



7030 Ryburn Dr. Millington, TN

Phone: (901) 873-5300

Fax: (901) 873-5301

www.gohispeed.com

July 27, 2022

Dell Power Plant
Dell, AR

The following report is a summary of findings from the vibration survey that was performed on July 20, 2022. The report only contains defects/issues found from the survey.

QualiTest® uses a four step rating system for defects.

Class I: Defect is present, but effect on reliability is not clear; no immediate action is required. Continue to normally monitor.

Class II: Defect (s) present that may cause problem in long term (2-6 months). Repair during normal maintenance scheduling. Continue to monitor.

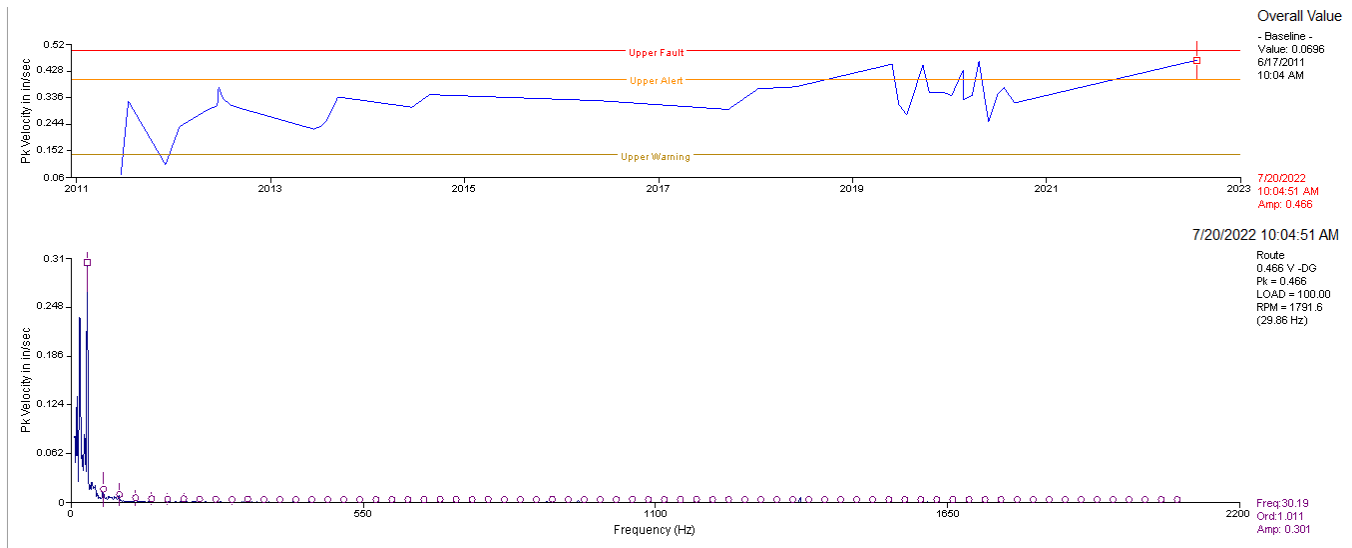
Class III: Defect (s) present that may cause failure in short term (less than 2 months). This should be addressed as soon as practical, with a high maintenance priority. Increase monitoring frequency.

Class IV: Defect (s) present that makes continued reliability unpredictable, and possibility of secondary damage is high. Repairs should be made ASAP. An unscheduled shutdown should be considered for repairs

Hi-Speed Industrial Service tests and inspects industrial machinery and equipment and makes recommendations concerning maintenance and repairs based on its experience in the field of industrial repair and maintenance. The information contained herein is provided as an opinion only, not as a guaranty or warranty of the matters discussed herein.

COOLING TOWER AREA

Cooling Tower Fan 3 **CLASS II**



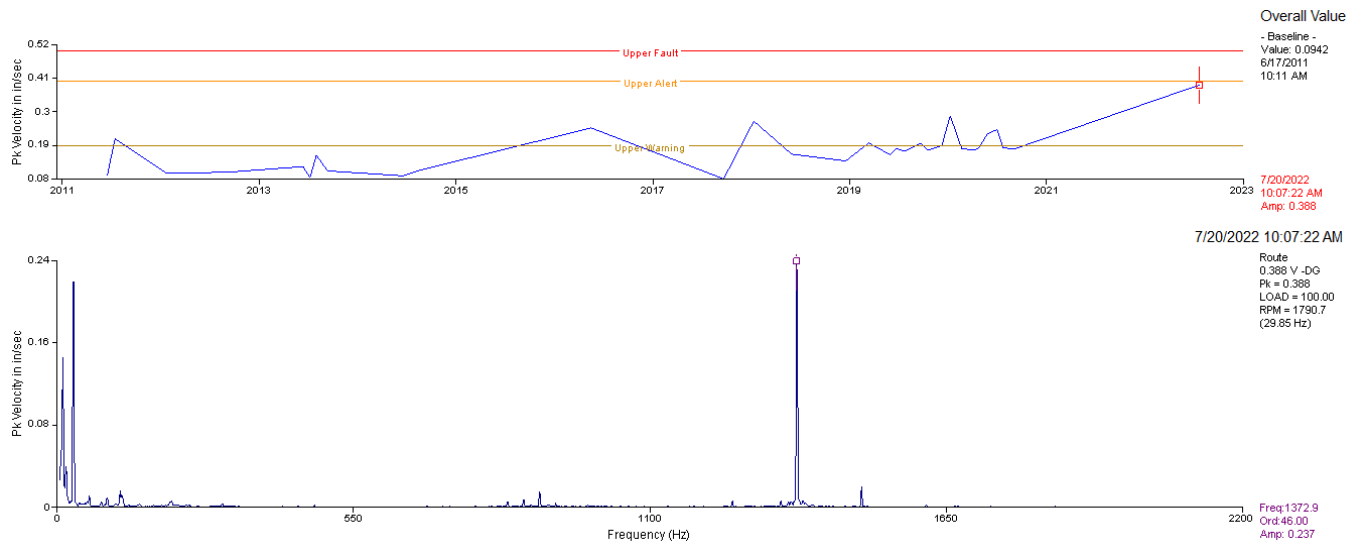
Observation:

Motor inboard axial trend data shows an increase in overall amplitude. Spectral data shows a dominant 1 x motor rpm vibration. There is also a sub-synchronous vibration associated with the fan speed

Recommendation:

Inspect all motor fasteners and other base bolts ensuring all bolts are tight. Inspect coupling hubs and drive shaft for wear. Also inspect gearbox base bolts ensuring all bolts are tight. An alignment check should also be performed.

Cooling Tower Fan 6 CLASS II



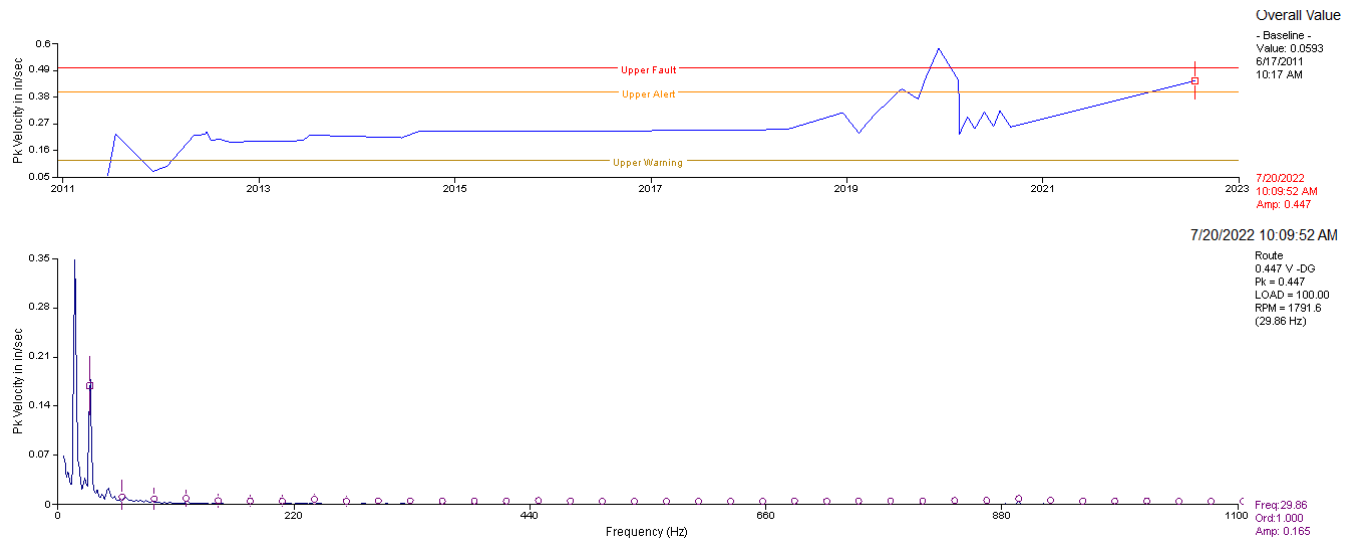
Observation:

Motor inboard horizontal data shows a dominant vibration at 46 x motor rpm. This may be related to rotor bar frequency of the motor. Rotor may have issues, but we need to confirm number of rotor bars to help diagnosis. We will monitor this closely next survey.

Recommendation:

Electrical vibrations typically aren't severe; however, the vibration in this motor is quite high in amplitude. If vibration continues to increase, motor may need to be replaced.

Cooling Tower Fan 8 **CLASS II**



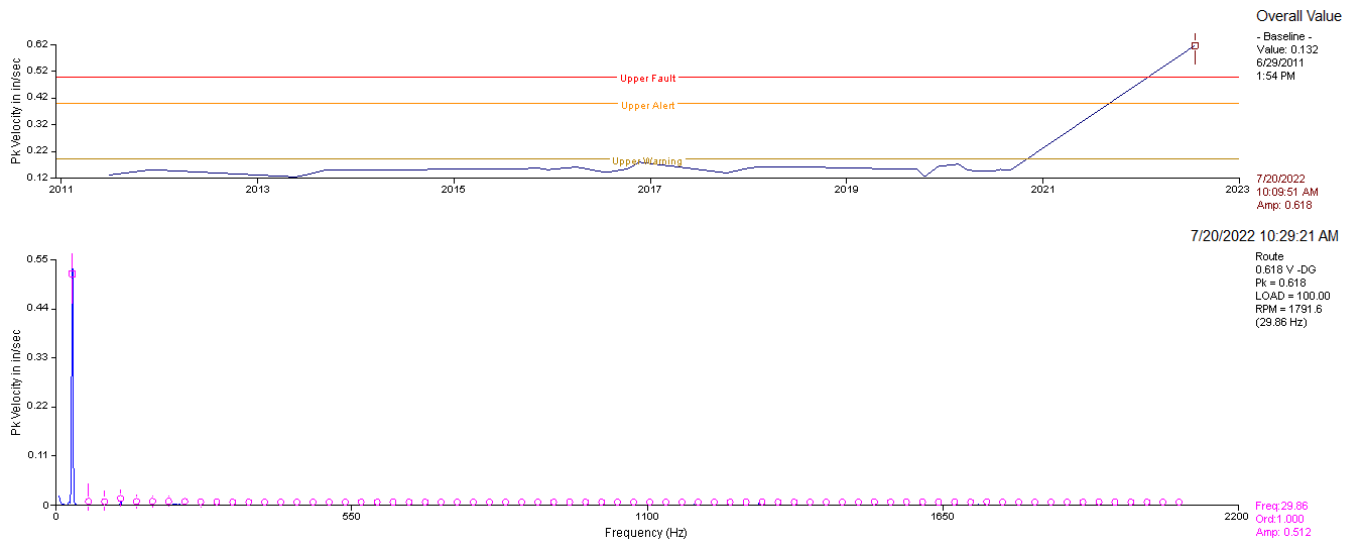
Observation:

Motor inboard horizontal data shows a dominant sub-synchronous vibration that may be a multiple of fan speed.

Recommendation:

The sub-synchronous peak in the motor may be blade pass of the fan. Fan blades may need to be inspected. Also ensure all bolts on fan hub/blades are tight and ensure gearbox bolts are tight.

LFAA 1A CLASS III



Observation:

MOH data shows a significant increase in overall amplitude. Dominant 1 x rpm vibration can be seen in the MOH velocity spectrum.

Recommendation:

The increased 1 x rpm vibration is causing concern and may be caused by issue in the pump. Vertical motors typically start to have 1 x rpm vibration when the pump shaft/bushings start to wear. Process flow can also contribute to this type of vibration. Inspect pump and coupling as soon as practical.

GAS TURBINE UNIT 1

LP Recirc Unit 1 **CLASS III**



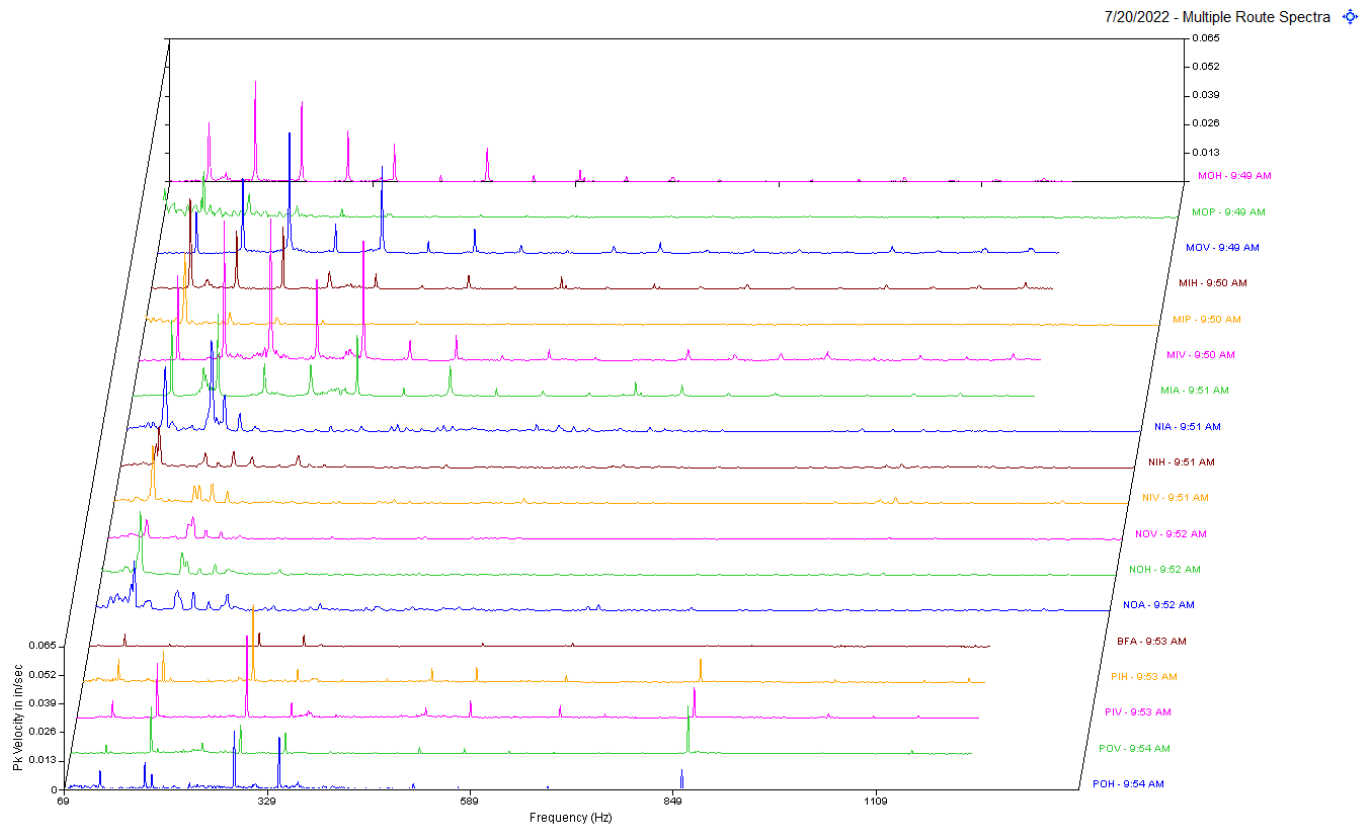
Observation:

Multiple point spectra of motor and pump shows a lot of vibration in the motor. Most of this vibration is non-synchronous to motor rpm.

Recommendation:

Motor data indicates defects are present in the motor bearings. Motor should be scheduled for replacement soon.

Boiler Feed Water Pump 1B CLASS I



Observation:

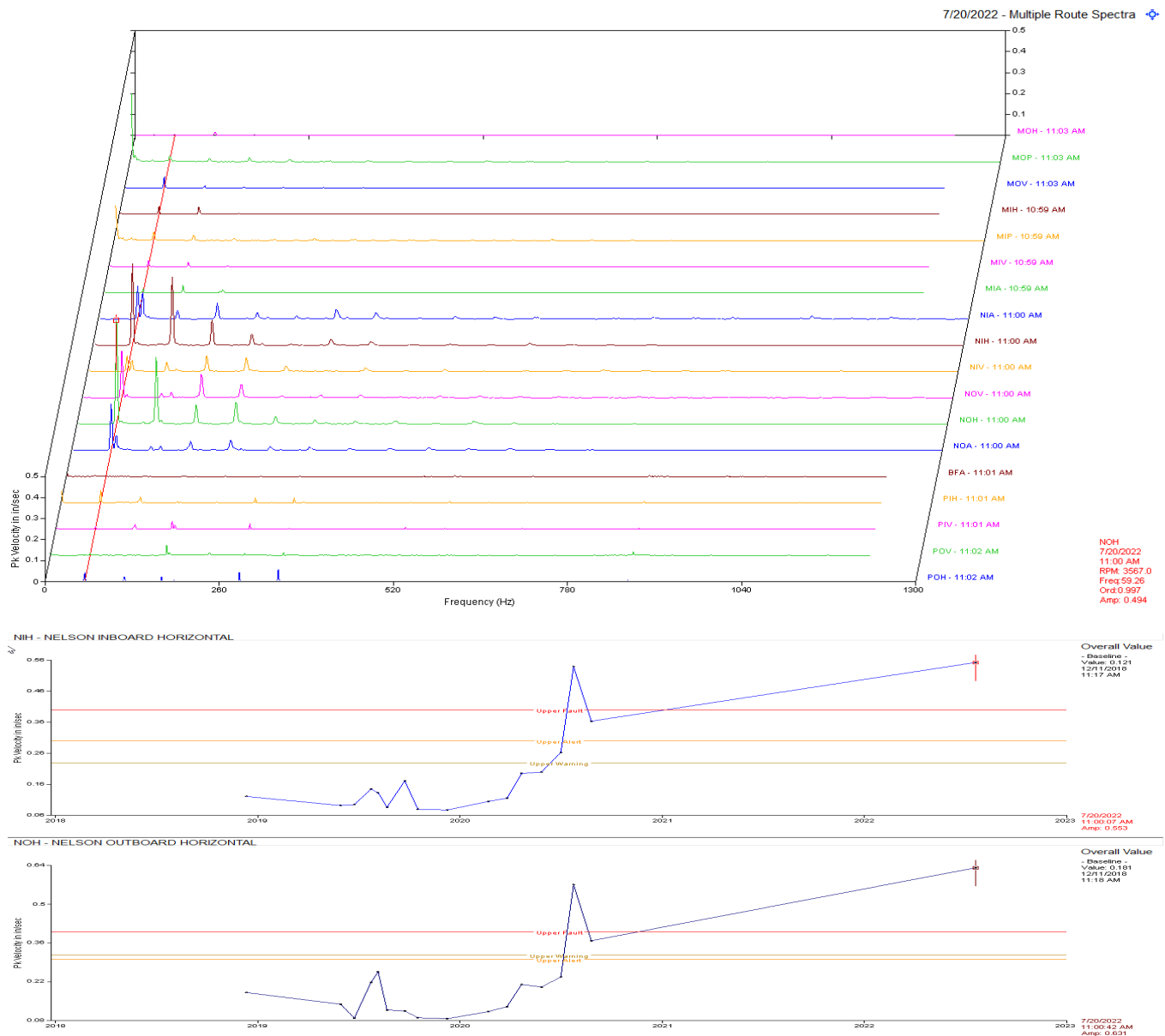
Multiple point spectra of motor, drive, and pump shows some rpm harmonics in motor data. Drive and pump data all show low amplitudes with some normal vibrations.

Recommendation:

Motor data indicates some possible clearances in the motor bearings. This appears to be minor as of now and we will monitor this closely in next surveys.

GAS TURBINE UNIT 2

Boiler Feed Water Pump 2B **CLASS III**



Observation:

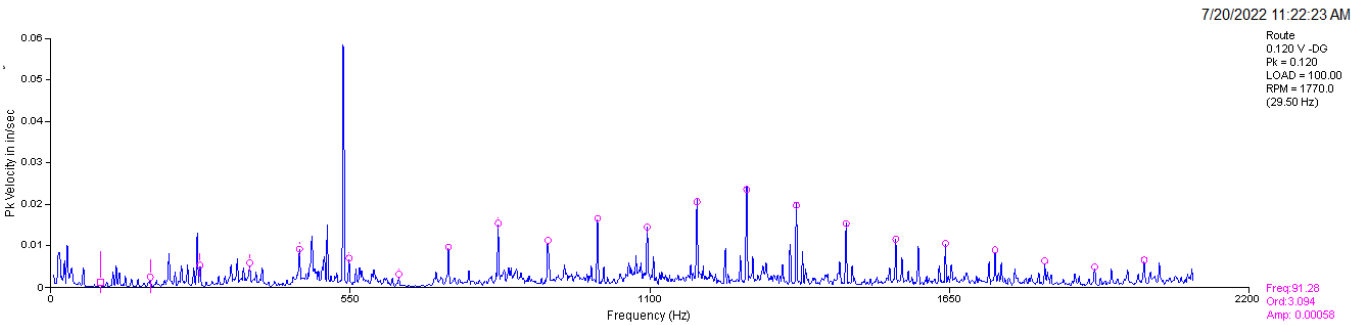
Multiple point spectra of motor, drive, and pump shows some high amplitude input rpm harmonics in nelson drive data. Motor and pump data all show low amplitudes with normal vibrations. Trend data of the Nelson input and output horizontals shows significant increase and highest on average amplitude.

Recommendation:

Nelson data shows high amplitude input rpm harmonics. This is likely some type of looseness/wear of internal drive components. Inspect nelson drive for wear as soon as practical

STEAM TURBINE UNIT

STG Hydraulic Pump 1 CLASS II



Observation:
Motor inboard vertical velocity spectrum shows multiple non-synchronous peaks related to a likely bearing defect frequency.

Recommendation:
Motor data indicates defects present in motor bearings. Motor should be replaced as scheduling allows.

UTILITY PUMPS

No issues found in this area during this survey.

Abbreviated Last Measurement Summary

Database: AECI Dell Power Plant.rbm
Area: Cooling Tower

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
-----	-----	-----
CTW1 - Cooling Tower Fan 1	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.247 In/Sec	1.034 G-s
MOP - Motor Outboard Horz Peakvue	.347 G-s	
MOV - Motor Outboard Vertical	.243 In/Sec	.628 G-s
MIH - Motor Inboard Horizontal	.268 In/Sec	.722 G-s
MIP - Motor Inboard Horz Peakvue	.080 G-s	
MIV - Motor Inboard Vertical	.191 In/Sec	.613 G-s
MIA - Motor Inboard Axial	.274 In/Sec	.270 G-s

CTW2	- Cooling Tower Fan 2	(20-Jul-22)	
		OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal		.243 In/Sec	1.459 G-s
MOP - Motor Outboard Horz Peakvue		.358 G-s	
MOV - Motor Outboard Vertical		.161 In/Sec	1.371 G-s
MIH - Motor Inboard Horizontal		.221 In/Sec	1.550 G-s
MIP - Motor Inboard Horz Peakvue		.436 G-s	
MIV - Motor Inboard Vertical		.207 In/Sec	1.670 G-s
MIA - Motor Inboard Axial		.315 In/Sec	.896 G-s
CTW3	- Cooling Tower Fan 3	(20-Jul-22)	
		OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal		.252 In/Sec	1.002 G-s
MOP - Motor Outboard Horz Peakvue		.188 G-s	
MOV - Motor Outboard Vertical		.317 In/Sec	1.305 G-s
MIH - Motor Inboard Horizontal		.246 In/Sec	1.609 G-s
MIP - Motor Inboard Horz Peakvue		.086 G-s	
MIV - Motor Inboard Vertical		.310 In/Sec	.710 G-s
MIA - Motor Inboard Axial		.466 In/Sec	.405 G-s
CTW4	- Cooling Tower Fan 4	(20-Jul-22)	
		OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal		.199 In/Sec	.967 G-s
MOP - Motor Outboard Horz Peakvue		.137 G-s	
MOV - Motor Outboard Vertical		.278 In/Sec	2.054 G-s
MIH - Motor Inboard Horizontal		.254 In/Sec	2.347 G-s
MIP - Motor Inboard Horz Peakvue		.048 G-s	
MIV - Motor Inboard Vertical		.267 In/Sec	1.074 G-s
MIA - Motor Inboard Axial		.314 In/Sec	.287 G-s
CTW5	- Cooling Tower Fan 5	(20-Jul-22)	
		OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal		.221 In/Sec	.876 G-s
MOP - Motor Outboard Horz Peakvue		.219 G-s	
MOV - Motor Outboard Vertical		.213 In/Sec	1.012 G-s
MIH - Motor Inboard Horizontal		.243 In/Sec	1.643 G-s
MIP - Motor Inboard Horz Peakvue		.157 G-s	
MIV - Motor Inboard Vertical		.152 In/Sec	.744 G-s
MIA - Motor Inboard Axial		.306 In/Sec	.450 G-s
CTW6	- Cooling Tower Fan 6	(20-Jul-22)	
		OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal		.239 In/Sec	1.321 G-s
MOP - Motor Outboard Horz Peakvue		.152 G-s	
MOV - Motor Outboard Vertical		.254 In/Sec	1.372 G-s
MIH - Motor Inboard Horizontal		.388 In/Sec	4.131 G-s
MIP - Motor Inboard Horz Peakvue		.075 G-s	
MIV - Motor Inboard Vertical		.367 In/Sec	1.123 G-s
MIA - Motor Inboard Axial		.426 In/Sec	.325 G-s
CTW7	- Cooling Tower Fan 7	(20-Jul-22)	
		OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal		.186 In/Sec	.979 G-s
MOP - Motor Outboard Horz Peakvue		.362 G-s	
MOV - Motor Outboard Vertical		.163 In/Sec	1.130 G-s
MIH - Motor Inboard Horizontal		.180 In/Sec	.741 G-s
MIP - Motor Inboard Horz Peakvue		.298 G-s	
MIV - Motor Inboard Vertical		.203 In/Sec	1.176 G-s
MIA - Motor Inboard Axial		.215 In/Sec	.488 G-s
CTW8	- Cooling Tower Fan 8	(20-Jul-22)	
		OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal		.271 In/Sec	1.548 G-s
MOP - Motor Outboard Horz Peakvue		.221 G-s	
MOV - Motor Outboard Vertical		.204 In/Sec	1.656 G-s
MIH - Motor Inboard Horizontal		.219 In/Sec	3.527 G-s
MIP - Motor Inboard Horz Peakvue		.097 G-s	
MIV - Motor Inboard Vertical		.207 In/Sec	.949 G-s
MIA - Motor Inboard Axial		.447 In/Sec	.370 G-s

CTW9	- Cooling Tower Fan 9	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz	
MOH - Motor Outboard Horizontal	.340 In/Sec	2.110 G-s	
MOP - Motor Outboard Horz Peakvue	.246 G-s		
MOV - Motor Outboard Vertical	.373 In/Sec	.978 G-s	
MIH - Motor Inboard Horizontal	.195 In/Sec	1.702 G-s	
MIP - Motor Inboard Horz Peakvue	.120 G-s		
MIV - Motor Inboard Vertical	.351 In/Sec	1.371 G-s	
MIA - Motor Inboard Axial	.377 In/Sec	.610 G-s	
CTW10	- Cooling Tower Fan 10	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz	
MOH - Motor Outboard Horizontal	.281 In/Sec	.908 G-s	
MOP - Motor Outboard Horz Peakvue	.211 G-s		
MOV - Motor Outboard Vertical	.340 In/Sec	.731 G-s	
MIH - Motor Inboard Horizontal	.240 In/Sec	.820 G-s	
MIP - Motor Inboard Horz Peakvue	.166 G-s		
MIV - Motor Inboard Vertical	.252 In/Sec	1.018 G-s	
MIA - Motor Inboard Axial	.330 In/Sec	.485 G-s	
CTW11	- Cooling Tower Fan 11	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz	
MOH - Motor Outboard Horizontal	.293 In/Sec	.861 G-s	
MOP - Motor Outboard Horz Peakvue	.067 G-s		
MOV - Motor Outboard Vertical	.172 In/Sec	.711 G-s	
MIH - Motor Inboard Horizontal	.213 In/Sec	1.571 G-s	
MIP - Motor Inboard Horz Peakvue	.042 G-s		
MIV - Motor Inboard Vertical	.289 In/Sec	1.019 G-s	
MIA - Motor Inboard Axial	.146 In/Sec	.288 G-s	
CTW12	- Cooling Tower Fan 12	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz	
MOH - Motor Outboard Horizontal	.218 In/Sec	.537 G-s	
MOP - Motor Outboard Horz Peakvue	.220 G-s		
MOV - Motor Outboard Vertical	.347 In/Sec	2.292 G-s	
MIH - Motor Inboard Horizontal	.248 In/Sec	2.369 G-s	
MIP - Motor Inboard Horz Peakvue	.070 G-s		
MIV - Motor Inboard Vertical	.243 In/Sec	1.569 G-s	
MIA - