

November 21st Performance Test Analysis
11/29/2013

Contract Guarantee Heat Rate 12,559 Btu/kWh After Dead Band 12,433

Case	Guarantee	Nov 21st Test	70 MW Perf	70 MW from HB
Gross Plant Power	114,820	114,230	81710	82682
Auxiliary Load	13,300	11,630	1,670	10870
Net Plant Power	101,520	102,600	70840	69882
Net HHV Heat Rate	12,475	11,349		13440
Heat Input MMBtu/hr	1,266	1,164		939.21
Fuel Moisture %	45%	37.5%		
Dry Bulb deg F	80%	69.4%		
Wet Bulb deg F	78%	67.8%		
Main Steam Flow PPH	900,100	877,583	660375	651000
FW Flow PPH (based on 0 blowdown)	900,117	875,000	653527	650983
Steam Press psig	1,620	1604	1566	1634
Steam Temp deg F	1,005	998.7	976	1005
FW Temp Into Economizer Deg F	439	439.2	437	392
Main Steam h Btu/lb	1,490	1485.32	1473	1490
FW h Btu/lb	419	418.6	415.6	392
Delta h Btu/lb	1,071	1,067	1057.4	1098
Heat Input MMBtu	964	933	691	715
Boiler Efficiency	0.7633	0.8016	0.763	0.763
Overall Heat input	1,263	1,164	906	937
Heat Rate Btu/kWh	12,441	11,349	1,092	12,784.97
Condenser Hotwell Temp Deg F	107	105		
Vacuum in Hg abs	2.40	2.11		
Ambient Temp Deg F	80	69.4		
Wet Bulb Temp Deg F	78	67.8		
Wet Bulb HR Correction From Curve	1	0.994		
Fuel Moisture Correction from Curve	1	0.965	40% moisture correction	0.9743 11718.56 11927.29
Corrected Heat Rate	12,475	11,831	Degradation 1.75	12,042.24 At 45% moisture
Corrected Heat Input MMBtu/hr	1266	1214		

Solid Fuel Flow cu ft/hour		11,766		106.24
Tons/hour @ 17 lbs/cu ft	132.8	112.3	19.09	95%
Fuel Average Btu/lb	4,769	5,183		
Heat input MMBtu	1,266	1,164		
Tons/MWh	1.3079	1.0948		