56	111.77	10.57	112.08	10.60	112.08	10.60	112.28	10.60	112.31	10.62	113.36	10.69	113.41	10.70	114.33	10.77	113.31	10.69	113.29	10.69	113.29	10.69	112.64	10.64	113.54	10.71	113.54	10.71	113.26	10.69	113.26	10.69	113.67	10.72	113.96	10.74	113.96	10.74	113.96	10.74	113.96	10.74	114.31	10.76	114.33	10.77
02	1UPRN07 Unit & NSS Transf BU Prot	0.1 sec	1 min	106.27	9.15	106.29	9.16	105.46	9.08	105.46	9.08	105.47	9.08	106.62	9.18	107.05	9.22	107.20	9.23	107.26	9.24	107.56	9.26	107.56	9.26	107.76	9.28	107.78	9.28	108.79	9.37	108.84	9.37	109.72	9.45	108.74	9.37	108.72	9.36	108.72	9.36	108.10	9.31	108.97	9.39	108.97	9.39	108.69	9.36	108.69	9.36	109.09	9.40	109.37	9.42	109.37	9.42	109.37	9.42	109.37	9.42	109.70	9.45	109.73	9.45
05	Digital Transient Recorder	0 sec	120 min	110.02	1.14	110.04	1.14	109.17	1.15	109.17	1.15	109.18	1.14	110.39	1.13	110.84	1.13	112.01	1.12	111.06	1.13	111.37	1.12	111.37	1.12	112.59	1.11	111.61	1.12	112.66	1.11	112.71	1.11	113.64	1.10	112.61	1.11	112.59	1.11	112.59	1.11	111.93	1.12	112.84	1.11	112.84	1.11	112.56	1.11	112.56	1.11	112.98	1.11	113.27	1.10	113.27	1.10	113.27	1.10	113.27	1.10	113.61	1.10	113.64	1.10
06	115kV Line 4 Sta UV Trip Bus A	3rd sec	3.1st sec																																																														
12	71PCB-10052 Bkr Alt. 1 Failure	0.1 sec	1 min	110.72	0.03	110.74	0.03	109.88	0.03	109.88	0.03	109.88	0.03	111.08	0.03	111.53	0.03	111.69	0.03	111.75	0.03	112.06	0.03	112.06	0.03	112.27	0.03	112.30	0.03	113.35	0.03	113.39	0.03	114.31	0.03	113.29	0.03	113.27	0.03	113.27	0.03	112.62	0.03	113.53	0.03	113.53	0.03	113.24	0.03	113.24	0.03	113.66	0.03	113.94	0.03	113.94	0.03	113.94	0.03	113.94	0.03	114.29	0.03	114.32	0.03
14	345kV Bkr 71PCB-10042 Trip	0.1st sec	0.2nd sec																																																													
19	71PCB-10042 Bkr Alt. 1 Failure	0.1 sec	1 min	110.71	0.03	110.74	0.03	109.87	0.03	109.87	0.03	109.88	0.03	111.08	0.03	111.53	0.03	111.69	0.03	111.75	0.03	112.06	0.03	112.06	0.03	112.26	0.03	112.29	0.03	113.34	0.03	113.39	0.03	114.31	0.03	113.29	0.03	113.27	0.03	113.27	0.03	112.62	0.03	113.52	0.03	113.52	0.03	113.24	0.03	113.24	0.03	113.65	0.03	113.94	0.03	113.94	0.03	113.94	0.03	113.94	0.03	114.29	0.03	114.31	0.03
21	345kV Bkr 71PCB-10052 Trip	0.1st sec	0.2nd sec																																																													
	Comp's. 06, 14 & 21 Continuous Cntl	0 sec	120 min	110.66	0.15	110.68	0.15	109.82	0.15	109.82	0.15	109.83	0.15	111.03	0.15	111.48	0.15	111.63	0.15	111.69	0.15	112.00	0.15	112.00	0.15	112.21	0.15	112.24	0.15	113.29	0.15	113.33	0.15	114.25	0.15	113.23	0.15	113.21	0.15	113.21	0.15	112.56	0.15	113.47	0.15	113.47	0.15	113.18	0.15	113.18	0.15	113.60	0.15	113.89	0.15	113.89	0.15	113.89	0.15	113.89	0.15	114.23	0.15	114.26	0.15
71DC-A2				108.10	50.75	108.12	50.76	107.27	50.43	107.27	50.43	109.51	14.67	110.72	14.74	111.17	14.76	111.32	14.77	109.59	43.54	109.98	42.21	109.98	42.21	110.18	42.27	110.21	42.28	111.24	42.60	112.41	24.66	113.34	24.63	112.31	24.66	112.29	24.67	112.29	24.67	111.64	24.69	112.55	24.66	112.55	24.66	112.26	24.67	112.26	24.67	112.68	24.65	112.97	24.64	112.97	24.64	112.97	24.64	112.97	24.64	113.32	24.63	113.34	24.63
01	RPS BU Scram 03SOV-140A	0.1st sec	120 min	107.67	0.19	107.69	0.19	106.84	0.19	106.84	0.19	109.08	0.19	110.27	0.20	110.72	0.20	110.88	0.20	109.15	0.19	109.54	0.19	109.54	0.19	109.74	0.19	109.77	0.19	110.80	0.20	111.96	0.20	112.89	0.20	111.86	0.20	111.84	0.20	111.84	0.20	111.19	0.20	112.10	0.20	112.10	0.20	111.81	0.20	111.81	0.20	112.23	0.20	112.52	0.20	112.52	0.20	112.52	0.20	112.52	0.20	112.86	0.20	112.89	0.20
03	Core Spray Channel A Logic	0 sec	120 min	107.89	1.10	107.91	1.10	107.06	1.09	107.06	1.09	109.30	1.11	110.50	1.12	110.95	1.13	111.10	1.13	109.37	1.11	109.77	1.11	109.77	1.11	109.97	1.12	109.99	1.12	111.03	1.13	112.19	1.14	113.12	1.15	112.09	1.14	112.07	1.14	112.07	1.14	111.42	1.13	112.33	1.14	112.33	1.14	112.04	1.14	112.04	1.14	112.46	1.14	112.75	1.14	112.75	1.14	112.75	1.14	112.75	1.14	113.10	1.15	113.12	1.15
04	RHR Channel A Logic	0 sec	120 min	107.57	2.76	107.59	2.76	106.75	2.73	106.75	2.73	108.98	2.79	110.17	2.82	110.62	2.83	110.78	2.84	109.05	2.79	109.44	2.80	109.44	2.80	109.64	2.81	109.67	2.81	110.70	2.84	111.86	2.87	112.78	2.89	111.76	2.86	111.74	2.86	111.74	2.86	111.09	2.85	112.00	2.87	112.00	2.87	111.71	2.86	111.71	2.86	112.13	2.87	112.42	2.88	112.42	2.88	112.42	2.88	112.42	2.88	112.76	2.89	112.79	2.89
08	RFPT 31FPD-5A Trip 31SOV-12A	0.1st sec	120 min	104.67	0.81	104.70	0.81	103.87	0.80	103.87	0.80	106.05	0.82	107.21	0.83	107.65	0.83	107.80	0.83	106.12	0.82	106.50	0.82	106.50	0.82	106.69	0.82	106.72	0.82	107.72	0.83	108.85	0.84	109.75	0.85	108.76	0.84	108.74	0.84	108.74	0.84	108.10	0.83	108.98	0.84	108.98	0.84	108.71	0.84	108.71	0.84	109.11	0.84	109.39	0.84	109.39	0.84	109.39	0.84	109.39	0.84	109.73	0.85	109.75	0.85
09	Relay Cab. Ch.A RCIC Pnl	0 sec	120 min	107.60	2.60	107.62	2.60	106.77	2.60	106.77	2.60	109.01	2.60	110.22	2.60	110.67	2.60	110.82	2.60	109.09	2.60	109.48	2.60	109.48	2.60	109.68	2.60	109.71	2.60	110.75	2.60	111.91	2.60	112.84	2.60	111.81	2.60	111.79	2.60	111.79	2.60	111.14	2.60	112.05	2.60	112.05	2.60	111.76	2.60	111.76	2.60	112.18	2.60	112.47	2.60	112.47	2.60	112.47	2.60	112.47	2.60	112.82	2.60	112.84	2.60
	Power Supply 13TU-3-13	0 sec	120 min	107.60	1.34	107.62	1.34	106.77	1.35	106.77	1.35	109.01	1.32	110.22	1.31	110.67	1.30	110.82	1.30	109.09	1.32	109.48	1.32	109.48	1.32	109.68	1.32	109.71	1.31	110.75	1.30	111.91	1.29	112.84	1.28	111.81	1.29	111.79	1.29	111.79	1.29	111.14	1.30	112.05	1.29	112.05	1.29	111.76	1.29	111.76	1.29	112.18	1.29	112.47	1.28	112.47	1.28	112.47	1.28	112.47	1.28	112.82	1.28	112.84	1.28
10	RCIC & HPCI Misc Loads	0 sec	120 min	107.44	2.77	107.47	2.77	106.62	2.77	106.62	2.77	108.86	2.76	110.07	2.75	110.52	2.75	110.67	2.74	108.93	2.76	109.33	2.75	109.33	2.75	109.53	2.75	109.56	2.75	110.60	2.75	111.76	2.74	112.69	2.73	111.66	2.74	111.64	2.74	111.64	2.74	110.99	2.74	111.90	2.74	111.90	2.74	111.61	2.74	111.61	2.74	112.03	2.74	112.32	2.74	112.32	2.74	112.32	2.74	112.32	2.74	112.67	2.73	112.70	2.73
	Inverter 13INV-152	0 sec	120 min	107.44	1.76	107.47	1.76	106.62	1.77	106.62	1.77	108.86	1.73	110.07	1.71	110.52	1.71	110.67	1.70	108.93	1.73	109.33	1.73	109.33	1.73	109.53	1.72	109.56	1.72	110.60	1.71	111.76	1.69	112.69	1.67	111.66	1.69	111.64	1.69	111.64	1.69	110.99	1.70	111.90	1.69	111.90	1.69	111.61	1.69	111.61	1.69	112.03	1.68	112.32	1.68	112.32	1.68	112.32	1.68	112.32	1.68	112.67	1.67	112.70	1.67
	13SOV-12	0.1st sec	120 min	107.02	0.12	107.05	0.12	106.20	0.12	106.20	0.12	108.44	0.12	109.64	0.12	110.09	0.12	110.24	0.12	108.51	0.12	108.90	0.12	108.90	0.12	109.10	0.12	109.13	0.12	110.17	0.12	111.33	0.12	112.25	0.12	111.23	0.12	111.21	0.12	111.21	0.12	110.56	0.12	111.46	0.12	111.46	0.12	111.18	0.12	111.18	0.12	111.60	0.12	111.88	0.12	111.88	0.12	111.88	0.12	111.88	0.12	112.23	0.12	112.26	0.12
11	02-184P-3A(M) RWR MG Set A Eme	6th sec	120 min																	89.61	27.12	89.93	27.21	89.93	27.21	90.10	27.26	90.12	27.27	90.97	27.53	105.40	9.52	106.39	9.43	105.30	9.53	105.27	9.53	105.27	9.53	104.57	9.59	105.55	9.50	105.55	9.50	105.24	9.53	105.24	9.53	105.69	9.49	106.00	9.46	106.00	9.46	106.00	9.46	106.00	9.46	106.37	9.43	106.40	9.43
	02-184P-3A(M) RWR MG Set A Pmp	6th sec	120 min																	109.25	1.82	109.71	0.37	109.71	0.37	109.91	0.37	109.94	0.37	110.97	0.38	112.13	0.38	113.06	0.38	112.03	0.38	112.01	0.38	112.01	0.38	111.36	0.38	112.27	0.38	112.27	0.38	111.98	0.38	111.98	0.38	112.40	0.38	112.69	0.38	112.69	0.38	112.69	0.38	112.69	0.38	113.03	0.38	113.06	0.38
	02-184P-3A(M) Continuous Control	0 sec	6th sec	108.05	0.07	108.07	0.07	107.22	0.06	107.22	0.06	109.47	0.07	110.67	0.07	111.12	0.07	111.27	0.07																																										
14	13INV-801A Steam Leak Det Sys	0 sec	120 min	107.12	1.21	107.14	1.21	106.28	1.22	106.28	1.22	108.55	1.19	109.76	1.18	110.21	1.17	110.37	1.17	108.62	1.19	109.02	1.19	109.02	1.19	109.22	1.18	109.25	1.18	110.29	1.17	111.47	1.16	112.40	1.15	111.37	1.16	111.35	1.16	111.35	1.16	110.69	1.17	111.61	1.16	111.61	1.16	111.32	1.16	111.32	1.16	111.74	1.16	112.03	1.15	112.03	1.15	112.03	1.15	112.03	1.15	112.38	1.15	112.41	1.15
16	RCIC Valve Trip Sol 13TTS-1	0.1st sec	120 min	107.89	0.12	107.92	0.12	107.07	0.12	107.07	0.12	109.31	0.13	110.51	0.13	110.96	0.13	111.11	0.13	109.38	0.13	109.77	0.13	109.77	0.13	109.98	0.13	110.00	0.13	111.04	0.13	112.20	0.13	113.13	0.13	112.10	0.13	112.08	0.13	112.08	0.13	111.43	0.13	112.34	0.13	112.34	0.13	112.05	0.13	112.05	0.13	112.47	0.13	112.76	0.13	112.76	0.13	112.76	0.13	112.76	0.13	113.11	0.13	113.13	0.13
18	Reac Recir M/G Set A Trip	17th sec	18th sec																																																														
19	600V SWGR 71L25			101.50	36.35	101.53	36.35	100.73	36.07	100.73	36.07	109.48	0.18	110.68	0.19	111.13	0.19	111.29	0.19	109.55	0.18	109.95	0.18	109.95	0.18	110.15	0.18	110.18	0.18	111.21	0.19	112.38	0.19	113.30	0.19	112.28	0.19	112.26	0.19	112.26	0.19	111.60	0.19	112.51	0.19	112.51	0.19	112.23	0.19	112.23	0.19	112.64	0.19	112.93	0.19	112.93	0.19	112.93	0.19	112.93	0.19	113.28	0.19	113.31	0.19
22	ADS Panel 09-45 Load	0 sec	120 min	107.88	2.79	107.90	2.79	107.05	2.77	107.05	2.77	109.29	2.83	110.49	2.86	110.94	2.87	111.09	2.88	109.36	2.83	109.75	2.84	109.75	2.84	109.96	2.85	109.98	2.85	111.02	2.87	112.18	2.90	113.11	2.93	112.08	2.90	112.06	2.90	112.06	2.90	111.41	2.88	112.32	2.91	112.32	2.91	112.03	2.90	112.03	2.90	112.45	2.91	112.74	2.92	112.74	2.92	112.74	2.92	112.74	2.92	113.08	2.93	113.11	2.93
	ADS Logic	0.1st sec	120 min	107.42	0.78	107.44	0.78	106.60	0.77	106.60	0.77	108.83	0.79	110.02	0.80	110.47	0.80	110.62	0.80	108.90	0.79	109.29	0.79	109.29	0.79	109.49	0.80	109.52	0.80	110.55	0.80	111.71	0.81	112.63	0.82	111.61	0.81	111.59	0.81	111.59	0.81	110.94	0.81	111.84	0.81	111.84	0.81	111.56	0.81	111.56	0.81	111.97	0.81	112.26	0.82	112.26	0.82	112.26	0.82	112.26	0.82	112.61	0.82	112.63	0.82
	6 ADS SOV (Load Only)	2nd min	60 min.																																																														
	02SOV-71E1	2nd min	60 min.																																																														
	ADS System Continuous Control	0 sec	120 min	107.88	2.01	107.90	2.01	107.05	2.00	107.05	2.00	109.29	2.04	110.49	2.06	110.94	2.07	111.09	2.07	109.36	2.04	109.75	2.05	109.75	2.05	109.96	2.05	109.98	2.05	111.02	2.07	112.18	2.09	113.11	2.11	112.08	2.09	112.06	2.09	112.06	2.09	111.41	2.08	112.32	2.09	112.32	2.09	112.03	2.09	112.03	2.09	112.45	2.10	112.74	2.10	112.74	2.10	112.74	2.10	112.74	2.10	113.08	2.11	113.11	2.11
71DC-A3				110.23	38.40	110.25	38.41	109.39	38.13	109.39	38.13	109.40	38.14	110.59	38.52	111.89	7.22	112.05	7.22	112.11	7.23	112.29	12.26	112.29	12.26	112.63	7.25	112.66	7.25	113.71	7.29	113.76	7.29	114.68	7.33	113.66	7.29	113.64	7.29	113.64	7.29	112.98	7.26	113.89	7.30	113.89	7.30	113.60	7.29	113.60	7.29	114.02	7.30	114.31	7.31	114.31	7.31	114.31	7.31	114.31	7.31	114.66	7.33	114.68	7.33
01	09ECCS1-EP SRV Electric Lift	0.1st sec	120 min	109.41	1.42	109.43	1.42	108.56	1.45	108.56	1.43	108.57	1.43	109.77	1.41	111.18	1.40	111.24	1.39	111.30	1.39	111.48	1.39	111.48	1.39	111.82	1.39	111.85	1.39	112.91	1.37	112.96	1.37	113.89	1.36	112.86	1.37	112.84	1.37	112.84	1.37	112.18	1.38	113.09	1.37	113.09	1.37	112.81	1.37	112.81	1.37	113.24	1.37	113.52	1.37	113.52	1.37	113.52	1.37	113.52	1.37	113.87	1.36	113.89	1.36
06	ESW Lockout Matrix	2nd sec	120 min	110.05	0.38	110.08	0.38	109.22	0.38	109.22	0.38	109.23	0.38	110.42	0.38	111.71	0.39	111.87	0.39	111.93	0.39	112.11	0.39	112.11	0.39	112.45	0.39	112.48	0.39	113.53	0.39	113.57	0.39	114.50	0.40	113.47	0.39	113.45	0.39	113.45	0.39	112.80	0.39	113.71	0.39	113.71	0.39	113.42	0.39	113.42	0.39	113.84	0.39	114.13	0.39	114.13	0.39	114.13	0.39	114.13	0.39	114.47	0.39	114.50	0.40
	ESW Continuos Control	0 sec	2nd sec																																																														
07	Standby Gas Treat Cont A	0.1st sec	120 min	109.54	1.42	109.57	1.42	108.71	1.41	108.71	1.41	108.72	1.41	109.91	1.42	111.20	1.44	111.35	1.44	111.41	1.44	111.59	1.45	111.59	1.45	111.93	1.45	111.96	1.45	113.00	1.46	113.05	1.46	113.97	1.48	112.95	1.46	112.93	1.46	112.93	1.46	112.28	1.45	113.18	1.47	113.18	1.47	112.90	1.46	112.90	1.46	113.31	1.47	113.60	1.47	113.60	1.47	113.60	1.47	113.60	1.47	113.94	1.48	113.97	1.48
09	94EHC Main Turbine EHC Panel	0.1st sec	120 min	109.10	0.83	109.12	0.83	108.27	0.83	108.27	0.83	108.28	0.83	109.46	0.84	110.74	0.85	110.90	0.85	110.96	0.85	111.13	0.85	111.13	0.85	111.47	0.85	111.50	0.85	112.54	0.86	112.59	0.86	113.50	0.87	112.49	0.86	112.47	0.86	112.47	0.86	111.82	0.86	112.72	0.86	112.72	0.86	112.44	0.86	112.44	0.86	112.85	0.86	113.13	0.87	113.13	0.87	113.13	0.87	113.13	0.87	113.48	0.87	113.50	0.87
10	94-1TEHN05 Main Turb. MasterTrip	0.1st sec	120 min	110.14	0.11	110.16	0.11	109.30	0.11	109.30	0.11	109.31	0.11	110.50	0.11	111.80	0.11	111.95	0.11	112.02	0.11	112.19	0.11	112.19	0.11	112.53	0.11	112.56	0.11	113.61	0.11	113.66	0.11	114.59	0.11	113.56	0.11	113.54	0.11	113.54	0.11	112.89	0.11	113.79	0.11	113.79	0.11	113.51	0.11	113.51	0.11	113.92	0.11	114.21	0.11	114.21	0.11	114.21	0.11	114.21	0.11	114.56	0.11	114.59	0.11
13	38MOV-VB1	N/A	N/A																																																														
	38MOV-VB1 Continuos Cntl & Htr	0 sec	120 min	109.61	0.48	109.63	0.48	108.78	0.47	108.78	0.47	108.79	0.47	109.97	0.48	111.26	0.48	111.42	0.48	111.48	0.48	111.65	0.48	111.65	0.48	111.99	0.49	112.02	0.49	113.07	0.49	113.12	0.49	114.03	0.50	113.02	0.49	113.00	0.49	113.00	0.49	112.35	0.49	113.25	0.49	113.25	0.49	112.97	0.49	112.97	0.49	113.38	0.49	113.67	0.49	113.67	0.49	113.67	0.49	113.67	0.49	114.01	0.49	114.04	0.50
20	Panel 71HO1			110.06	0.42	110.09	0.42	109.23	0.42	109.23	0.42	109.23	0.42	110.43	0.42	111.72	0.43	111.88	0.43	111.94	0.43	112.12	0.43	112.12	0.43	112.46	0.43	112.49	0.43	113.54	0.43	113.58	0.43	114.50	0.44	113.48	0.43	113.46	0.43	113.46	0.43	112.81	0.43	113.72	0.44	113.72	0.44	113.43	0.43	113.43	0.43	113.85	0.44	114.14	0.44	114.14	0.44	114.14	0.44	114.14	0.44	114.48	0.44	114.51	0.44
22	Panel 71HO3			109.94	1.11	109.97	1.11	109.11	1.10	109.11	1.10	109.12	1.10	110.31	1.11	111.60	1.12	111.76	1.12	111.82	1.12	110.70	6.15	110.70	6.15	112.34	1.13	112.37	1.13	113.42	1.14	113.46	1.14	114.38	1.15	113.36	1.14	113.34	1.14	113.34	1.14	112.69	1.13	113.60	1.14	113.60	1.14	113.31	1.14	113.31	1.14	113.73	1.14	114.02	1.15	114.02	1.15	114.02	1.15	114.02	1.15	114.36	1.15	114.39	1.15
23	600V SWGR 71L13			88.52	31.51	88.54	31.52	87.85	31.27	87.85	31.27	87.86	31.28	88.81	31.62	111.71	0.27	111.86	0.27	111.93	0.27	112.10	0.27	112.10	0.27	112.44	0.27	112.47	0.27	113.52	0.27	113.57	0.27	114.49	0.27	113.47	0.27	113.45	0.27	113.45	0.27	112.80	0.27	113.70	0.27	113.70	0.27	113.42	0.27	113.42	0.27	113.83	0.27	114.12	0.27	114.12	0.27	114.12	0.27	114.12	0.27	114.47	0.27	114.50	0.27
24	Panel 71HO7			110.03	0.73	110.05	0.73	109.19	0.72	109.19	0.72	109.20	0.72	110.40	0.73	111.69	0.74	111.85	0.74	111.91	0.74	112.08	0.74	112.08	0.74	112.42	0.74	112.45	0.74	113.51	0.75	113.55	0.75	114.47	0.76	113.45	0.75	113.43	0.75	113.43	0.75	112.78	0.75	113.68	0.75	113.68	0.75	113.40	0.75	113.40	0.75	113.82	0.75	114.10	0.75	114.10	0.75	114.10	0.75	114.10	0.75	114.45	0.76	114.48	0.76

LOCA w/ LOOP — Load Voltage & Current (Seconds; Fld Flash Start at 3.6th; 900 RPM at 5.5th; Fld Flash Stop at 6.6th; last two columns headed 13th and 13.2)

Source Panel	Load	Start Time	Stop Time	3.56th Voltage	3.56th Current	3.58th Voltage	3.58th Current	3.6th Voltage	3.6th Current	3.9th Voltage	3.9th Current	4th Voltage	4th Current	4.4th Voltage	4.4th Current	5th Voltage	5th Current	5.5th Voltage	5.5th Current	6th Voltage	6th Current	6.2nd Voltage	6.2nd Current	6.3rd Voltage	6.3rd Current	6.54th Voltage	6.54th Current	6.6th Voltage	6.6th Current	7th Voltage	7th Current	7.2nd Voltage	7.2nd Current	7.3rd Voltage	7.3rd Current	7.4th Voltage	7.4th Current	8.2nd Voltage	8.2nd Current	8.3rd Voltage	8.3rd Current	8.4rd Voltage	8.4rd Current	8.5th Voltage	8.5th Current	8.9th Voltage	8.9th Current	9th Voltage	9th Current	9.2nd Voltage	9.2nd Current	10th Voltage	10th Current	10.2nd Voltage	10.2nd Current	11th Voltage	11th Current	11.2nd Voltage	11.2nd Current	12.2nd Voltage	12.2nd Current	13th Voltage	13th Current	13.2 Voltage	13.2 Current
71DC-A4				107.96	54.17	108.09	52.43	103.01	121.63	103.01	121.63	103.01	121.63	104.20	121.94	104.64	122.05	104.80	122.09	104.86	122.11	106.56	99.31	106.56	99.31	107.24	91.58	107.38	89.77	112.75	19.04	112.22	28.41	112.80	34.12	105.83	131.54	105.84	131.01	105.85	130.94	102.57	173.90	107.57	106.80	107.57	106.80	107.29	106.72	107.29	106.72	110.14	66.95	110.43	66.79	110.43	66.79	110.43	66.80	110.43	66.80	112.79	33.80	112.53	38.52
02	Force Paralleling Cntl Pnl 93FPAC	1.85th sec	120 min	107.86	0.34	107.99	0.34	102.91	0.32	102.91	0.32	102.92	0.32	104.10	0.33	104.55	0.33	104.70	0.33	104.76	0.33	106.46	0.34	106.46	0.34	106.53	2.34	107.24	0.45	112.60	0.47	112.08	0.47	112.65	0.47	105.70	0.44	105.71	0.44	105.71	0.44	102.44	0.43	107.44	0.45	107.44	0.45	107.16	0.45	107.16	0.45	110.00	0.46	110.30	0.46	110.30	0.46	110.30	0.46	110.30	0.46	112.65	0.47	112.39	0.47
	TBRX1 Start Tie Brk Cnt	1.85th sec	120 min	107.85	0.02	107.98	0.02	102.90	0.02	102.90	0.02	102.90	0.02	104.09	0.02	104.54	0.02	104.69	0.02	104.75	0.02	106.45	0.02	106.45	0.02	106.52	0.02	107.23	0.02	112.59	0.02	112.07	0.02	112.64	0.02	105.69	0.02	105.70	0.02	105.70	0.02	102.43	0.02	107.43	0.02	107.43	0.02	107.15	0.02	107.15	0.02	109.99	0.02	110.29	0.02	110.29	0.02	110.29	0.02	110.29	0.02	112.64	0.02	112.38	0.02
	TBRX2 Start Tie Brk Permissive	1.85th sec	120 min	107.85	0.02	107.98	0.02	102.90	0.02	102.90	0.02	102.90	0.02	104.09	0.02	104.53	0.02	104.69	0.02	104.75	0.02	106.45	0.02	106.45	0.02	106.52	0.02	107.23	0.02	112.59	0.02	112.07	0.02	112.64	0.02	105.69	0.02	105.70	0.02	105.70	0.02	102.43	0.02	107.43	0.02	107.43	0.02	107.15	0.02	107.15	0.02	109.98	0.02	110.28	0.02	110.28	0.02	110.28	0.02	110.28	0.02	112.64	0.02	112.38	0.02
	TD8M EDG A & C Force Parallel	1.90th sec	120 min	107.83	0.06	107.96	0.06	102.88	0.05	102.88	0.05	102.89	0.05	104.07	0.05	104.52	0.05	104.67	0.05	104.73	0.05	106.43	0.05	106.43	0.05	106.50	0.05	107.21	0.05	112.58	0.06	112.05	0.06	112.63	0.06	105.67	0.05	105.68	0.05	105.69	0.05	102.42	0.05	107.41	0.05	107.41	0.05	107.13	0.05	107.13	0.05	109.97	0.06	110.27	0.06	110.27	0.06	110.27	0.06	110.27	0.06	112.62	0.06	112.36	0.06
	VSRX1 EDG A Start Field Flashing	3.52th sec	120 min	107.86	0.02	107.99	0.02	102.91	0.02	102.91	0.02	102.92	0.02	104.10	0.02	104.55	0.02	104.70	0.02	104.76	0.02	106.46	0.02	106.46	0.02	106.53	0.02	107.24	0.02	112.60	0.02	112.08	0.02	112.65	0.02	105.70	0.02	105.71	0.02	105.71	0.02	102.44	0.02	107.44	0.02	107.44	0.02	107.16	0.02	107.16	0.02	110.00	0.02	110.30	0.02	110.30	0.02	110.30	0.02	110.30	0.02	112.65	0.02	112.39	0.02
	VSRX2 EDG C Start Field Flashing	3.52th sec	120 min	107.86	0.02	107.99	0.02	102.91	0.02	102.91	0.02	102.92	0.02	104.10	0.02	104.55	0.02	104.70	0.02	104.76	0.02	106.46	0.02	106.46	0.02	106.53	0.02	107.24	0.02	112.60	0.02	112.08	0.02	112.65	0.02	105.70	0.02	105.71	0.02	105.71	0.02	102.44	0.02	107.44	0.02	107.44	0.02	107.16	0.02	107.16	0.02	110.00	0.02	110.30	0.02	110.30	0.02	110.30	0.02	110.30	0.02	112.65	0.02	112.39	0.02
	GFR EDG A & C Field Flashing	3.54th sec	6.6th sec	107.86	0.02	107.99	0.02	102.91	0.02	102.91	0.02	102.92	0.02	104.10	0.02	104.55	0.02	104.70	0.02	104.76	0.02	106.46	0.02	106.46	0.02	106.53	0.02																																				
	TD9M EDG A & C Force Parallel	3.54th sec	120 min	107.86	0.06	107.99	0.06	102.91	0.05	102.91	0.05	102.92	0.05	104.10	0.05	104.55	0.05	104.70	0.05	104.76	0.05	106.46	0.05	106.46	0.05	106.53	0.05	107.24	0.05	112.60	0.06	112.08	0.06	112.65	0.06	105.70	0.05	105.71	0.05	105.71	0.05	102.44	0.05	107.44	0.06	107.44	0.06	107.16	0.05	107.16	0.05	110.00	0.06	110.30	0.06	110.30	0.06	110.30	0.06	110.30	0.06	112.65	0.06	112.39	0.06
	TD9X EDG A & C Force Parallel	6.54th sec	120 min																							106.46	2.00	106.53	0.13	112.60	0.14	112.08	0.13	112.65	0.14	105.70	0.13	105.71	0.13	105.71	0.13	102.44	0.12	107.44	0.13	107.44	0.13	107.16	0.13	107.16	0.13	110.00	0.13	110.30	0.13	110.30	0.13	110.30	0.13	110.30	0.13	112.65	0.14	112.39	0.14
04	Main Generator Excitation	0.1 sec	1 min	100.63	2.10	100.75	2.10	96.01	2.00	96.01	2.00	96.02	2.00	97.12	2.03	97.54	2.04	97.68	2.04	97.74	2.04	99.32	2.07	99.32	2.07	99.95	2.09	100.08	2.09	105.09	2.19	104.60	2.18	105.13	2.20	98.64	2.06	98.65	2.06	98.66	2.06	95.61	2.00	100.27	2.09	100.27	2.09	100.01	2.09	100.01	2.09	102.65	2.14	102.93	2.15	102.93	2.15	102.93	2.15	102.93	2.15	105.13	2.20	104.89	2.19
08	Panel 71HO5			106.82	35.28	106.95	35.24	101.81	36.82	101.81	36.82	101.82	36.82	103.02	36.43	103.47	36.29	103.62	36.24	103.68	36.22	106.16	12.43	106.16	12.43	107.16	2.30	107.30	2.30	112.66	2.51	111.84	11.85	112.23	17.59	102.11	114.56	102.14	114.04	102.15	113.96	97.49	156.68	104.65	89.95	104.65	89.95	104.38	89.84	104.38	89.84	108.50	50.26	108.81	50.13	108.81	50.13	108.81	50.13	108.81	50.13	112.23	17.27	111.82	21.97
11	Panel 93ECP-A	0.1st sec	120 min	106.13	8.20	106.49	7.17	101.36	7.36	101.36	7.36	101.37	7.36	102.57	7.30	103.02	7.28	103.17	7.27	103.23	7.27	104.95	7.19	104.95	7.19	105.64	7.15	105.78	7.15	111.20	6.92	110.67	6.94	111.25	6.91	104.22	7.22	104.23	7.22	104.23	7.22	100.92	7.38	105.98	7.14	105.98	7.14	105.69	7.15	105.69	7.15	108.56	7.02	108.87	7.01	108.87	7.01	108.87	7.01	108.87	7.01	111.25	6.91	110.98	6.92
	K1 Auto Start	0.1st sec	120 min	105.63	0.13	105.99	0.13	100.88	0.12	100.88	0.12	100.89	0.12	102.09	0.12	102.53	0.12	102.69	0.12	102.75	0.12	104.46	0.13	104.46	0.13	105.14	0.13	105.28	0.13	110.68	0.13	110.15	0.13	110.73	0.13	103.73	0.13	103.74	0.13	103.74	0.13	100.45	0.12	105.48	0.13	105.48	0.13	105.20	0.13	105.20	0.13	108.06	0.13	108.36	0.13	108.36	0.13	108.36	0.13	108.36	0.13	110.73	0.13	110.46	0.13
	Tie Breaker	1.8rd sec	120 min	106.13	0.02	106.49	0.02	101.36	0.02	101.36	0.02	101.37	0.02	102.57	0.02	103.02	0.02	103.17	0.02	103.23	0.02	104.95	0.02	104.95	0.02	105.64	0.02	105.78	0.02	111.20	0.02	110.67	0.02	111.25	0.02	104.22	0.02	104.23	0.02	104.23	0.02	100.92	0.02	105.98	0.02	105.98	0.02	105.69	0.02	105.69	0.02	108.56	0.02	108.87	0.02	108.87	0.02	108.87	0.02	108.87	0.02	111.25	0.02	110.98	0.02
	TD6 Engine Start Interlock	1.8rd sec	120 min	106.13	0.05	106.49	0.05	101.36	0.05	101.36	0.05	101.37	0.05	102.57	0.05	103.02	0.05	103.17	0.05	103.23	0.05	104.95	0.05	104.95	0.05	105.64	0.05	105.78	0.05	111.20	0.06	110.67	0.06	111.25	0.06	104.22	0.05	104.23	0.05	104.23	0.05	100.92	0.05	105.98	0.05	105.98	0.05	105.69	0.05	105.69	0.05	108.56	0.06	108.87	0.06	108.87	0.06	108.87	0.06	108.87	0.06	111.25	0.06	110.98	0.06
	TD7 Engine Start Raw Wtr	1.8rd sec	120 min	106.13	0.05	106.49	0.05	101.36	0.05	101.36	0.05	101.37	0.05	102.57	0.05	103.02	0.05	103.17	0.05	103.23	0.05	104.95	0.05	104.95	0.05	105.64	0.05	105.78	0.05	111.20	0.06	110.67	0.06	111.25	0.06	104.22	0.05	104.23	0.05	104.23	0.05	100.92	0.05	105.98	0.05	105.98	0.05	105.69	0.05	105.69	0.05	108.56	0.06	108.87	0.06	108.87	0.06	108.87	0.06	108.87	0.06	111.25	0.06	110.98	0.06
	K4 Loss of Gen Field	3.5th sec	120 min	106.13	0.02	106.49	0.02	101.36	0.02	101.36	0.02	101.37	0.02	102.57	0.02	103.02	0.02	103.17	0.02	103.23	0.02	104.95	0.02	104.95	0.02	105.64	0.02	105.78	0.02	111.20	0.02	110.67	0.02	111.25	0.02	104.22	0.02	104.23	0.02	104.23	0.02	100.92	0.02	105.98	0.02	105.98	0.02	105.69	0.02	105.69	0.02	108.56	0.02	108.87	0.02	108.87	0.02	108.87	0.02	108.87	0.02	111.25	0.02	110.98	0.02
	FFR Field Flash	3.56th sec	120 min	105.50	1.19	106.43	0.12	101.30	0.11	101.30	0.11	101.31	0.11	102.51	0.11	102.96	0.12	103.11	0.12	103.17	0.12	104.89	0.12	104.89	0.12	105.58	0.12	105.72	0.12	111.13	0.12	110.60	0.12	111.18	0.12	104.15	0.12	104.17	0.12	104.17	0.12	100.86	0.11	105.91	0.12	105.91	0.12	105.63	0.12	105.63	0.12	108.50	0.12	108.80	0.12	108.80	0.12	108.80	0.12	108.80	0.12	111.18	0.12	110.92	0.12
	VSR Volt Speed	3.5th sec	120 min	106.13	0.02	106.49	0.02	101.36	0.02	101.36	0.02	101.37	0.02	102.57	0.02	103.02	0.02	103.17	0.02	103.23	0.02	104.95	0.02	104.95	0.02	105.64	0.02	105.78	0.02	111.20	0.02	110.67	0.02	111.25	0.02	104.22	0.02	104.23	0.02	104.23	0.02	100.92	0.02	105.98	0.02	105.98	0.02	105.69	0.02	105.69	0.02	108.56	0.02	108.87	0.02	108.87	0.02	108.87	0.02	108.87	0.02	111.25	0.02	110.98	0.02
	TD5 Diesel Fail to Start	0.2nd sec	1.75th sec																																																														
	SOV-1A Air Start Right Solenoid	0.2nd sec	1.75th sec																																																														
	SOV-2A Air Start Left Solenoid	0.2nd sec	1.75th sec																																																														
	K2 Gov. Booster Pump	0.2nd sec	1.75th sec																																																														
	ESR40 Speed Relay	0.32nd sec	120 min	106.13	0.13	106.49	0.13	101.36	0.12	101.36	0.12	101.37	0.12	102.57	0.12	103.02	0.12	103.17	0.12	103.23	0.12	104.95	0.13	104.95	0.13	105.64	0.13	105.78	0.13	111.20	0.13	110.67	0.13	111.25	0.13	104.22	0.13	104.23	0.13	104.23	0.13	100.92	0.12	105.98	0.13	105.98	0.13	105.69	0.13	105.69	0.13	108.56	0.13	108.87	0.13	108.87	0.13	108.87	0.13	108.87	0.13	111.25	0.13	110.98	0.13
	ESR200 Speed Relay	1.75th sec	120 min	106.13	0.12	106.49	0.12	101.36	0.12	101.36	0.12	101.37	0.12	102.57	0.12	103.02	0.12	103.17	0.12	103.23	0.12	104.95	0.12	104.95	0.12	105.64	0.12	105.78	0.12	111.20	0.13	110.67	0.13	111.25	0.13	104.22	0.12	104.23	0.12	104.23	0.12	100.92	0.12	105.98	0.12	105.98	0.12	105.69	0.12	105.69	0.12	108.56	0.13	108.87	0.13	108.87	0.13	108.87	0.13	108.87	0.13	111.25	0.13	110.98	0.13
	ESR400 Speed Relay	3.4th sec	120 min	106.13	0.12	106.49	0.12	101.36	0.12	101.36	0.12	101.37	0.12	102.57	0.12	103.02	0.12	103.17	0.12	103.23	0.12	104.95	0.12	104.95	0.12	105.64	0.12	105.78	0.12	111.20	0.13	110.67	0.13	111.25	0.13	104.22	0.12	104.23	0.12	104.23	0.12	100.92	0.12	105.98	0.12	105.98	0.12	105.69	0.12	105.69	0.12	108.56	0.13	108.87	0.13	108.87	0.13	108.87	0.13	108.87	0.13	111.25	0.13	110.98	0.13
