Hunlock Creek Energy Center

Operator Logs

Week Beginning: 4/30/12

	Units	Min	Norm	Max	4/30/12 Day	4/30/12 Night	5/1/12 Day	5/1/12 Night	5/2/12 Day	5/2/12 Night	5/3/12 Day	5/3/12 Night	5/4/12 Day	5/4/12 Night	5/5/12 Day	5/5/12 Night	5/6/12 Day	5/6/12 Night
HRSG																		
#5 HRSG Walkdown	OK/UNSAT		OK	UNSAT	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
#6 HRSG Walkdown	OK/UNSAT		OK	UNSAT	OOS	OOS	OOS	OOS	OOS	OOS	—	—	—	—	—	—	—	—
#5 Inlet House Prefilter D/P	in-Wg	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0
#5 Inlet House Filter D/P	in-Wg	0		3.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#6 Inlet House Prefilter D/P	in-Wg	0			—	—	—	—	—	OOS	—	—	—	—	—	—	—	—
#6 Inlet House Filter D/P	in-Wg	0		3.5	—	—	—	—	—	OOS	—	—	—	—	—	—	—	—
#6 CTG Hydraulics Oil Level		1/3	FULL		—	—	—	—	—	OOS	—	—	—	—	—	—	—	—
#6 Turbine Lube Oil Level		1/3	3/4		—	—	—	—	—	OOS	—	—	—	—	—	—	—	—
#6 CTG Generator Oil Level		1/3	7/8		—	—	—	—	—	OOS	—	—	—	—		—	—	—
#5 CTG Hydraulics Oil Level		1/3	FULL		Full	Full	Full	Full	Full	Full	Full	Full	Full	Full	Full	Full	Full	Full
#5 Turbine Lube Oil Level		1/3	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	Full	Full	Full	Full	Full	Full	Full
#5 CTG Generator Oil Level		1/3	7/8		7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8
#5 CEM Shack			OK	UNSAT	Log	OK	Log	OK	OK	OK	Log	OK	OK	OK	OK	OK	OK	OK
#6 CEM Shack			OK	UNSAT	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Main Gas Inlet Press	psig	620	660	690	645	650	650	650	645	650	650	650	650	650	650	650	645	650
#5 Gas Coalescer D/P	psid		0-5	10	0	—	0	0	0	0	0	0	0	—	0	0	0	0
#6 Gas Coalescer D/P	psid				—	—	—	—	—	OOS	—	—	—	—		—	—	—
NH3 Cont Level	inches		1-3	5	2" H2O	2" H2O	3" H2O	2" H2O	2" H2O	2" H2O	4" H2O	4" H2O	2" H2O	2" H2O	2" H2O	2" H2O	2" H2O	2" H2O
Chem/FO Unloading Cont Level	inches		0	1	0	0	0	0	0	0	0	0	1"	1	1	1	1"	1"
CTG #5 DRAIN TANK VALT	EMPTY/UNSAT		EMPTY	PUMP	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	4"	3"
CTG #6 DRAIN TANK VALT	EMPTY/UNSAT		EMPTY	PUMP	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3	3"	3"
CTG #5 TURBINE LUBE OIL FILTER D/P	psid		0-10	15	2	2	2	2	2	2	2	2	2	2	2	2	2	2
CTG #5 SCAVENGING OIL FILTER D/P	psid		0-10	15	3.5	3.5	3	3	3	3	3	3	3	3	3	3	3	3
CTG #5 VG OIL FILTER D/P	psid		0-10	15	12	12.1	12.1	12.1	12.0	12.0	11.5	12.0	11.5	11.8	12.0	12.0	12.1	12
CTG #5 GENERATOR LUBE OIL FILTER D/P	psid		0-10	15	5	6.0	5.0	5.0	5.5	5.5	5	5	5	5.5	5.5	5.5	5.0	5.0
CTG #6 TURBINE LUBE OIL FILTER D/P	psid		0-10	15	—	—	—	—	—	OOS	—	—	—	—	—	—	—	—
CTG #6 SCAVENGING OIL FILTER D/P	psid		0-10	15	—	—	—	—	—	OOS	—	—	—	—	—	—	—	—
CTG #6 VG OIL FILTER D/P	psid		0-10	15	—	—	—	—	—	OOS	—	—	—	—	—	—	—	—
CTG #6 GENERATOR LUBE OIL FILTER D/P	psid		0-10	15	—	—	—	—	—	OOS	—	—	—	—	—	—	—	—
Shift Supervisor Review					[illegible]	BS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	E.S.P.	[illegible]	E.S.P.	[illegible]	E.S.P.

If drain tank valt has water it needs to be pumped down and documented and make sure it is pumped to an oil water seperator

*- Circle the running pump

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RO Unit																			
Online or Offline		ON/OFF				ON	ON		ON	OFF	ON	OFF	ON	ON	ON	ON	ON	ON	
Multi Media Filter	**Tag Number**																		
press diff between water inlet and outlet	PDIS 103	psid		3	5	4.5	5.0	4.0	4.1		4.2		4.5	4.5	4.5	5.7	4.6	4.6	4.9
inlet water flow meter	FIT 101	GPM		165		232.8	190.2	185.8	184.8		192.0		185.6	196.6	182.6	223.6	185.0	190.2	183.8
outlet water pressure	PI 102	psig		40		44	40	40	40		42		45	38	38	38	38	38	39
inlet water pressure	PI 101	psig		40		48	48	48	48		48		48	48	48	45	48	46	48
RO (south side)	**Tag Number**																		
2nd pass reject pressure	PI 218	psig		65		60	60	60	60		59		59	60	60	60	60	60	60
RO feed	PI 215	psig		90		80	78	80	80		79		79	82	79	79	80	80	80
3rd stage In	PI 210	psig		90		80	80	80	80		80		80	80	80	80	80	80	80
RO feed	PI207	psig		120		115	115	115	115		115		115	115	115	115	115	115	115
booster pump 1st pass pressure	PI 205	psig		288		290	291	290	290		289		288	291	289	289	289	289	289
booster pump 2nd pass pressure	PI 213	psig		280		288	290	290	290		289		288	285	290	290	290	290	290
Fil-Trek water pressure into filter	PI203	psig		35		40	40	40	40		40		40	40	40	40	40	40	40
Fil-Trek water pressure out of filter	PI 204	psig		35		40	36	40	40		40		40	40	40	40	40	40	40
Left of Panel (chemistry)	**Tag Number**																		
2nd pass permeate conductivity	AIT 203	us/cm				1.471	1.390	1.614	1.441		1.448		1.446	1.914	1.861	1.589	1.713	1.454	1.792
feed conductivity	AIT 202A	us/cm				158.8	130.3	129.7	137.1		129.3		124.5	127.0	127.3	120.1	126.7	121.3	125.3
1st pass permeate conductivity	AIT 202B	us/cm				2.786	2.011	2.222	2.047		2.162		1.902	2.735	2.65	2.185	2.297	2.933	2.423
Feed ORP	AIT 201	Mv	100	200	250+	199	181	135	188		181		196	205	205	205	191	199	192
Fil-Trek press diff between inlet and outlet	PDIS 201	psid				0	0	0	0		0		0	0	0	0	0	0	0
Panel	**Tag Number**																		
1st pass Recovery rate	%					75	73	71	73		78		72	73	73	73	73	73	77
