

Docket: 07-035-93 / Utah GRC 2007
 CCS Data Request 7.16

Estimated Startup Fuel Consumption and Power Production

Assuming:

Site conditions=ISO

Evaporative Cooling Tower

Fuel Cost (\$/MM BTU (HHV))= \$5.00 0.034299 0.0336108

Power Sale Price (\$/kWh) \$0.050

<u>Configuration</u>	<u>2xS107FA SS</u>	<u>1xS207FA</u>	
Net Plant Output (kW)	519,468	530,299	
Net Plant Heat Rate (BTU/kWh (LHV))	6,180	6,056	
Plant Heat Consumption (BTU/hr (LHV))	3,210,312,240	3,211,490,744	3,568 mmBtu/start
GT Output (kW)	343,192	343,192	
ST Output (kW)	187,576	198,299	
Gross Power (kW)	530,768	541,491	
	0.97871	0.97933	
<u>Cold Start</u>			
Starting Time (minutes)	180	240	
Fuel Consumption/start (BTU/hr (LHV))	3,178,209,118	3,532,639,818	3,925 mmBtu/start
Fuel Cost/start (\$)	\$17,639	\$19,606	
Power Produced/start (kWh)	256,126	262,603	
Power Value/start (\$)	\$12,806	\$13,130	
Start up Cost (\$)	\$4,833	\$6,476	
<u>Warm Start</u>			
Starting Time (minutes)	109	122	
Fuel Consumption/start (BTU/hr (LHV))	1,701,465,487	2,135,641,345	2,373 mmBtu/start
Fuel Cost/start (\$)	\$9,443	\$11,853	
Power Produced/start (kWh)	256,126	262,603	
Power Value/start (\$)	\$12,806	\$13,130	
Start up Cost (\$)	-\$3,363	-\$1,277	
<u>Hot Start</u>			
Starting Time (minutes)	68	71	
Fuel Consumption/start (BTU/hr (LHV))	1,027,299,917	1,188,251,575	1,320 mmBtu/start
Fuel Cost/start (\$)	\$5,702	\$6,595	
Power Produced/start (kWh)	256,126	262,603	
Power Value/start (\$)	\$12,806	\$13,130	
Start up Cost (\$)	-\$7,105	-\$6,535	

J.B.S.
 03/04/03