	C2 Fuel Oil Prime Pump	0.2nd sec	120 min	106.13	0.14	106.49	0.14	101.36	0.13	101.36	0.13	101.37	0.13	102.57	0.13	103.02	0.13	103.17	0.13	103.23	0.13	104.95	0.13	104.95	0.13	105.64	0.14	105.78	0.14	111.20	0.14	110.67	0.14	111.25	0.14	104.22	0.13	104.23	0.13	104.23	0.13	100.92	0.13	105.98	0.14	105.98	0.14	105.69	0.14	105.69	0.14	108.56	0.14	108.87	0.14	108.87	0.14	108.87	0.14	108.87	0.14	111.25	0.14	110.98	0.14
	TD10 Loss of Field	3.52nd sec	3.58th sec	106.13	0.05	106.49	0.05																																																										
	TD1 Gov. Solenoid TD	0.2 sec	120 min	106.13	0.05	106.49	0.05	101.36	0.05	101.36	0.05	101.37	0.05	102.57	0.05	103.02	0.05	103.17	0.05	103.23	0.05	104.95	0.05	104.95	0.05	105.64	0.05	105.78	0.05	111.20	0.06	110.67	0.06	111.25	0.06	104.22	0.05	104.23	0.05	104.23	0.05	100.92	0.05	105.98	0.05	105.98	0.05	105.69	0.05	105.69	0.05	108.56	0.06	108.87	0.06	108.87	0.06	108.87	0.06	108.87	0.06	111.25	0.06	110.98	0.06
	EMT Run Time Indicator	0.2st sec	120 min	106.13	0.57	106.49	0.56	101.36	0.59	101.36	0.59	101.37	0.59	102.57	0.58	103.02	0.58	103.17	0.58	103.23	0.58	104.95	0.57	104.95	0.57	105.64	0.57	105.78	0.57	111.20	0.54	110.67	0.54	111.25	0.54	104.22	0.58	104.23	0.58	104.23	0.58	100.92	0.59	105.98	0.57	105.98	0.57	105.69	0.57	105.69	0.57	108.56	0.55	108.87	0.55	108.87	0.55	108.87	0.55	108.87	0.55	111.25	0.54	110.98	0.54
	93GS-5A Boost Pump	0.3rd sec	1.75th sec																																																														
	93P-4A Fuel Oil Pump	0.3rd sec	120 min	105.95	5.03	106.31	5.01	101.17	5.27	101.17	5.27	101.18	5.27	102.38	5.20	102.83	5.18	102.98	5.17	103.05	5.17	104.77	5.09	104.77	5.09	105.45	5.05	105.59	5.05	111.03	4.80	110.49	4.82	111.08	4.80	104.03	5.12	104.04	5.12	104.05	5.12	100.73	5.29	105.79	5.04	105.79	5.04	105.51	5.05	105.51	5.05	108.39	4.92	108.69	4.90	108.69	4.90	108.69	4.90	108.69	4.90	111.07	4.80	110.81	4.81
	ESS Speed Switch	0.32nd sec	120 min	106.12	0.063	106.48	0.064	101.35	0.061	101.35	0.061	101.35	0.061	102.55	0.061	103.00	0.062	103.16	0.062	103.22	0.06	104.94	0.06	104.94	0.06	105.62	0.06	105.77	0.06	111.19	0.07	110.66	0.07	111.24	0.07	104.20	0.06	104.22	0.06	104.22	0.06	100.91	0.06	105.96	0.06	105.96	0.06	105.68	0.06	105.68	0.06	108.55	0.06	108.85	0.07	108.85	0.07	108.85	0.07	108.85	0.07	111.23	0.07	110.97	0.07
	62- High Circulating Current	3.58th sec	120 min			106.49	0.05	101.36	0.05	101.36	0.05	101.37	0.05	102.57	0.05	103.02	0.05	103.17	0.05	103.23	0.05	104.95	0.05	104.95	0.05	105.64	0.05	105.78	0.05	111.20	0.06	110.67	0.06	111.25	0.06	104.22	0.05	104.23	0.05	104.23	0.05	100.92	0.05	105.98	0.05	105.98	0.05	105.69	0.05	105.69	0.05	108.56	0.06	108.87	0.06	108.87	0.06	108.87	0.06	108.87	0.06	111.25	0.06	110.98	0.06
	Panel 93EGP-A Gen Control	3.6th sec	120 min	107.96	0.00	108.09	0.18	101.89	33.66	101.89	33.66	101.90	33.67	103.07	34.05	103.51	34.20	103.66	34.25	103.72	34.27	105.41	34.83	105.41	34.83	106.07	35.05	106.21	35.09	112.75	0.00	112.22	0.00	112.80	0.00	105.83	0.00	105.84	0.00	105.85	0.00	102.57	0.00	107.57	0.00	107.57	0.00	107.29	0.00	107.29	0.00	110.14	0.00	110.43	0.00	110.43	0.00	110.43	0.00	110.43	0.00	112.79	0.00	112.53	0.00
	EDG A FF	3.6th sec	6.6th sec					101.89	33.49	101.89	33.49	101.90	33.49	103.07	33.88	103.51	34.02	103.66	34.07	103.72	34.09	105.41	34.65	105.41	34.65	106.07	34.87	106.21	34.91																																				
	K2/VR Auto Field Flash	3.58th sec	6.6th sec			108.09	0.13	101.89	0.12	101.89	0.12	101.90	0.12	103.07	0.12	103.51	0.12	103.66	0.12	103.72	0.12	105.41	0.12	105.41	0.12	106.07	0.13	106.21	0.13																																				
	TDVR Field Shutdown	3.58th sec	6.6th sec			108.09	0.06	101.89	0.05	101.89	0.05	101.90	0.05	103.07	0.05	103.51	0.05	103.66	0.05	103.72	0.05	105.41	0.05	105.41	0.05	106.07	0.05	106.21	0.05																																				
	93P/S-A	0 sec	120 min	105.93	0.37	106.29	0.37	101.15	0.39	101.15	0.39	101.15	0.39	102.36	0.38	102.81	0.38	102.96	0.38	103.03	0.38	104.75	0.38	104.75	0.38	105.43	0.37	105.58	0.37	111.01	0.35	110.47	0.36	111.06	0.35	104.01	0.38	104.02	0.39	104.03	0.38	100.71	0.39	105.77	0.37	105.77	0.37	105.49	0.37	105.49	0.37	108.37	0.36	108.67	0.36	108.67	0.36	108.67	0.36	108.67	0.36	111.05	0.35	110.79	0.35
12	Panel 93ECP-C	0.1st sec	120 min	106.48	8.24	106.79	7.21	101.67	7.40	101.67	7.40	101.68	7.40	102.88	7.34	103.32	7.32	103.48	7.31	103.54	7.30	105.26	7.22	105.26	7.22	105.94	7.19	106.08	7.18	111.49	6.95	110.96	6.97	111.54	6.95	104.52	7.26	104.53	7.26	104.54	7.26	101.23	7.42	106.28	7.17	106.28	7.17	106.00	7.19	106.00	7.19	108.86	7.06	109.16	7.05	109.16	7.05	109.16	7.05	109.16	7.05	111.54	6.95	111.28	6.96
	K1 Auto Start	0.1st sec	120 min	105.98	0.13	106.29	0.13	101.19	0.12	101.19	0.12	101.20	0.12	102.39	0.12	102.84	0.12	102.99	0.12	103.06	0.12	104.76	0.13	104.76	0.13	105.44	0.13	105.58	0.13	110.97	0.13	110.44	0.13	111.02	0.13	104.03	0.13	104.04	0.13	104.05	0.13	100.76	0.12	105.78	0.13	105.78	0.13	105.50	0.13	105.50	0.13	108.35	0.13	108.65	0.13	108.65	0.13	108.65	0.13	108.65	0.13	111.02	0.13	110.75	0.13
	Tie Breaker	1.8rd sec	120 min	106.48	0.02	106.79	0.02	101.67	0.02	101.67	0.02	101.68	0.02	102.88	0.02	103.32	0.02	103.48	0.02	103.54	0.02	105.26	0.02	105.26	0.02	105.94	0.02	106.08	0.02	111.49	0.02	110.96	0.02	111.54	0.02	104.52	0.02	104.53	0.02	104.54	0.02	101.23	0.02	106.28	0.02	106.28	0.02	106.00	0.02	106.00	0.02	108.86	0.02	109.16	0.02	109.16	0.02	109.16	0.02	109.16	0.02	111.54	0.02	111.28	0.02
	TD6 Engine Start Interlock	1.8rd sec	120 min	106.48	0.05	106.79	0.05	101.67	0.05	101.67	0.05	101.68	0.05	102.88	0.05	103.32	0.05	103.48	0.05	103.54	0.05	105.26	0.05	105.26	0.05	105.94	0.05	106.08	0.05	111.49	0.06	110.96	0.06	111.54	0.06	104.52	0.05	104.53	0.05	104.54	0.05	101.23	0.05	106.28	0.05	106.28	0.05	106.00	0.05	106.00	0.05	108.86	0.06	109.16	0.06	109.16	0.06	109.16	0.06	109.16	0.06	111.54	0.06	111.28	0.06
	TD7 Engine Start Raw Wtr	1.8rd sec	120 min	106.48	0.05	106.79	0.05	101.67	0.05	101.67	0.05	101.68	0.05	102.88	0.05	103.32	0.05	103.48	0.05	103.54	0.05	105.26	0.05	105.26	0.05	105.94	0.05	106.08	0.05	111.49	0.06	110.96	0.06	111.54	0.06	104.52	0.05	104.53	0.05	104.54	0.05	101.23	0.05	106.28	0.05	106.28	0.05	106.00	0.05	106.00	0.05	108.86	0.06	109.16	0.06	109.16	0.06	109.16	0.06	109.16	0.06	111.54	0.06	111.28	0.06
	K4 Loss of Gen Field	3.5th sec	120 min	105.58	0.02	105.32	0.02	103.29	0.02	103.29	0.02	106.86	0.02	106.31	0.02	106.31	0.02	106.91	0.02	106.89	0.02	106.88	0.02	106.48	0.02	106.88	0.02	106.48	0.02	106.79	0.02	101.67	0.02	101.68	0.02	102.88	0.02	101.68	0.02	102.88	0.02	103.32	0.02	103.48	0.02	103.32	0.02	103.48	0.02	103.32	0.02	103.48	0.02	103.54	0.02	103.48	0.02	105.94	0.02	106.08	0.02	103.54	0.02	110.96	0.02
	FFR Field Flash	3.56th sec	120 min	105.95	1.20	106.74	0.12	101.62	0.11	101.62	0.11	101.63	0.11	102.82	0.12	103.27	0.12	103.43	0.12	103.49	0.12	105.21	0.12	105.21	0.12	105.89	0.12	106.03	0.12	111.44	0.12	110.91	0.12	111.49	0.12	104.47	0.12	104.48	0.12	104.49	0.12	101.18	0.11	106.23	0.12	106.23	0.12	105.94	0.12	105.94	0.12	108.81	0.12	109.11	0.12	109.11	0.12	109.11	0.12	109.11	0.12	111.48	0.12	111.22	0.12
	VSR Volt Speed	3.5th sec	120 min	106.48	0.02	106.79	0.02	101.67	0.02	101.67	0.02	101.68	0.02	102.88	0.02	103.32	0.02	103.48	0.02	103.54	0.02	105.26	0.02	105.26	0.02	105.94	0.02	106.08	0.02	111.49	0.02	110.96	0.02	111.54	0.02	104.52	0.02	104.53	0.02	104.54	0.02	101.23	0.02	106.28	0.02	106.28	0.02	106.00	0.02	106.00	0.02	108.86	0.02	109.16	0.02	109.16	0.02	109.16	0.02	109.16	0.02	111.54	0.02	111.28	0.02
	TD5 Diesel Fail to Start	0.2nd sec	1.75th sec																																																														
	SOV-1C Air Start Right Solenoid	0.2nd sec	1.75th sec																																																														
	SOV-2C Air Start Left Solenoid	0.2nd sec	1.75th sec																																																														
	K2 Gov. Booster Pump	0.2nd sec	1.75th sec																																																														
	ESR40 Speed Relay	0.32nd sec	120 min	106.48	0.13	106.79	0.13	101.67	0.12	101.67	0.12	101.68	0.12	102.88	0.12	103.32	0.12	103.48	0.13	103.54	0.13	105.26	0.13	105.26	0.13	105.94	0.13	106.08	0.13	111.49	0.13	110.96	0.13	111.54	0.13	104.52	0.13	104.53	0.13	104.54	0.13	101.23	0.12	106.28	0.13	106.28	0.13	106.00	0.13	106.00	0.13	108.86	0.13	109.16	0.13	109.16	0.13	109.16	0.13	109.16	0.13	111.54	0.13	111.28	0.13
	ESR200 Speed Relay	1.75th sec	120 min	106.48	0.12	106.79	0.12	101.67	0.12	101.67	0.12	101.68	0.12	102.88	0.12	103.32	0.12	103.48	0.12	103.54	0.12	105.26	0.12	105.26	0.12	105.94	0.12	106.08	0.12	111.49	0.13	110.96	0.13	111.54	0.13	104.52	0.12	104.53	0.12	104.54	0.12	101.23	0.12	106.28	0.12	106.28	0.12	106.00	0.12	106.00	0.12	108.86	0.13	109.16	0.13	109.16	0.13	109.16	0.13	109.16	0.13	111.54	0.13	111.28	0.13
	ESR400 Speed Relay	3.4th sec	120 min	106.48	0.12	106.79	0.12	101.67	0.12	101.67	0.12	101.68	0.12	102.88	0.12	103.32	0.12	103.48	0.12	103.54	0.12	105.26	0.12	105.26	0.12	105.94	0.12	106.08	0.12	111.49	0.13	110.96	0.13	111.54	0.13	104.52	0.12	104.53	0.12	104.54	0.12	101.23	0.12	106.28	0.12	106.28	0.12	106.00	0.12	106.00	0.12	108.86	0.13	109.16	0.13	109.16	0.13	109.16	0.13	109.16	0.13	111.54	0.13	111.28	0.13
	C2 Fuel Oil Prime Pump	0.2nd sec	120 min	106.48	0.14	106.79	0.14	101.67	0.13	101.67	0.13	101.68	0.13	102.88	0.13	103.32	0.13	103.48	0.13	103.54	0.13	105.26	0.14	105.26	0.14	105.94	0.14	106.08	0.14	111.49	0.14	110.96	0.14	111.54	0.14	104.52	0.13	104.53	0.13	104.54	0.13	101.23	0.13	106.28	0.14	106.28	0.14	106.00	0.14	106.00	0.14	108.86	0.14	109.16	0.14	109.16	0.14	109.16	0.14	109.16	0.14	111.54	0.14	111.28	0.14
	TD10 Loss of Field	3.52nd sec	3.58th sec	106.48	0.05	106.79	0.05																																																										
	TD1 Gov. Solenoid TD	0.2nd sec	120 min	106.48	0.05	106.79	0.05	101.67	0.05	101.67	0.05	101.68	0.05	102.88	0.05	103.32	0.05	103.48	0.05	103.54	0.05	105.26	0.05	105.26	0.05	105.94	0.05	106.08	0.05	111.49	0.06	110.96	0.06	111.54	0.06	104.52	0.05	104.53	0.05	104.54	0.05	101.23	0.05	106.28	0.05	106.28	0.05	106.00	0.05	106.00	0.05	108.86	0.06	109.16	0.06	109.16	0.06	109.16	0.06	109.16	0.06	111.54	0.06	111.28	0.06
	EMT Run Time Indicator	0.2st sec	120 min	106.48	0.56	106.79	0.56	101.67	0.59	101.67	0.59	101.68	0.59	102.88	0.58	103.32	0.58	103.48	0.58	103.54	0.58	105.26	0.57	105.26	0.57	105.94	0.57	106.08	0.57	111.49	0.54	110.96	0.54	111.54	0.54	104.52	0.57	104.53	0.57	104.54	0.57	101.23	0.59	106.28	0.56	106.28	0.56	106.00	0.57	106.00	0.57	108.86	0.55	109.16	0.55	109.16	0.55	109.16	0.55	109.16	0.55	111.54	0.54	111.28	0.54
	93GS-5C Boost pump	0.3rd sec	1.75th sec																																																														
	93P-4C Fuel oil pump	0.3rd sec	120 min	106.29	5.01	106.61	5.00	101.48	5.25	101.48	5.25	101.49	5.25	102.69	5.19	103.14	5.17	103.29	5.16	103.35	5.16	105.07	5.07	105.07	5.07	105.76	5.04	105.90	5.03	111.32	4.79	110.79	4.81	111.37	4.78	104.33	5.11	104.35	5.11	104.35	5.11	101.04	5.27	106.10	5.02	106.10	5.02	105.81	5.04	105.81	5.04	108.68	4.90	108.98	4.89	108.98	4.89	108.98	4.89	108.98	4.89	111.37	4.78	111.10	4.80
	ESS Speed Switch	0.32nd sec	120 min	106.46	0.064	106.78	0.064	101.66	0.061	101.66	0.061	101.67	0.061	102.86	0.061	103.31	0.062	103.47	0.062	103.53	0.06	105.24	0.06	105.24	0.06	105.93	0.06	106.07	0.06	111.48	0.07	110.95	0.07	111.53	0.07	104.51	0.06	104.52	0.06	104.52	0.06	101.22	0.06	106.27	0.06	106.27	0.06	105.98	0.06	105.98	0.06	108.85	0.07	109.15	0.07	109.15	0.07	109.15	0.07	109.15	0.07	111.53	0.07	111.26	0.07
	62- High Circulating Current	3.58th sec	120 min			106.79	0.05	101.67	0.05	101.67	0.05	101.68	0.05	102.88	0.05	103.32	0.05	103.48	0.05	103.54	0.05	105.26	0.05	105.26	0.05	105.94	0.05	106.08	0.05	111.49	0.06	110.96	0.06	111.54	0.06	104.52	0.05	104.53	0.05	104.54	0.05	101.23	0.05	106.28	0.05	106.28	0.05	106.00	0.05	106.00	0.05	108.86	0.06	109.16	0.06	109.16	0.06	109.16	0.06	109.16	0.06	111.54	0.06	111.28	0.06
	Panel 93EGP-C Gen Control	3.6th sec	120 min	107.96	0.00	108.09	0.18	102.48	34.06	102.48	34.06	102.49	34.06	103.67	34.45	104.11	34.60	104.27	34.65	104.33	34.67	106.02	35.24	106.02	35.24	106.70	35.46	106.83	35.51	112.75	0.00	112.22	0.00	112.80	0.00	105.83	0.00	105.84	0.00	105.85	0.00	102.57	0.00	107.57	0.00	107.57	0.00	107.29	0.00	107.29	0.00	110.14	0.00	110.43	0.00	110.43	0.00	110.43	0.00	110.43	0.00	112.79	0.00	112.53	0.00
	EDG C FF	3.6th sec	6.6th sec					102.48	33.89	102.48	33.89	102.49	33.89	103.67	34.28	104.11	34.43	104.27	34.48	104.33	34.50	106.02	35.06	106.02	35.06	106.70	35.28	106.83	35.32																																				
	K2/VR Auto Field Flash	3.58th sec	6.6th sec			108.09	0.13	102.48	0.12	102.48	0.12	102.49	0.12	103.67	0.12	104.11	0.12	104.27	0.12	104.33	0.12	106.02	0.13	106.02	0.13	106.70	0.13	106.83	0.13																																				
	TDVR Field Shutdown	3.58th sec	6.6th sec			108.09	0.06	102.48	0.05	102.48	0.05	102.49	0.05	103.67	0.05	104.11	0.05	104.27	0.05	104.33	0.05	106.02	0.05	106.02	0.05	106.70	0.05	106.83	0.05																																				
	93P/S-C	0 sec	120 min	106.28	0.42	106.60	0.42	101.46	0.44	101.46	0.44	101.47	0.44	102.67	0.43	103.12	0.43	103.27	0.43	103.34	0.43	105.06	0.42	105.06	0.42	105.74	0.42	105.88	0.42	111.30	0.40	110.77	0.40	111.35	0.40	104.32	0.43	104.33	0.43	104.34	0.43	101.02	0.44	106.08	0.42	106.08	0.42	105.80	0.42	105.80	0.42	108.67	0.41	108.97	0.41	108.97	0.41	108.97	0.41	108.97	0.41	111.35	0.40	111.09	0.40

LOCA w/ LOOP — Load Voltage & Current (Seconds; 900 RPM at 5.5th)

Source Panel	Load	Start Time	Stop Time	3.56th Voltage	3.56th Current	3.58th Voltage	3.58th Current	3.6th Voltage	3.6th Current	3.9th Voltage	3.9th Current	4th Voltage	4th Current	4.4th Voltage	4.4th Current	5th Voltage	5th Current	5.5th Voltage	5.5th Current	6th Voltage	6th Current	6.2nd Voltage	6.2nd Current	6.3rd Voltage	6.3rd Current	6.54th Voltage	6.54th Current	6.6th Voltage	6.6th Current	7th Voltage	7th Current	7.2nd Voltage	7.2nd Current	7.3rd Voltage	7.3rd Current	7.4th Voltage	7.4th Current	8.2nd Voltage	8.2nd Current	8.3rd Voltage	8.3rd Current	8.4rd Voltage	8.4rd Current	8.5th Voltage	8.5th Current	8.9th Voltage	8.9th Current	9th Voltage	9th Current	9.2nd Voltage	9.2nd Current	10th Voltage	10th Current	10.2nd Voltage	10.2nd Current	11th Voltage	11th Current	11.2nd Voltage	11.2nd Current	12.2nd Voltage	12.2nd Current	13.1st Voltage	13.1st Current	13.2nd Voltage	13.2nd Current
71DC-A5				108.08	35.32	108.10	35.31	107.22	35.49	107.22	35.49	107.22	35.49	108.45	35.24	108.91	35.16	109.07	35.13	109.13	35.11	109.45	35.05	109.45	35.05	109.66	35.02	109.69	35.01	110.76	34.81	110.81	34.80	114.04	9.19	113.02	9.19	113.00	9.18	113.00	9.18	112.35	9.15	113.26	9.20	113.26	9.20	112.97	9.18	112.97	9.18	113.39	9.21	113.67	9.23	113.67	9.23	113.67	9.23	113.67	9.23	114.02	9.25	114.05	9.25
01	ECCS Cab Power Pnl 09-95	0 sec	7.2nd sec	107.07	7.18	107.10	7.18	106.21	7.24	106.21	7.24	106.21	7.24	107.45	7.16	107.92	7.13	108.08	7.12	108.14	7.11	108.46	7.09	108.46	7.09	108.67	7.08	108.70	7.08	109.78	7.01	109.83	7.00																														
02	Feedwater Inverter 06INV-1A	0 sec	120 min	106.97	1.25	107.00	1.25	106.10	1.26	106.10	1.26	106.11	1.26	107.35	1.24	107.82	1.24	107.98	1.24	108.04	1.24	108.36	1.23	108.36	1.23	108.57	1.23	108.60	1.23	109.69	1.22	109.73	1.22	113.00	1.18	111.97	1.19	111.95	1.19	111.95	1.19	111.29	1.20	112.20	1.19	112.20	1.19	111.92	1.19	111.92	1.19	112.34	1.19	112.63	1.19	112.63	1.19	112.63	1.19	112.63	1.19	112.97	1.18	113.00	1.18
05	HPCI Relay Logic Pnl 09-32	0 sec	120 min	108.04	0.19	108.07	0.19	107.18	0.19	107.18	0.19	107.19	0.19	108.42	0.19	108.88	0.19	109.04	0.19	109.10	0.19	109.42	0.19	109.42	0.19	109.62	0.19	109.65	0.19	110.73	0.20	110.77	0.20	114.01	0.20	112.99	0.20	112.97	0.20	112.97	0.20	112.32	0.20	113.22	0.20	113.22	0.20	112.94	0.20	112.94	0.20	113.35	0.20	113.64	0.20	113.64	0.20	113.64	0.20	113.64	0.20	113.98	0.20	114.01	0.20
07	CRD 09ARI-2 Isolation Rly Pnl	0 sec	120 min	106.94	6.18	106.96	6.18	106.09	6.13	106.09	6.13	106.09	6.13	107.31	6.20	107.76	6.23	107.92	6.24	107.98	6.24	108.30	6.26	108.30	6.26	108.50	6.27	108.53	6.28	109.59	6.34	109.64	6.34	112.84	6.52	111.83	6.47	111.81	6.46	111.81	6.46	111.17	6.43	112.06	6.48	112.06	6.48	111.78	6.46	111.78	6.46	112.19	6.49	112.48	6.50	112.48	6.50	112.48	6.50	112.48	6.50	112.82	6.52	112.84	6.52
	03SOV-201	0.1st sec	120 min	104.30	1.27	104.32	1.27	103.47	1.26	103.47	1.26	103.48	1.26	104.66	1.27	105.11	1.28	105.26	1.28	105.32	1.28	105.63	1.28	105.63	1.28	105.83	1.29	105.86	1.29	108.89	1.30	108.94	1.30	110.06	1.34	109.08	1.33	109.06	1.33	109.06	1.33	108.43	1.32	109.30	1.33	109.30	1.33	109.03	1.33	109.03	1.33	109.43	1.33	109.70	1.33	109.70	1.33	109.70	1.33	109.70	1.33	110.04	1.34	110.06	1.34
09	27MAP Panel	0 sec	7.2nd sec	106.49	4.70	106.52	4.69	105.62	4.73	105.62	4.73	105.63	4.73	106.87	4.68	107.34	4.66	107.50	4.65	107.56	4.65	107.88	4.63	107.88	4.63	108.10	4.63	108.13	4.62	109.22	4.59	109.26	4.58																														
18	71INV-1A	0 sec	7.2nd sec	105.41	14.55	105.43	14.54	104.53	14.67	104.53	14.67	104.54	14.67	105.79	14.49	106.27	14.43	106.43	14.41	106.49	14.40	106.82	14.35	106.82	14.35	107.03	14.33	107.06	14.32	108.16	14.18	108.21	14.17																														
71BMCC-1				107.32	80.72	107.34	80.70	106.47	80.66	106.47	80.66	104.77	115.68	105.95	116.12	106.39	116.32	108.68	72.74	108.75	72.70	109.07	72.47	109.07	72.47	109.28	72.35	109.31	72.31	110.40	71.60	110.45	71.57	111.40	70.98	110.35	71.65	110.33	71.65	110.33	71.65	109.65	72.09	110.59	71.48	110.59	71.48	108.96	98.87	108.96	98.85	109.38	98.75	111.02	71.20	111.02	71.22	111.02	71.20	111.02	71.20	111.38	70.97	111.41	70.98
OA1	13MOV-16 Close	43 sec	55 sec																																																														
	13MOV-16 Control	43 sec	55 sec																																																														
	13MOV-16 Continuous Control	0 sec	120 min	106.83	0.17	106.85	0.17	105.99	0.16	105.99	0.16	104.29	0.16	105.47	0.16	105.91	0.16	108.19	0.17	108.25	0.17	108.57	0.17	108.57	0.17	108.78	0.17	108.81	0.17	109.90	0.17	109.94	0.17	110.89	0.17	109.84	0.17	109.82	0.17	109.82	0.17	109.15	0.17	110.08	0.17	110.08	0.17	108.46	0.17	108.46	0.17	108.88	0.17	110.51	0.17	110.51	0.17	110.51	0.17	110.51	0.17	110.87	0.17	110.90	0.17
OB2	13MOV-21 Open	1st sec	17.8th sec	104.15	7.80	104.17	7.80	103.28	7.87	103.28	7.87	101.52	8.00	102.74	7.91	103.20	7.87	105.56	7.70	105.62	7.69	105.95	7.67	105.95	7.67	106.17	7.65	106.20	7.65	107.33	7.57	107.38	7.57	108.36	7.50	107.27	7.57	107.25	7.58	107.25	7.58	106.55	7.63	107.52	7.56	107.52	7.56	105.84	7.68	105.84	7.68	106.28	7.64	107.97	7.53	107.96	7.53	107.97	7.53	107.97	7.53	108.33	7.50	108.36	7.50
	13MOV-21 Control (Open)	1st sec	17.8th sec	106.61	0.50	106.63	0.50	105.77	0.49	105.77	0.49	104.08	0.48	105.26	0.49	105.69	0.49	107.97	0.50	108.03	0.50	108.35	0.50	108.35	0.50	108.56	0.51	108.59	0.51	109.68	0.51	109.72	0.51	110.67	0.52	109.62	0.51	109.60	0.51	109.60	0.51	108.93	0.51	109.86	0.51	109.86	0.51	108.25	0.50	108.25	0.50	108.67	0.51	110.29	0.51	110.29	0.51	110.29	0.51	110.29	0.51	110.65	0.52	110.67	0.52
	13MOV-21 Close	43 sec	1 min 3.5 sec																																																														
	13MOV-21 Control (Close)	43 sec	1 min 3.5 sec																																																														
	13MOV-21 Continuous Control	0 sec	120 min																																																														
OC1	13MOV-27 Open	4th sec	8.9th sec									95.19	34.80	96.27	35.20	96.67	35.34	105.96	9.91	106.02	9.90	106.35	9.87	106.35	9.87	106.57	9.85	106.60	9.85	107.72	9.75	107.77	9.74	108.75	9.66	107.66	9.75	107.64	9.75	107.64	9.75	106.95	9.82	107.91	9.73	107.91	9.73																		
	13MOV-27 Control Open	4th sec	8.9th sec									101.98	0.47	103.13	0.48	103.56	0.48	105.79	0.49	105.85	0.49	106.17	0.49	106.17	0.49	106.37	0.50	106.40	0.50	107.46	0.50	107.51	0.50	108.44	0.51	107.41	0.50	107.39	0.50	107.39	0.50	106.73	0.50	107.64	0.50	107.64	0.50																		
	13MOV-27 Close	9th sec	15.7th sec																																													99.00	36.19	99.00	36.20	99.39	36.34	108.36	9.69	108.36	9.69	108.36	9.69	108.36	9.69	108.72	9.66	108.75	9.66
	13MOV-27 Control Close	9th sec	15.7th sec																																													106.06	0.49	106.06	0.49	106.47	0.50	108.07	0.50	108.07	0.50	108.07	0.50	108.07	0.50	108.42	0.50	108.44	0.51
	13MOV-27 Continuous Control	0 sec	120 min	106.35	0.16	106.37	0.16	105.52	0.16	105.52	0.16																																																					
OE1	13P-3	0.1st sec	120 min	104.11	27.61	104.14	27.61	103.25	27.85	103.25	27.85	101.48	28.33	102.71	27.99	103.16	27.87	105.52	27.25	105.59	27.23	105.92	27.14	105.92	27.14	106.14	27.09	106.17	27.08	107.30	26.80	107.34	26.78	108.32	26.54	107.24	26.81	107.22	26.82	107.22	26.81	106.52	26.99	107.49	26.75	107.49	26.75	105.81	27.17	105.81	27.17	106.25	27.06	107.93	26.64	107.93	26.64	107.93	26.64	107.93	26.64	108.30	26.55	108.33	26.54
	13P-3 Control	0.1st sec	120 min	105.61	0.52	105.64	0.52	104.78	0.52	104.78	0.52	103.10	0.51	104.27	0.52	104.70	0.52	106.96	0.53	107.02	0.53	107.34	0.53	107.34	0.53	107.55	0.53	107.58	0.53	108.65	0.54	108.70	0.54	109.63	0.54	108.59	0.54	108.57	0.54	108.57	0.54	107.91	0.53	108.83	0.54	108.83	0.54	107.23	0.53	107.23	0.53	107.65	0.53	109.26	0.54	109.26	0.54	109.26	0.54	109.26	0.54	109.61	0.54	109.64	0.54
	13P-3 Continuous Control	0 sec	0.1st sec																																																														
OE2	13P-4	3rd sec	120 min	102.07	43.41	102.09	43.42	101.27	43.07	101.27	43.07	99.65	42.38	100.77	42.86	101.19	43.04	105.58	25.65	105.65	25.63	105.98	25.55	105.98	25.55	106.20	25.50	106.23	25.49	107.35	25.23	107.40	25.21	108.38	24.99	107.30	25.24	107.27	25.24	107.28	25.24	106.58	25.41	107.55	25.18	107.55	25.18	105.87	25.58	105.87	25.58	106.31	25.47	107.99	25.08	107.99	25.08	107.99	25.08	107.99	25.08	108.36	24.99	108.39	24.99
	13P-4 Control	3rd sec	120 min	105.55	0.54	105.64	0.52	104.73	0.54	104.73	0.54	103.05	0.53	104.27	0.52	104.65	0.54	106.90	0.55	106.96	0.55	107.34	0.53	107.34	0.53	107.49	0.55	107.58	0.53	108.65	0.54	108.70	0.54	109.57	0.56	108.53	0.56	108.57	0.54	108.57	0.54	107.91	0.53	108.83	0.54	108.83	0.54	107.17	0.55	107.23	0.53	107.65	0.53	109.26	0.54	109.20	0.56	109.26	0.54	109.26	0.54	109.61	0.54	109.58	0.56
	13P-4 Continuous Control	0.1 sec	3rd sec																																																														
71BMCC-3				109.22	15.75	109.24	15.74	108.36	15.86	108.36	15.86	108.37	15.86	109.60	15.70	110.06	15.63	110.21	15.61	110.21	15.61	110.59	15.56	110.59	15.56	110.80	15.54	110.83	15.53	111.91	15.39	111.95	15.39	112.89	15.27	111.85	15.40	111.83	15.40	111.83	15.40	111.16	15.49	112.09	15.37	112.09	15.37	111.80	15.41	111.80	15.41	112.22	15.35	112.52	15.32	112.52	15.32	112.52	15.32	112.52	15.32	112.87	15.27	113.84	8.03
OB1	13MOV-131	0.1st sec	17.5th sec	105.92	7.67	105.95	7.67	105.04	7.74	105.04	7.74	105.05	7.73	106.31	7.64	106.79	7.61	106.95	7.60	106.95	7.60	107.34	7.57	107.34	7.57	107.56	7.55	107.59	7.55	108.69	7.48	108.74	7.47	109.71	7.41	108.64	7.48	108.61	7.48	108.62	7.48	107.93	7.53	108.88	7.46	108.88	7.46	108.58	7.48	108.58	7.48	109.02	7.45	109.32	7.43	109.32	7.43	109.32	7.43	109.32	7.43	109.69	7.41	110.68	7.34
	13MOV-131 Control	0.1st sec	17.5th sec	107.56	0.50	107.58	0.50	106.71	0.50	106.71	0.50	106.72	0.50	107.93	0.50	108.38	0.50	108.54	0.51	108.54	0.51	108.91	0.51	108.91	0.51	109.12	0.51	109.15	0.51	110.20	0.51	110.25	0.51	111.18	0.52	110.15	0.51	110.13	0.51	110.13	0.51	109.47	0.51	110.38	0.51	110.38	0.51	110.10	0.51	110.10	0.51	110.52	0.51	110.81	0.52	110.81	0.52	110.81	0.52	110.81	0.52	111.15	0.52	112.11	0.52
	13MOV-131 Continuous Control	17.6th sec	120 min																																																														
OB2	13MOV-132	0.1st sec	13.1st sec	106.02	7.07	106.05	7.07	105.13	7.13	105.13	7.13	105.14	7.13	106.41	7.05	106.88	7.02	107.04	7.01	107.04	7.01	107.44	6.98	107.44	6.98	107.65	6.97	107.68	6.96	108.79	6.89	108.83	6.89	109.80	6.83	108.73	6.90	108.71	6.90	108.71	6.90	108.02	6.94	108.98	6.88	108.98	6.88	108.68	6.90	108.68	6.90	109.11	6.87	109.42	6.85	109.42	6.85	109.42	6.85	109.42	6.85	109.78	6.83		
	13MOV-132 Control	0.1st sec	13.1st sec	107.30	0.50	107.33	0.50	106.46	0.50	106.46	0.50	106.47	0.50	107.67	0.50	108.12	0.50	108.28	0.50	108.28	0.50	108.65	0.51	108.65	0.51	108.86	0.51	108.89	0.51	109.94	0.51	109.99	0.51	110.91	0.52	109.89	0.51	109.87	0.51	109.87	0.51	109.21	0.51	110.12	0.51	110.12	0.51	109.83	0.51	109.83	0.51	110.25	0.51	110.54	0.51	110.54	0.51	110.54	0.51	110.54	0.51	110.89	0.52		
	13MOV-132 Continuous Control	13.2st sec	120 min																																																													113.20	0.17
71H01				110.06	0.42	110.09	0.42	109.23	0.42	109.23	0.42	109.23	0.42	110.43	0.42	111.72	0.43	111.88	0.43	111.94	0.43	112.12	0.43	112.12	0.43	112.46	0.43	112.49	0.43	113.54	0.43	113.58	0.43	114.50	0.44	113.48	0.43	113.46	0.43	113.46	0.43	112.81	0.43	113.72	0.44	113.72	0.44	113.43	0.43	113.43	0.43	113.85	0.44	114.14	0.44	114.14	0.44	114.14	0.44	114.14	0.44	114.48	0.44	114.51	0.44
	4KV Swgr Bkr 71-10102 trip	0.1 sec	3.1st sec																																																														
	4KV Swgr Bkr 71-10110 trip	0.1st sec	0.2nd sec																																																														
	4KV Swgr Bkr 71-10112 trip	N/A	N/A																																																														
	4KV Bus 10100 Undervoltage	0.1st sec	120 min	109.71	0.20	109.73	0.20	108.88	0.19	108.88	0.19	108.88	0.19	110.07	0.20	111.36	0.20	111.52	0.20	111.58	0.20	111.76	0.20	111.76	0.20	112.09	0.20	112.12	0.20	113.17	0.20	113.22	0.20	114.14	0.20	113.12	0.20	113.10	0.20	113.10	0.20	112.45	0.20	113.35	0.20	113.35	0.20	113.07	0.20	113.07	0.20	113.48	0.20	113.77	0.20	113.77	0.20	113.77	0.20	113.77	0.20	114.12	0.20	114.14	0.20
	71H01 Continuous Control	0 sec	120 min	109.66	0.225	109.68	0.225	108.82	0.22	108.82	0.223	108.83	0.223	110.02	0.226	111.31	0.23	111.46	0.229	111.53	0.23	111.70	0.23	111.70	0.23	112.04	0.230	112.07	0.230	113.12	0.232	113.16	0.232	114.08	0.234	113.06	0.232	113.04	0.232	113.04	0.232	112.39	0.231	113.30	0.233	113.30	0.233	113.01	0.232	113.01	0.232	113.43	0.233	113.72	0.233	113.72	0.23	113.72	0.23	113.72	0.23	114.06	0.23	114.09	0.23
71H03				109.94	1.11	109.97	1.11	109.11	1.10	109.11	1.10	109.12	1.10	110.31	1.11	111.60	1.12	111.76	1.12	111.82	1.12	110.70	6.15	110.70	6.15	112.34	1.13	112.37	1.13	113.42	1.14	113.46	1.14	114.38	1.15	113.36	1.14	113.34	1.14	113.34	1.14	112.69	1.13	113.60	1.14	113.60	1.14	113.31	1.14	113.31	1.14	113.73	1.14	114.02	1.15	114.02	1.15	114.02	1.15	114.02	1.15	114.36	1.15	114.39	1.15
	4KV Swgr Bkr 71-10302 trip	0.1sec	3.1st sec																																																														
	4KV Swgr Bkr 71-10304 trip	6.2 sec	6.3rd sec																			104.99	5.04	104.99	5.04																																								
	4KV Swgr Bkr 71-10304 close	119th min 20 sec	119th min 20.1 sec																																																														
	71-10304 Brk Charging Motor	119th min 20.2 sec	119th min 25 sec																																																														
	4KV Swgr Bkr 71-10310 trip	3rd sec	3.1st sec																																																														
	86U- Pmp 37P-8A UV Trip Aux Relay	3rd sec	120 min	109.85	0.05	109.87	0.05	109.02	0.05	109.02	0.05	109.02	0.05	110.21	0.06	111.51	0.06	111.66	0.06	111.73	0.06	110.61	0.06	110.61	0.06	112.24	0.06	112.27	0.06	113.32	0.06	113.36	0.06	114.28	0.06	113.26	0.06	113.24	0.06	113.24	0.06	112.59	0.06	113.50	0.06	113.50	0.06	113.21	0.06	113.21	0.06	113.63	0.06	113.92	0.06	113.92	0.06	113.92	0.06	113.92	0.06	114.26	0.06	114.29	0.06
	4KV Swgr Bkr 71-10312 trip	N/A	N/A																																																														
	4KV Swgr Bkr 71-10312 close	119th min 0 sec	119th min 0.1 sec																																																														
	71-10312 Brk Charging Motor	119th min 0.2 sec	119th min 5 sec																																																														
	4KV Swgr Bkr 71-10320 trip	3rd sec	3.1st sec																																																														
	86U- Pmp 46P-1A UV Trip Aux Relay	3rd sec	120 min	109.85	0.05	109.87	0.05	109.02	0.05	109.02	0.05	109.02	0.05	110.22	0.06	111.51	0.06	111.66	0.06	111.73	0.06	110.61	0.06	110.61	0.06	112.24	0.06	112.27	0.06	113.32	0.06	113.37	0.06	114.29	0.06	113.27	0.06	113.25	0.06	113.25	0.06	112.59	0.06	113.50	0.06	113.50	0.06	113.21	0.06	113.21	0.06	113.63	0.06	113.92	0.06	113.92	0.06	113.92	0.06	113.92	0.06	114.26	0.06	114.29	0.06
	4KV Swgr Bkr 71-10330 trip	3rd sec	3.1st sec																																																														
	4KV Swgr Bkr 71-10340 trip	3rd sec	3.1st sec																																																														
	4KV Swgr Bkr 71-10350 trip	3rd sec	3.1st sec																																																														
	86U- Pmp 33P-9A UV Trip Aux Relay	3rd sec	120 min	109.85	0.05	109.87	0.05	109.01	0.05	109.01	0.05	109.02	0.05	110.21	0.06	111.50	0.06	111.66	0.06	111.72	0.06	110.60	0.06	110.60	0.06	112.23	0.06	112.26	0.06	113.31	0.06	113.36	0.06	114.28	0.06	113.26	0.06	113.24	0.06	113.24	0.06	112.59	0.06	113.49	0.06	113.49	0.06	113.21	0.06	113.21	0.06	113.62	0.06	113.91	0.06	113.91	0.06	113.91	0.06	113.91	0.06	114.26	0.06	114.28	0.06
	4KV Swgr Bkr 71-10360 trip	3rd sec	3.1st sec																																																														
	86U- Pmp 37P-2A UV Trip Aux Relay	3rd sec	120 min	109.85	0.05	109.87	0.05	109.01	0.05	109.01	0.05	109.02	0.05	110.21	0.06	111.50	0.06	111.66	0.06	111.72	0.06	110.60	0.06	110.60	0.06	112.23	0.06	112.26	0.06	113.31	0.06	113.36	0.06	114.28	0.06	113.26	0.06	113.24	0.06	113.24	0.06	112.59	0.06	113.49	0.06	113.49	0.06	113.21	0.06	113.21	0.06	113.62	0.06	113.91	0.06	113.91	0.06	113.91	0.06	113.91	0.06	114.26	0.06	114.28	0.06
	Bus 10300 Undervoltage Oper	0.1st sec	120 min	109.55	0.21	109.58	0.21	108.72	0.21	108.72	0.21	108.73	0.21	109.92	0.21	111.21	0.21	111.36	0.21	111.43	0.21	110.31	0.21	110.31	0.21	111.94	0.21	111.97	0.21	113.01	0.22	113.06	0.22	113.98	0.22	112.96	0.22	112.94	0.22	112.94	0.22	112.29	0.22	113.19	0.22	113.19	0.22	112.91	0.22	112.91	0.22	113.32	0.22	113.61	0.22	113.61	0.22	113.61	0.22	113.61	0.22	113.96	0.22	113.98	0.22
	71H03 Continuous Control	0 sec	120 min	108.69	0.68	108.71	0.68	107.87	0.67	107.87	0.67	107.87	0.67	109.05	0.68	110.33	0.69	110.48	0.69	110.55	0.69	109.44	0.68	109.44	0.68	111.06	0.69	111.08	0.69	112.12	0.70	112.17	0.70	113.08	0.70	112.07	0.70	112.05	0.70	112.05	0.70	111.41	0.69	112.30	0.70	112.30	0.70	112.02	0.70	112.02	0.70	112.43	0.70	112.72	0.70	112.72	0.70	112.72	0.70	112.72	0.70	113.06	0.70	113.08	0.70
71H05				106.82	35.28	106.95	35.24	101.81	36.82	101.81	36.82	101.82	36.82	103.02	36.43	103.47	36.29	103.62	36.24	103.68	36.22	106.16	12.43	106.16	12.43	107.16	2.30	107.30	2.30	112.66	2.51	111.84	11.85	112.23	17.59	102.11	114.56	102.14	114.04	102.15	113.96	97.49	156.68	104.65	89.95	104.65	89.95	104.38	89.84	104.38	89.84	108.50	50.26	108.81	50.13	108.81	50.13	108.81	50.13	108.81	50.13	112.23	17.27	111.82	21.97
	4KV Swgr Bkr 71-10502 close	7.2nd sec	7.3rd sec																													97.29	4.67	97.63	4.69																														
	71-10502 Brk Charging Motor	7.4rd sec	12.2nd sec																																	99.31	54.03	99.34	54.04	99.35	54.04	94.81	51.58	103.78	16.91	103.78	16.91	103.50	16.91	103.50	16.91	107.66	16.25	107.97	16.21	107.97	16.21	107.97	16.21	107.97	16.21				
	4KV Swgr Bkr 71-10510 Close	2 min 30 sec	2 min 30.1 sec																																																													
	71-10510 Brk Charging Motor	2 min 30.2 sec	2 min 35 sec																																																													
	10SOV-101C	0 sec	2 min 30 sec	106.64	0.18	106.77	0.18	101.64	0.17	101.64	0.17	101.65	0.17	102.85	0.18	103.30	0.18	103.45	0.18	103.51	0.18	105.98	0.18	105.98	0.18	106.99	0.18	107.13	0.18	112.48	0.19	111.65	0.19	112.04	0.19	101.95	0.17	101.97	0.17	101.98	0.17	97.33	0.17	104.48	0.18	104.48	0.18	104.21	0.18	104.21	0.18	108.33	0.18	108.63	0.18	108.63	0.18	108.63	0.18	108.63	0.18	112.05	0.19	111.64	0.19
	4KV Swgr bkr 71-10512 close	7.2nd sec	7.3nd sec																													97.70	4.69	98.04	4.71																														
	71-10512 Brk Charging Motor	7.4rd sec	12.2nd sec																																	99.61	54.19	99.64	54.21	99.65	54.21	95.10	51.74	103.88	16.85	103.88	16.85	103.60	16.89	103.60	16.89	107.76	16.24	108.06	16.19	108.06	16.19	108.06	16.19	108.06	16.19				
	4KV Swgr Bkr 71-10514 trip	6.2nd sec	6.3rd sec																			105.85	5.08	105.85	5.08																																								
	4KV Swgr Bkr 71-10514 close	119th min 40 sec	119th min 40.1 sec																																																													
	71-10514 Brk Charging Motor	119th min 40.2 sec	119th min 45 sec																																																													
	4KV Swgr Bkr 71-10520 close	2 min	2 min 0.1 sec																																																													
	71-10520 Brk Charging Motor	2 min 0.2 sec	2 min 5 sec																																																													
	10SOV-101A	0 sec	2 min	106.64	0.18	106.77	0.18	101.64	0.17	101.64	0.17	101.65	0.17	102.85	0.18	103.30	0.18	103.45	0.18	103.51	0.18	105.98	0.18	105.98	0.18	106.99	0.18	107.13	0.18	112.48	0.19	111.65	0.19	112.04	0.19	101.95	0.17	101.97	0.17	101.98	0.17	97.33	0.17	104.48	0.18	104.48	0.18	104.21	0.18	104.21	0.18	108.33	0.18	108.63	0.18	108.63	0.18	108.63	0.18	108.63	0.18	112.05	0.19	111.64	0.19
	4KV Swgr Bkr 71-10530 trip	N/A	N/A																																																													
	4KV Swgr Bkr 71-10530 close	18.2nd sec	18.3rd sec																																																													
	71-10530 Brk Charging Motor	18.4rd sec	23.2nd sec																																																													
	4KV Swgr Bkr 71-10540 trip	N/A	N/A																																																													
	4KV Swgr Bkr 71-10540 close	13.2nd sec	13.3rd sec																																																												96.85	4.65
	71-10540 Brk Charging Motor	13.4rd sec	18.2nd sec																																																													
	4KV Swgr Bkr 71-10550 close	1st sec	1.1st sec																																																													
	71-10550 Brk Charging Motor	1.2st sec	6th sec	106.20	16.48	106.33	16.46	101.16	17.30	101.16	17.30	101.17	17.30	102.38	17.09	102.83	17.02	102.98	16.99	103.05	16.98																																										
	4KV Swgr Bkr 71-10550 trip	6.2nd sec	6.3rd sec																			105.60	5.07	105.60	5.07																																								
	4KV Swgr Bkr 71-10550 close	8.2nd sec	8.3rd sec																																			88.64	4.25	88.65	4.26																								
	71-10550 Brk Charging Motor	8.4rd sec	13.2nd sec																																							95.54	51.97	102.60	54.70	102.60	54.70	102.33	54.56	102.33	54.56	107.90	16.22	108.20	16.17	108.20	16.17	108.20	16.17	108.20	16.17	111.65	15.67	111.23	15.73
	4KV Swgr Bkr 71-10560	N/A	N/A																																																													
	K8 EDG-A&C Tie Brk Relay	1.9th sec	120 min	106.79	0.08	106.93	0.08	101.79	0.07	101.79	0.07	101.80	0.07	102.99	0.07	103.44	0.07	103.60	0.07	103.66	0.07	106.13	0.08	106.13	0.08	107.14	0.08	107.28	0.08	112.64	0.08	111.81	0.08	112.20	0.08	102.09	0.07	102.12	0.07	102.13	0.07	97.47	0.07	104.63	0.07	104.63	0.07	104.35	0.07	104.35	0.07	108.48	0.08	108.78	0.08	108.78	0.08	108.78	0.08	108.78	0.08	112.21	0.08	111.79	0.08
	4KV Swgr Bkr 71-10504 close	2nd sec	2.1st sec																																																													
	71-10504 Brk Charging Motor	2.2th sec	6th sec	106.01	16.51	106.14	16.49	100.96	17.33	100.96	17.33	100.97	17.33	102.18	17.13	102.63	17.05	102.79	17.03	102.85	17.01																																										
	62-1EDGA02 EDG A&C Relay	7th sec	8.2 sec																											112.66	0.06	111.83	0.06	112.22	0.06	102.11	0.05	102.13	0.05																										
	62X-1EDGA02 EDG A&C Relay	7th sec	8.2 sec																											112.66	0.03	111.83	0.03	112.22	0.03	102.11	0.03	102.14	0.03																										
	K9 Gen Tie to EDG-A&C (Trip)	7.3rd sec	120 min																															111.12	1.31	102.05	0.07	102.08	0.07	102.09	0.07	97.43	0.07	104.59	0.07	104.59	0.07	104.31	0.07	104.31	0.07	108.44	0.08	108.74	0.08	108.74	0.08	108.74	0.08	108.74	0.08	112.17	0.08	111.75	0.08
	4KV Swgr Bkr 71-10504 trip	7.3rd sec	7.4rd sec																															110.20	5.29	100.27	4.81																												
	Emer Bus 10500 Undervoltage	0.1 sec	7.2nd	103.96	0.85	104.09	0.85	99.09	0.81	99.09	0.81	99.10	0.81	100.26	0.82	100.70	0.82	100.85	0.82	100.91	0.82	103.32	0.84	103.32	0.84	104.30	0.85	104.43	0.85	109.65	0.90	108.85	0.89																														
	71H05 Continuous Control	0 sec	120 min	103.44	1.01	103.57	1.01	98.59	0.96	98.59	0.96	98.60	0.96	99.76	0.97	100.19	0.97	100.34	0.98	100.40	0.98	102.80	1.00	102.80	1.00	103.77	1.01	103.91	1.01	109.10	1.06	108.30	1.05	108.67	1.06	98.88	0.96	98.91	0.96	98.92	0.96	94.40	0.92	101.34	0.99	101.34	0.99	101.07	0.98	101.08	0.98	105.07	1.02	105.36	1.02	105.36	1.02	105.36	1.02	105.36	1.02	108.68	1.06	108.28	1.05
71H07				109.94	0.73	109.96	0.73	109.11	0.73	109.11	0.72	109.11	0.72	110.31	0.73	111.60	0.74	111.75	0.74	111.82	0.74	111.99	0.74	111.99	0.74	112.33	0.74	112.36	0.74	113.41	0.75	113.46	0.75	114.38	0.76	113.36	0.75	113.34	0.75	113.34	0.75	112.69	0.75	113.59	0.75	113.59	0.75	113.31	0.75	113.31	0.75	113.72	0.75	114.01	0.75	114.01	0.75	114.01	0.75	114.01	0.75	114.36	0.76	114.38	0.76
	4KV Swgr Bkr 71-10702 trip	0.1sec	3.1st sec																																																														
	4KV Swgr Bkr 71-10710 trip	3rd sec	3.1st sec																																																														
	86U- Pmp 33PP-8C UV Trip Aux Rela	3rd sec	120 min	109.84	0.05	109.86	0.05	109.00	0.05	109.00	0.05	109.01	0.05	110.20	0.06	111.49	0.06	111.65	0.06	111.71	0.06	111.89	0.06	111.89	0.06	112.23	0.06	112.25	0.06	113.31	0.06	113.35	0.06	114.27	0.06	113.25	0.06	113.23	0.06	113.23	0.06	112.58	0.06	113.48	0.06	113.48	0.06	113.20	0.06	113.20	0.06	113.61	0.06	113.90	0.06	113.90	0.06	113.90	0.06	113.90	0.06	114.25	0.06	114.27	0.06
	4KV Swgr Bkr 71-10720 trip	3rd sec	3.1st sec																																																														
	86U- Pmp 46P-1C UV Trip Aux Relay	3rd sec	120 min	109.84	0.05	109.86	0.05	109.01	0.05	109.01	0.05	109.01	0.05	110.21	0.06	111.50	0.06	111.65	0.06	111.72	0.06	111.89	0.06	111.89	0.06	112.23	0.06	112.26	0.06	113.31	0.06	113.36	0.06	114.28	0.06	113.26	0.06	113.24	0.06	113.24	0.06	112.58	0.06	113.49	0.06	113.49	0.06	113.20	0.06	113.20	0.06	113.62	0.06	113.91	0.06	113.91	0.06	113.91	0.06	113.91	0.06	114.25	0.06	114.28	0.06
	4KV Swgr Bkr 71-10730 trip	3rd sec	3.1st sec																																																														
	4KV Swgr Bkr 71-10740 trip	3rd sec	3.1st sec																																																														
	86U- Pmp 33P-9C UV Trip Aux Relay	3rd sec	120 min	109.84	0.05	109.86	0.05	109.01	0.05	109.01	0.05	109.01	0.05	110.20	0.06	111.50	0.06	111.65	0.06	111.72	0.06	111.89	0.06	111.89	0.06	112.23	0.06	112.26	0.06	113.31	0.06	113.35	0.06	114.27	0.06	113.25	0.06	113.23	0.06	113.24	0.06	112.58	0.06	113.49	0.06	113.49	0.06	113.20	0.06	113.20	0.06	113.62	0.06	113.91	0.06	113.91	0.06	113.91	0.06	113.91	0.06	114.25	0.06	114.28	0.06
	4KV Swgr Bkr 71-10750 trip	3rd sec	3.1st sec																																																														
	86U- Pmp 37P-2C UV Trip Aux Relay	3rd sec	120 min	109.84	0.05	109.86	0.05	109.00	0.05	109.00	0.05	109.01	0.05	110.20	0.06	111.49	0.06	111.65	0.06	111.71	0.06	111.89	0.06	111.89	0.06	112.23	0.06	112.26	0.06	113.31	0.06	113.35	0.06	114.27	0.06	113.25	0.06	113.23	0.06	113.23	0.06	112.58	0.06	113.49	0.06	113.49	0.06	113.20	0.06	113.20	0.06	113.62	0.06	113.90	0.06	113.90	0.06	113.90	0.06	113.90	0.06	114.25	0.06	114.28	0.06
	Bus 10700 Undervoltage	3rd sec	120 min	109.83	0.06	109.85	0.06	108.99	0.06	108.99	0.06	109.00	0.06	110.19	0.06	111.48	0.06	111.64	0.06	111.70	0.06	111.87	0.06	111.87	0.06	112.21	0.06	112.24	0.06	113.29	0.06	113.34	0.06	114.26	0.06	113.24	0.06	113.22	0.06	113.22	0.06	112.57	0.06	113.47	0.06	113.47	0.06	113.19	0.06	113.19	0.06	113.60	0.06	113.89	0.06	113.89	0.06	113.89	0.06	113.89	0.06	114.24	0.06	114.26	0.06
	71H07 Continuous Control	0 sec	120 min	109.09	0.45	109.11	0.45	108.26	0.41	108.26	0.44	108.27	0.44	109.45	0.45	110.74	0.45	110.89	0.46	110.95	0.46	111.13	0.46	111.13	0.46	111.46	0.46	111.49	0.46	112.54	0.46	112.58	0.46	113.49	0.47	112.48	0.46	112.46	0.46	112.46	0.46	111.81	0.46	112.71	0.46	112.71	0.46	112.43	0.46	112.43	0.46	112.84	0.46	113.13	0.46	113.13	0.46	113.13	0.46	113.13	0.46	113.47	0.47	113.50	0.47
71L13				88.52	31.51	88.54	31.52	87.85	31.27	87.85	31.27	87.86	31.28	88.81	31.62	111.71	0.27	111.86	0.27	111.93	0.27	112.10	0.27	112.10	0.27	112.44	0.27	112.47	0.27	113.52	0.27	113.57	0.27	114.49	0.27	113.47	0.27	113.45	0.27	113.45	0.27	112.80	0.27	113.70	0.27	113.70	0.27	113.42	0.27	113.42	0.27	113.83	0.27	114.12	0.27	114.12	0.27	114.12	0.27	114.12	0.27	114.47	0.27	114.50	0.27
	600v Bkr # 11316 52X energize	2nd sec	4.4th sec	87.09	0.70	87.11	0.70	86.43	0.69	86.43	0.69	86.44	0.69	87.38	0.70																																																
	600v Bkr # 11316 52/CC close	2.1st sec	4.4th sec	86.95	30.61	86.97	30.61	86.29	30.37	86.29	30.37	86.29	30.38	87.24	30.71																																																
	71L23 Continuous Control	0 sec	120 min	88.09	0.21	88.11	0.21	87.42	0.21	87.42	0.21	87.43	0.21	88.38	0.21	111.16	0.27	111.32	0.27	111.38	0.27	111.55	0.27	111.55	0.27	111.89	0.27	111.92	0.27	112.97	0.27	113.01	0.27	113.93	0.27	112.91	0.27	112.89	0.27	112.90	0.27	112.25	0.27	113.15	0.27	113.15	0.27	112.86	0.27	112.86	0.27	113.28	0.27	113.57	0.27	113.56	0.27	113.57	0.27	113.57	0.27	113.91	0.27	113.94	0.27
71L25				101.50	36.35	101.53	36.35	100.73	36.07	100.73	36.07	109.48	0.18	110.68	0.19	111.13	0.19	111.29	0.19	109.55	0.18	109.95	0.18	109.95	0.18	110.15	0.18	110.18	0.18	111.21	0.19	112.38	0.19	113.30	0.19	112.28	0.19	112.26	0.19	112.26	0.19	111.60	0.19	112.51	0.19	112.51	0.19	112.23	0.19	112.23	0.19	112.64	0.19	112.93	0.19	112.93	0.19	112.93	0.19	112.93	0.19	113.28	0.19	113.31	0.19
	600v Bkr #12510 52X energize	2nd sec	3.9th sec	99.91	0.80	99.93	0.80	99.15	0.79	99.15	0.79																																																					
	600v Bkr #12510 52/CC close	2.1st sec	3.9th sec	100.50	35.38	100.52	35.38	99.73	35.11	99.73	35.11																																																				
	71L25 Continuous Control	0 sec	120 min	101.16	0.17	101.19	0.17	100.39	0.17	100.39	0.17	109.11	0.18	110.31	0.19	110.76	0.19	110.91	0.19	109.19	0.18	109.58	0.18	109.58	0.18	109.78	0.18	109.81	0.18	110.84	0.19	112.00	0.19	112.92	0.19	111.90	0.19	111.88	0.19	111.88	0.19	111.23	0.19	112.13	0.19	112.13	0.19	111.85	0.19	111.85	0.19	112.27	0.19	112.56	0.19	112.55	0.19	112.56	0.19	112.56	0.19	112.90	0.19	112.93	0.19

D02