1st pass reject flow	GPM					29.6	33.0	33.6	33.0		32.0		33.1	30.8	31.6	33.9	31.5	31.9	28.4
2nd pass reject Flow	FIT 204	GPM		14		10.7	10.7	10.7	10.7		10.2		10.7	10.8	10.6	10.7	10.8	10.6	11.0
2nd pass recovery rate	%					90	90	90	90		91		90	90	91	90	90	91	90
Demin Tank level	%		50	90	100	93	93	96	94	94	95	97	94	93	93	93	96	93	94
Permeate tank level	%		50	80	100	54	77	79	79	79	77	81	74	75	78	72	77	79	77
RO (north side)	**Tag Number**																		
1st pass reject flow	FIT 202	GPM		30		33.37	29.78	33.45	31.16		28.66		32.21	31.64	31.92	30.84	33.02	30.42	33.34
1st pass permeate flow	FIT 201	GPM		80		85.59	87.14	85.28	88.46		88.18		88.29	90.31	86.2	87.45	88.54	87.38	87.6
2nd pass permeate flow	FIT 203	psig		85		98.54	100.0	98.74	105.0		99.42		100.4	99.42	100.2	102.2	99.6	102.1	100.0
2nd stage In	PI 217	psig		80		70	70	70	70		70		70	70	70	68	70	67	69
2nd pass permeate flow pressure	PI 216	psig		10		12	12	12	12		12		12	12	12	12	12	12	12
1st pass reject flow pressure	PI 211	psig		70		60	60	60	60		60		60	60	60	60	59	58	59
1st pass permeate flow pressure	PI 208	psig		25		31	30	30	30		30		30	30	30	30	28	29	29
2nd stage In	PI 209	psig		100		90	91	94	94		94		94	94	94	89	89	87	89
Chemicals																			
Antiscalant (permatreat PC-191T) level		US Gal	10		70	8	7	7	6		5	5	4	3	2	1	1	69	69
Antiscalant pump pressure		psig				22	46	44	44		44	44	44	44	44	46	44	40	42
Sodium Bisulfite (permacare PC-7408) level		US Gal	10		70	63	62	61	60		58	58	57	56	55	54	53	52	51
Sodium Bisulfite pump pressure		psig				32	44	42	42		42	44	46	36	38	36	42	38	41
Permeate Pumps to Demin Tank																			
Permeate Transfer pump		#1 or #2				None	#2	1	1		1	None	None	#1	#1	None	#1	#1	#1
Transfer Press	PI 301	PSI				18	56	53	53		53	27	27	55	55	27	55	55	56
Demin Tank filter serial Number	# 15885	on/off				OFF	OFF	OFF	OFF		OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Demin Tank filter serial Number	# 17766	on/off				ON	ON	ON	ON		ON	ON	ON	ON	ON	ON	ON	ON	ON
Shift Supervisor Review						[illegible]	RS	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	ESP	[illegible]	ESP	[illegible]	ESP

GE Changed Antiscalant TK 12/1/2012

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Chiller Building																		
3D Trasar #DT184 Tank Level	gal				32.3	32.5	32.5	32	32	32.0	32	31.5	32	32	32	32.0	32.0	32.0
3D Trasar #DT191 Tank Level	gal				59	59.5	59	58.5	58.8	58.1	58.1	58.0	59.5	59.0	59.0	59.0	58.5	58.5
Stabrex ST 70 Tank Level	gal				60	61.0	60.5	60	60	59	59	58.5	59.0	59.0	59.0	59.0	58.0	58.0
3D Trasar pH	pH		0-5	10	8.44	8.21	8.06	8.05	8.02	8.10	8.01	8.21	8.09	8.11	8.27	8.40	8.05	8.40
3D Trasar Conductivity	uMhos		0-5	10	708	716	707	761	768	813	829	914	935	925	990	1092	1176	1174
#1 Raw Water Pump Oil Level		1/3	1/2	7/8	1/2	1/2 Run	1/2	1/2	1/2 Run	1/2 Run	1/2	1/2	1/2	1/2	1/2	1/2	1/2 Run	1/2 Run
#2 Raw Water Pump Oil Level		1/3	1/2	7/8	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Cooling Tower	OK/UNSAT		OK	UNSAT	OK	OK	OK	OK Auto	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Chill Water Pumps	OK/UNSAT		OK	UNSAT	OK ON	OK/ON	OK ON	OK Auto	OK	OK Auto	OK	OK Auto	OK/Auto	OK/Auto	OK/Auto	OK/Auto	OK/Auto	OK/Auto
Cooling Tower Pumps	OK/UNSAT		OK	UNSAT	OK Auto	OK/Auto	OK Auto	OK Auto	OK Auto	OK Auto	OK	OK Auto	OK/Auto	OK/Auto	OK/Auto	OK/Auto	OK/Auto	OK/Auto
BFP Building																		
#5 BFP Running	OFF/RUN				Run	Run	Run	Run	Run	Run	Run	Run	off	Run	Run	Run	Run	Run
Oil Level		1/3	1/2	7/8	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
STBY BFP Running	OFF/RUN				off	off	off	off	OFF	off	off	off	off	off	off	off	off	off
Oil Level		1/3	1/2	7/8	1/2	1/2	1/2	1/2	1/2	off	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
#6 BFP Running	OFF/RUN				OOS	-	OOS	OOS	—	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS
Oil Level		1/3	1/2	7/8	OOS	-	OOS	OOS	—	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS
5711 Tank Level	gal				64.5	65.0	64	63.5	63.3	60.9	62	61.5	61.0	61.0	61.0	61.0	60.0	59.5
RO Building																		
#1 Demin Pump Oil Level		1/3	1/2	7/8	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
#2 Demin Pump Oil Level		1/3	1/2	7/8	1/2	1/2 Run	1/2	1/2	1/2 Run	1/2 Run	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Air Receiver Pressure	psig	90	130	150	130	129	130		130	130	130	130	130	130	130	130	130	130
Air Receiver Filter D/P	psid		0-5	10	1.3	1.4	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Air Dryer Filter D/P	psid		0-5	10	.3	.4	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3
Air Compressor Running	1 OR 2				2	#2	2	2	#2	2	2	2	2	#2	#2	#2	#2	#2
Oil Level		1/3	1/2	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8
Off line Air Compressor Oil Level		1/3	1/2	7/8	7/8	7/8	7/8	7/8	7/8	7/8	3/4	7/8	7/8	7/8	7/8	7/8	7/8	7/8
Aux Boiler																		
ELIMIN-OX Tank Level	gal				60	61.0	60	60	60	60	60	60	60	60	60	60	60	60
BT-3000 Tank Level	gal				72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
Steam Turbine Building																		
Run Traveling Screens for 15 Minutes	OK/UNSAT				OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Add H2 as needed	OK/ADD				OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
#1 Turbine Bearing Temp	F				—	—	—	—	—	—	—	—	—	—	—	—		—
#2 Turbine Bearing Temp	F				114	123	124	124	124	122	106	124	105	125	119	126	124	124
#3 Turbine Bearing Temp	F				98	106	106	108	107	108	96	108	97	107	104	108	107	108
#4 Turbine Bearing Temp	F				130	144	143	142	142	142	100	144	100	144	137	144	145	146
#5 Turbine Bearing Temp	F				110	111	110	110	111	111	94	110	98	110	110	110	110	110
#6 Turbine Bearing Temp	F				104	106	106	108	108	108	96	106	90	106	106	106	107	106
Shift Supervisor Review					[illegible]	RF	[illegible]	DW	[illegible]	DW	[illegible]	[illegible]	[illegible]	ESP	[illegible]	ESP	[illegible]	ESP

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Steam Turbine Building																		
#1 CARP Tank Level		1/4	1/2		1/2	1/2 (ON)	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
#1 CARP Temp	F				52	54	54	55	56	56	56	88	59	74	64	67	94	76
#2 CARP Tank Level		1/4	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
#2 CARP Temp	F				54	65	65	72	70	72	56	61	59	63	66	73	60	62
North Circ Pump Running	RUN/OFF				OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	RUN	RUN	RUN	RUN	RUN	RUN
North Circ Pump Oil Level		1/3	1/2	7/8	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Noth Circ Pump Packing leakage	yes/no				Yes	Yes	Yes	Yes	NO	NO	NO	NO	Yes	Yes	Yes	Yes	Yes	Yes
South Circ Pump Running	RUN/OFF				Run	Run	Run	RUN	RUN	RUN	Run	RUN	OFF	OFF	OFF	OFF	OFF	OFF
South Circ Pump Oil Level		1/3	1/2	7/8	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
South Circ Pump Packing leakage	yes/no				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
#4 SW Pump Run	RUN/OFF				OFF	OFF	OFF	OFF	OFF	OFF	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS
#4 SW Pump Oil Level		1/3	1/2	7/8	Idle	Idle	Idle	Idle	Idle	Idle	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS
#4 SW Pump Packing Leakage	yes/no				NO	NO	NO	NO	NO	NO	OOS	OOS	OOS	OOS	OOS	OOS	OOS	OOS
#5 SW Pump Run	RUN/OFF				Run	Run	Run	RUN	RUN	RUN	RUN	RUN	Run	Run	RUN	RUN	RUN	RUN
#5 SW Pump Oil Level		1/3	1/2	7/8	Run	Run	Run	RUN	RUN	RUN	Run	RUN	R	Run	RUN	RUN	RUN	RUN
#5 SW Pump Packing Leakage	yes/no				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SW Press at SW Pump	psig	20			86	94	85	89	75	85	60	80	80	86	87	86	76	77
SW Press at SW Filters	psig	20			92	78	79	75	70	80	60	72	60	66	69	68	73	74
SW Press To CCW	psig				35	48	49	47	49	51	38	48	42	46	45	46	54	54
#1 CCW Pump Oil Level		1/3	1/2	7/8	1/2	1/2	1/2	1/2 RUN	1/2	1/2 RUN	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
#2 CCW Pump Oil Level		1/3	1/2	7/8	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
EHC Resevoir Level	inches		7"		6.5	6.5	6.5	6.5	6.5	6.5	6	6.5	6.0	6.0	5.5	5.5	6.0	6.0
EHC Temp	F	90	95-105	110	92	100	100	102	101	102	102	102	102	101	99	103	98	102
EHC Press	psig	1750	1800	1835	1784	1783	1783	1783	1785	1782	1784	1784	1782	1780	1782	1782	1779	1780
#1 EHC Pump Filter D/P	psid	0		80	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#2 EHC Pump Filter D/P	psid	0		80	30	25	25	25	25	25	28	25	34	30	31	29	32	30
EHC Kidney Pump Filter D/P	psid	0		80	8	8	8	8	8	8	8	8	8.0	8.0	8.0	8.0	8.0	8.0
EHC OIL DESICCANT FILTER COLOR			BLUE	PINK	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Condensate Pump Running	3A or 3B				3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A
Oil Level		1/3	1/2	7/8	7/8 7/8	7/8 7/8	7/8 7/8	7/8 7/8	7/8 7/8	7/8 7/8	7/8 7/8	7/8 7/8	7/8 7/8	7/8 7/8	7/8 7/8	7/8 7/8	7/8 7/8	7/8 7/8
Iron Horse Oil Level					OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Iron Horse Temp					75	96	95	95	95	98	80	99	80	90	84	100	84	100
In Line Strainer (turned 3 times)	yes/no				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Seal Oil Pressure	psig				28	28.0	27	27	27.2	27.5	30	27.6	28.0	27.5	27.5	28.0	28.0	28.0
Backflush H2/Turbine LO Coolers	OK				OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Turbo-Toc	OK				OK	OK/ON	OK	OK RUN	OK	OK	OK	OK	OK	OK/ON	OK/ON	OK/ON	OK/RUN	OK/ON
TOP UP GENERATOR FUEL OIL LEVEL	Gal	1/2	FULL		Full	Full	Full	Full	Full	Full	Full	Full	Full	Full	Full	Full	Full	Full
Shift Supervisor Review					[illegible]	RS	[illegible]	DW	[illegible]	DW	[illegible]	DW	[illegible]	S.R	[illegible]	S.R.	[illegible]	[illegible]

Hunlock Creek Energy Center

Operator Logs

Week Beginning: 4/30/12

	Units	Min	Norm	Max	4/30/12 Day	4/30/12 Night	5/1/12 Day	5/1/12 Night	5/2/12 Day	5/2/12 Night	5/3/12 Day	5/3/12 Night	5/4/12 Day	5/4/12 Night	5/5/12 Day	5/5/12 Night	5/6/12 Day	5/6/12 Night
Chiller Logs Unit 1*																		
Online or Offline	on/off				OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON	ON	ON	ON
Valves Lined Up or By-passed	in/out				BYPASS	BYPASS	BYPASS	Line up	line	Line	line	line	Breaker	Line	Line	Line	Line	Line
Evaporator																		
Inlet Temp	Deg F							49.2	51.7	53.9	54.2	50.1	52.1	52.1	49.4	49.3	49.8	49.5
Outlet Temp	Deg F							46.0	50.8	50.3	54.6	45.9	47.9	47.9	46.9	47.0	47.1	47.0
Refrigerant Press								-7.9	-7.1	-6.9	-6.7	-8.3	-8.0	-8.0	-8.1	-8.1	-7.6	-7.8
Condenser																		
Inlet Temp	Deg F							72.9	68.5	67.5	66	72.2	74.1	74.1	71.0	70.9	69.3	70.9
Outlet Temp	Deg F							74.5	68.6	70.5	66.1	77.1	78.0	78.0	74.1	73.9	72.6	74.0
Refrigerant Press								-8.1	-7.1	-7.0	-6.6	-1.0	-1.4	-1.4	-2.6	-2.1	-8.0	-8.0
Compressor																		
Starts								51	51	54	54	55	55	56	57	57	57	57
Runtime	Hours							324.1	324:41	330:34	331:20	337:00	342	343	349	358	362	362
Oil Tank Pressure	psig							-8.2	-7.2	-7.6	-6.7	-7.8	-3.8	-7.5	-7.8	-7.8	-8.1	-8.1
Oil Discharge Pressure	psig							-8.3	-7.3	-6.1	-6.7	13.6	-2.5	11.9	12.1	-12.1	-8.1	-8.2
Oil Differential Pressure	psid							0	0	20.74	0	21.88	0	19.41	19.91	19.93	0	0
Oil Level			*		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Oil Tank Temp	Deg F							140.1	145.4	119.3	141.5	113.1	94.2	112	110	111	140.2	143.8
IGV 1 Position	%							0	0	18.4	0	28.2	0	26.7	15.3	15.1	0	0
IGV 2 Position	%							0	0	68.9	0	78.8	0	77.7	63.2	62.8	0	0
IGV 1 Steps								0	0	9673	0	14653	0	12865	8046	7871	0	0
IGV Steps								0	0	32753	0	37808	0	36571	30212	28891	0	0
Motor																		
% RLA L1, L2, L3	%							0	0	45	0	56.1		55.8	41.3	41.4	0	0
Amps L1, L2, L3	amps							0	0	115	0	143.0		143	109	109	0	0
Volts AB, BC, CA	Volts							2366	2377	2358	2374	2350		2374	2358	2371	2862	2325
Power kW	kW							0	0	101.2	0	510.4		513	356	349	0	0
pF								0.01	0	.82	0	0.84		0.86	079	078	0	0
Winding Temp #1	Deg F							62.5	63.8	85.3	70.8	88.2	72.1	100	88.3	88.0	68.0	68.0
Winding Temp #2	Deg F							63.4	64.5	87.8	72.1	96.1	72.9	98	91.0	86.6	68.7	68.6
Winding Temp #3	Deg F							63.1	64.3	88.7	71.5	98.8	72.1	100	88.3	88.0	69.4	68.2
Shift Supervisor Review					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

*= OIL SUMP IS LOCATED ON THE ROAD SIDE OF THE CHILLER UNIT. NORMAL OIL LEVEL SHOULD BE; BOTTOM SIGHT GLASS FULL AND JUST BE SEEN IN TOP GLASS. THERE ARE BALLS IN THE SIGHT GLASS IT MAKE IT EASIER TO SEE. (BOTTOM GLASS BALL AT THE TOP AND TOP GLASS BALL ON THE BOTTOM).

Hunlock Creek Energy Center

Operator Logs

Week Beginning: 4/30/12

	Units	Min	Norm	Max	4/30/12 Day	4/30/12 Night	5/1/12 Day	5/1/12 Night	5/2/12 Day	5/2/12 Night	5/3/12 Day	5/3/12 Night	5/4/12 Day	5/4/12 Night	5/5/12 Day	5/5/12 Night	5/6/12 Day	5/6/12 Night
Chiller Logs Unit 2*																		
Online or Offline	on/off				off	off	off	on	OFF	on	off	on	off	on	on	on	on	on
Valves Lined Up or By-passed	in/out				Bypass	Bypass	Bypass	Line up	in line	Line	line	line	Line	Up	Line	Line	Line	Line
Evaporator																		
Inlet Temp	Deg F							49.7	51.7	53.9	54.2	50.1	52.1	52.1	48.4	49.3	49.8	49.8
Outlet Temp	Deg F							46.3	50.8	50.3	54.6	45.9	47.9	47.9	46.9	47.0	47.0	47.0
Refrigerant Press								-8.3	-7.0	-7.6	-6.6	-7.2	-6.8	-6.8	-8.1	-8.1	-7.6	-7.8
Condenser																		
Inlet Temp	Deg F							70.7	68.5	67.5	66	72.2	74.1	74.1	71.0	70.9	69.3	70.9
Outlet Temp	Deg F							74.8	68.5	70.5	66.1	77.1	79.0	75.6	74.1	73.9	72.6	74.0
Refrigerant Press								-1.9	-7.0	-2.8	-6.7	-2.5	-1.4	-1.4	-2.0	-2.1	-8.0	-8.0
Compressor																		
Starts								55	55	56	57	57	57	57	57	57	59	59
Runtime	Hours							297.21	300.13	301.45	302.36	302.70	302.0	302	302	302	303.34	309.48
Oil Tank Pressure	psig							-7.9	-7.1	-7.2	-6.8	-7.6	0	-7.1	-7.6	-7.7	-7.9	-7.8
Oil Discharge Pressure	psig							14.7	-7.1	-7.1	-6.7	-7.5	0	-7.1	-7.5	-7.6	14.7	14.7
Oil Differential Pressure	psid							22.55	0	0	0	0	0	0	0	0	22.58	22.52
Oil Level			*		ok	ok	ok	ok	OK	ok	ok	ok	OK	ok	ok	ok	ok	ok
Oil Tank Temp	Deg F							105.2	139	114.3	146.4	142.7	0	140	142	142	108	107
IGV 1 Position	%							18	0	0	0	0	0	0	0	0	15.1	15.3
IGV 2 Position	%							15.9	0	0	0	0	0	0	0	0	62.8	63.2
IGV 1 Steps								9593	0	0	0	0	0	0	0	0	8044	8133
IGV 2 Steps								31832	0	0	0	0	0	0	0	0	25387	25346
Motor																		
% RLA L1, L2, L3	%							46.6	0	0	0	0		0	0	0	37.5	38.0
Amps L1, L2, L3	amps							39.8	0	0	0	0		0	0	0	37.1	37.4
Volts AB, BC, CA	Volts							2360	2373	2362	2374	2364		2378	2369	2374	2356	2357
Power kW	kW							384	0	0	0	0		0	0	0	348	357
pF								0.23	0	0	-.01	0		0	0	0	389	347
Winding Temp #1	Deg F							86.9	74.8	81.8	73.1	77.3		69.3	68.5	70.6	84.8	85.6
Winding Temp #2	Deg F							86.9	75.0	83.2	73.2	76.5		69.3	68.5	70.5	84.7	85.5
Winding Temp #3	Deg F							92.4	75.8	79.8	74.2	72.6		70.7	68.5	72.0	90.0	90.0
Shift Supervisor Review					DW	DW	DW	DW	DW	DW	DW	DW	RW	ESP.	RW	ESP.	DW	ESP.

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Hunlock Cree[illegible] [illegible]nergy Center

Operator Logs

Week Beginning: 4/30/12

	Units	Min	Norm	Max	4/30/12 Day	4/30/12 Night	5/1/12 Day	5/1/12 Night	5/2/12 Day	5/2/12 Night	5/3/12 Day	5/3/12 Night	5/4/12 Day	5/4/12 Night	5/5/12 Day	5/5/12 Night	5/6/12 Day	5/6/12 Night
T3																		
Winding Temperature	DEG C				8	28	27	37	38	32	21	28	24	27	24	36	20	32
Oil Temperature	DEG C				9	28	27	38	38	32	21	24	27	30	25	35	23	32
Transformer Press	psig				-2	-.7	.5	2.9	.6	.9	-.5	1.6	.5	.9	0	1.3	.5	.8
Liquid Level					OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Bushing Levels					OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Containment Level					OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
52T3																		
SF6 Press	psig				64	70	68	74	69	70	70	74	71	71	69	71	71	71
Counter					347	347	347	347	347	347	348	348	349	349	350	350	351	351
SST3																		
Winding Temperature	DEG C				21	33	28	36	37	32	31	42	35	38	35	38	33	37
Oil Temperature	DEG C				21	31	28	36	38	32	31	40	31	37	34	38	33	35
Transformer Press	psig				.5	2.0	1.5	2.9	2.0	2.0	2.0	3.1	2.0	2.6	2.0	2.6	1.9	2.5
Liquid Level					OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Bushing Levels					OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Containment Level					1"	1"	2"	2"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"
T5																		
Winding Temperature	DEG C				50	76	77	80	80	75	45	79	45	73	54	79	62	79
Oil Temperature	DEG C				46	75	74	73	76	71	42	74	46	70	50	75	58	72
Pressure	psig				1.5	7.1	6.5	6.5	5.9	5.7	2.5	6.5	1.9	8.5	7.5	6.5	3.5	6.6
Liquid Level					OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Containment Level					OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Bushing Levels					OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
T6																		
Winding Temperature	DEG C				8	19	14	22	23	17	12	26	26	24	19	23	18	21
Oil Temperature	DEG C				8	20	14	23	24	17	12	26	21	25	19	24	17	22
Pressure	psig				-1	-.4	-.5	-.1	-.5	-.2	-.5	-.1	-.5	-.5	-.8	-.5	-.7	.6
Liquid Level					OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Containment Level					OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Bushing Levels					OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
52T5																		
SF6 Pressure	psig				66	74	70	76	71	72	71	78	74	73	71	74	72	72
Counter					163	163	163	163	163	163	163	163	163	163	163	163	163	163
52T6																		
SF6 Pressure	psig				64	69	68	72	68	69	68	74	72	72	70	71	70	70
Counter					146	146	146	146	146	146	146	146	146	146	146	146	146	146
52U																		
SF6 Pressure	psig				60	66	64	68	64	65	67	69	66	69	65	69	65	69
Counter					97	97	97	97	97	97	97	97	97	97	97	97	97	97
Shift Supervisor Review	INIT				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]