$$\frac{\text{Area Initial}}{\text{Vel test?}} = \frac{\text{Area 2nd}}{\text{Vel ave}} \left[\text{vel}^{?}_{\text{dest}}\right]$$

fina

$$\text{Vel}_{\text{initial test}}^{\text{backcalc}} = \frac{\overset{B9}{\text{Area Initial}}}{\underset{J9}{\text{Area final}}} \times \underset{3831}{\text{Vel final ave}}$$

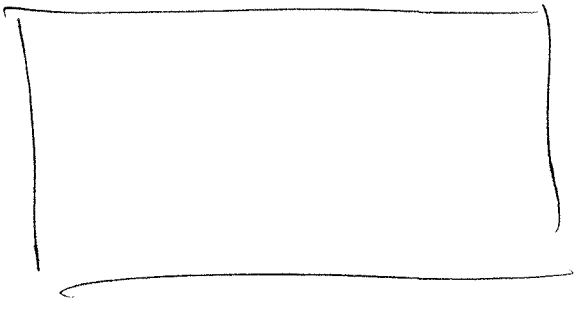
Outer 3831

Inner 3103

Δ Dev [Vel initial - vel backcalc]

→ curves

layout



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UNIT 2 MONTHLY PERFORMANCE MONITORING SUMMARY

U2 EQUIPMENT/PARAMETERS	PT ID	UNITS	BASELINE	MAR 92	FEB 92	JAN 92	DEC 91	OCT 91	SEP 91
COAL PULVERIZER 1E									
PULV COAL FLOW	COAXI006A	TPH	48.61	49.42	47.49	54.60	48.24	48.63	O/S
PULV PA FLOW	COAXI060A	%	88.02	88.53	87.31	91.47	87.51	93.11	87.61
PULV INLET TEMP	SGATE0643	DEGF	358.83	305.00	345.47	347.37	362.25	331.97	314.91
PULV DISCH TEMP	COAXI068A	DEGF	150.89	150.73	150.72	150.76	150.84	150.90	150.88
PULV DIFF PRESS	SGAPT0154	INWC	14.14	13.69	14.85	16.18	13.81	15.39	14.21
PULV AMPS	SGAKK0005	AMPS	62.63	56.08	60.82	61.83	59.55	60.96	59.68
AMPS/DP	CALC		4.43	4.10	4.10	3.82	4.31	3.96	4.20
TPH/AMPS	CALC		0.78	0.88	0.78	0.88	0.81	0.80	??
TPH/DP	CALC		3.44	3.61	3.20	3.37	3.49	3.16	??
COAL PULVERIZER 1F									
PULV COAL FLOW	COAXI007A	TPH	47.63	48.53	46.56	O/S	47.21	47.48	53.18
PULV PA FLOW	COAXI061A	%	87.79	93.18	91.66		87.43	91.47	97.83
PULV INLET TEMP	SGATE0644	DEGF	386.00	338.34	361.73		386.21	355.91	381.5
PULV DISCH TEMP	COAXI069A	DEGF	149.24	150.72	151.05		150.00	149.04	149.16
PULV DIFF PRESS	SGAPT0155	INWC	15.64	16.67	17.72		15.44	16.89	18.59
PULV AMPS	SGAKK0006	AMPS	63.24	58.81	61.11		57.89	59.72	60.14
AMPS/DP	CALC		4.04	3.53	3.45		3.75	3.54	3.24
TPH/AMPS	CALC		0.75	0.83	0.76		0.82	0.80	0.88
TPH/DP	CALC		3.05	2.91	2.63		3.06	2.81	2.86
COAL PULVERIZER 1G									
PULV COAL FLOW	COAXI008A	TPH	48.60	49.02	47.02	53.92	47.63	48.48	54.18
PULV PA FLOW	COAXI062A	%	87.56	92.33	91.34	91.04	87.08	95.32	95.34
PULV INLET TEMP	SGATE0645	DEGF	400.00	339.54	350.03	394.95	355.97	356.75	401.5
PULV DISCH TEMP	COAXI070A	DEGF	151.00	150.37	150.28	150.36	150.30	150.36	150.31
PULV DIFF PRESS	SGAPT0156	INWC	13.46	16.46	16.72	17.38	16.52	16.86	18.63
PULV AMPS	SGAKK0007	AMPS	60.20	54.30	57.63	59.20	56.79	58.41	62.62
AMPS/DP	CALC		4.47	3.30	3.45	3.41	3.44	3.46	3.36
TPH/AMPS	CALC		0.81	0.90	0.82	0.91	0.84	0.83	0.87
TPH/DP	CALC		3.61	2.98	2.81	3.10	2.88	2.88	2.91
COAL PULVERIZER 1H									
PULV COAL FLOW	COAXI009A	TPH	O/S	49.44	O/S	O/S	O/S	O/S	54.47
PULV PA FLOW	COAXI063A	%		92.67					98.72
PULV INLET TEMP	SGATE0646	DEGF		304.95					363.08
PULV DISCH TEMP	COAXI071A	DEGF		150.42					149.98
PULV DIFF PRESS	SGAPT0157	INWC		13.94					16.47
PULV AMPS	SGAKK0008	AMPS		54.92					59.92
AMPS/DP	CALC			3.94					3.64
TPH/AMPS	CALC			0.90					0.91
TPH/DP	CALC			3.55					3.31

NOTES: N/A - Point not available or not recorded during test
* - Invalid point
OOS - Equipment out of service during test

The test results reported here are based upon monthly unit performance tests conducted at test conditions to determine capacity and performance of the unit utilizing the calculations in the Foxboro 1A Plant Information Computer.

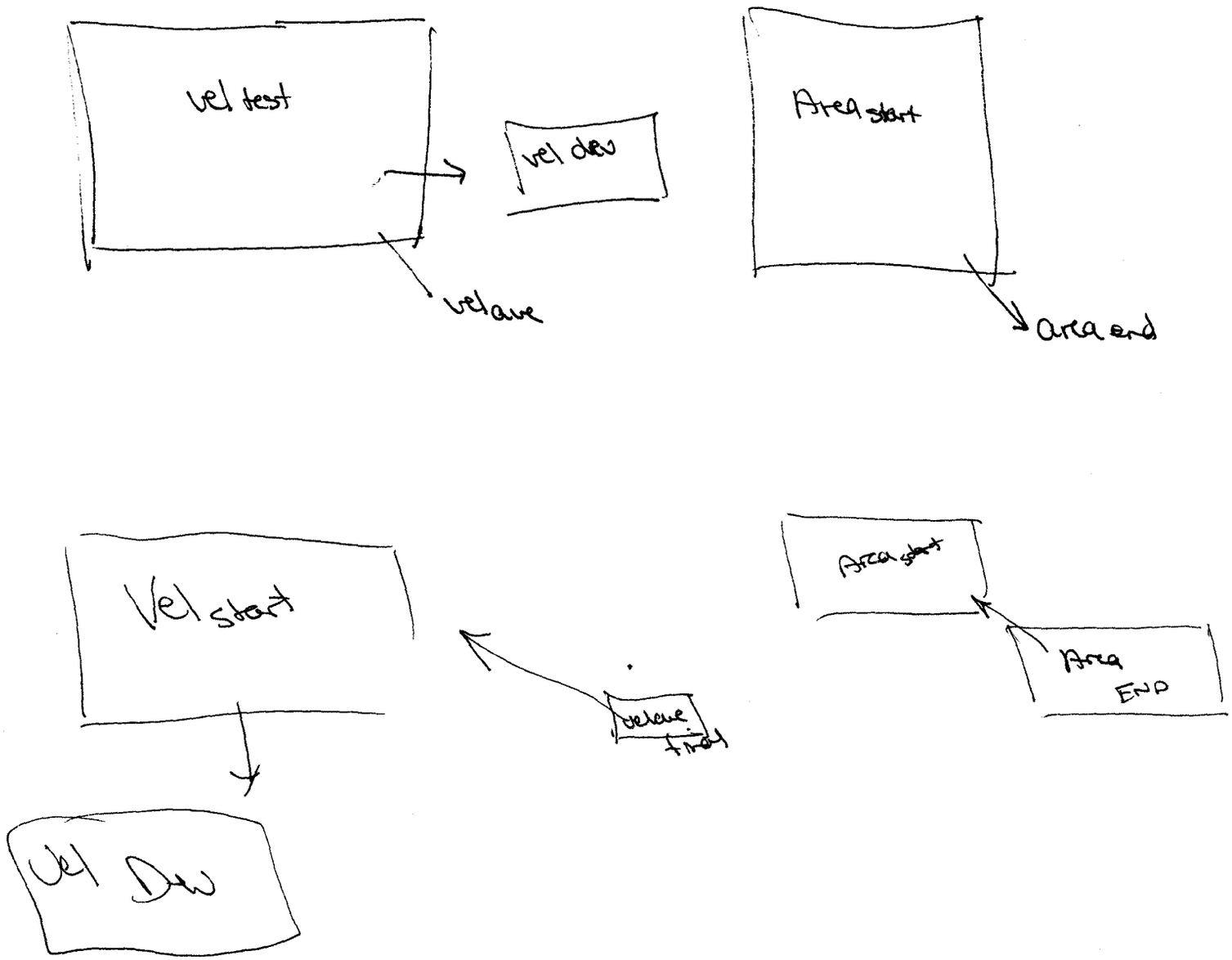
March 92 - F pulverizer OOS. Manually controlled SH dampers to control RH temps. RH damper remained closed during test.

January 92 - Due to availability of pulverizers this month's test was conducted at VWO and reduced throttle pressure at 840 MWG. F & H pulverizers out of service. Turbine test data corrected values can be used for trending. The balance of the turbine cycle should be evaluated based upon reduced throttle flows.

December 91 - Building heat exchanger drains routed to Unit 1. Isolated CGR bundles required high CGR extraction flow (675 kpph). CT fan 1A10 out of service.

October 91 - 1H coal pulverizer OOS. Condenser hotwell not isolated due to steam demands from Unit 1 start-up. Test length 1 hour and 15 minutes curtailed due to high reheat steam temperatures.

September 91 - Due to availability of pulverizers this month's test was conducted at VWO and reduced throttle pressure at 840 MWG. A & E pulverizers out of service. Turbine test data corrected values can be used for trending. The balance of the turbine cycle should be evaluated based upon reduced throttle flows.


vel test
vel dev
vel ave
Area start
area end
Vel start
Vel Dev
velave final
Area start
Area END

UNIT 2 MONTHLY PERFORMANCE MONITORING SUMMARY

U2 EQUIPMENT/PARAMETERS	PT ID	UNITS	BASELINE	MAR 92	FEB 92	JAN 92	DEC 91	OCT 91	SEP 91
DROP/HEAD	CALC	%	65.51	67.19	66.52	65.82	64.88	69.05	67.65
COLD END AVE TEMP	SGBKV0007	DEGF	193.52	190.96	190.33	193.81	188.74	204.17	200.41
DIFFERENTIAL PRESS	SGBPT0215	INWC	2.14	2.16	2.22	2.07	2.30	1.91	2
MOTOR AMPS	SGBKK0004	AMPS	3.36	3.23	3.06	3.20	3.09	3.11	3.18
INDUCED DRAFT FAN 1A									
XFMR 1A1 AMPS	CCEKK0001	AMPS	273.75	311.25	292.50	300.00	289.77	287.50	296.25
XFMR 1A2 AMPS	CCEKK0002	AMPS	292.50	296.25	292.50	288.75	303.07	318.75	303.75
ID FAN 1A SPEED	COAXI086A	RPM	663.57	696.66	666.57	656.78	673.08	694.20	673.69
INDUCED DRAFT FAN 1B									
XFMR 1B1 AMPS	CCEKK0003	AMPS	333.75	348.75	315.00	333.75	352.50	336.50	337.5
XFMR 1B2 AMPS	CCEKK0004	AMPS	330.00	352.50	318.92	337.50	326.25	336.50	345
ID FAN 1B SPEED	COAXI087A	RPM	670.19	702.15	671.78	662.50	678.62	699.17	678.06
INDUCED DRAFT FAN 1C									
XFMR 1C1 AMPS	CCEKK0005	AMPS	277.50	322.50	288.75	285.00	300.00	277.50	288.75
XFMR 1C2 AMPS	CCEKK0006	AMPS	277.50	292.50	285.00	292.50	288.75	277.50	285
ID FAN 1C SPEED	COAXI088A	RPM	661.34	694.64	665.17	655.43	671.82	691.95	670.85
INDUCED DRAFT FAN 1D									
XFMR 1D1 AMPS	CCEKK0007	AMPS	262.50	273.75	296.25	285.00	285.00	291.25	281.25
XFMR 1D2 AMPS	CCEKK0008	AMPS	266.25	292.50	296.25	292.50	285.00	277.50	281.25
ID FAN 1D SPEED	COAXI089A	RPM	665.98	700.00	669.43	659.33	675.87	696.45	675.82
TOTAL ID FAN AMPS	CALC	AMPS	2313.75	2490.00	2385.17	2415.00	2430.34	2403.00	2418.75
COAL PULVERIZER 1A									
PULV COAL FLOW	COAXI002A	TPH	48.91	O/S	47.54	54.26	48.20	48.86	O/S
PULV PA FLOW	COAXI056A	%	88.07		86.92	91.24	87.35	88.11	87.78
PULV INLET TEMP	SGATE0639	DEGF	339.13		310.79	311.99	301.56	313.27	301.10
PULV DISCH TEMP	COAXI064A	DEGF	150.95		150.03	148.42	147.94	150.39	150.42
PULV DIFF PRESS	SGAPT0150	INWC	12.51		10.23	12.96	9.91	11.24	9.47
PULV AMPS	SGAKK0001	AMPS	66.61		61.82	63.52	62.28	63.43	64.25
AMPS/DP	CALC		5.32		6.04	4.90	6.28	5.64	6.78
TPH/AMPS	CALC		0.73		0.77	0.85	0.77	0.77	??
TPH/DP	CALC		3.91		4.65	4.19	4.86	4.35	??
COAL PULVERIZER 1B									
PULV COAL FLOW	COAXI003A	TPH	48.78	49.19	47.66	54.93	48.29	48.78	54.49
PULV PA FLOW	COAXI057A	%	87.86	88.24	87.06	91.29	87.29	88.07	91.57
PULV INLET TEMP	SGATE0640	DEGF	343.38	322.01	331.36	333.63	332.26	321.89	350.76
PULV DISCH TEMP	COAXI065A	DEGF	151.20	151.93	151.31	150.17	150.06	151.37	151.44
PULV DIFF PRESS	SGAPT0151	INWC	11.66	13.19	12.97	14.91	12.73	13.07	13.26
PULV AMPS	SGAKK0002	AMPS	59.54	60.03	62.90	63.52	58.76	61.63	62.17
AMPS/DP	CALC		5.11	4.55	4.85	4.26	4.62	4.72	4.69
TPH/AMPS	CALC		0.82	0.82	0.76	0.86	0.82	0.79	0.88
TPH/DP	CALC		4.18	3.73	3.67	3.68	3.79	3.73	4.11
COAL PULVERIZER 1C									
PULV COAL FLOW	COAXI004A	TPH	49.07	49.89	48.06	55.05	48.69	49.23	54.95
PULV PA FLOW	COAXI058A	%	86.70	87.05	85.89	90.04	86.20	86.61	95.74
PULV INLET TEMP	SGATE0641	DEGF	330.17	325.99	351.27	345.17	335.58	326.30	349.41
PULV DISCH TEMP	COAXI066A	DEGF	150.65	150.67	150.72	150.70	150.72	150.63	150.66
PULV DIFF PRESS	SGAPT0152	INWC	12.26	12.43	12.91	13.91	12.09	12.96	15.08
PULV AMPS	SGAKK0003	AMPS	61.77	59.03	61.30	62.49	58.99	63.20	61.44
AMPS/DP	CALC		5.04	4.75	4.75	4.49	4.88	4.88	4.07
TPH/AMPS	CALC		0.79	0.85	0.78	0.88	0.83	0.78	0.89
TPH/DP	CALC		4.00	4.01	3.72	3.96	4.03	3.80	3.64
COAL PULVERIZER 1D									
PULV COAL FLOW	COAXI005A	TPH	49.01	49.32	47.65	54.49	48.21	48.67	54.29
PULV PA FLOW	COAXI059A	%	88.58	90.29	89.29	91.82	87.75	88.07	91.85
PULV INLET TEMP	SGATE0642	DEGF	330.60	318.87	330.93	341.51	337.95	325.24	345.63
PULV DISCH TEMP	COAXI067A	DEGF	150.66	150.40	150.34	150.49	150.45	150.52	151.43
PULV DIFF PRESS	SGAPT0153	INWC	13.18	12.17	12.80	14.34	13.18	14.02	14.71
PULV AMPS	SGAKK0004	AMPS	59.13	55.75	58.62	57.92	55.28	55.08	58.25
AMPS/DP	CALC		4.49	4.58	4.58	4.04	4.19	3.93	3.96
TPH/AMPS	CALC		0.83	0.88	0.81	0.94	0.87	0.88	0.93
TPH/DP	CALC		3.72	4.05	3.72	3.80	3.66	3.47	3.69

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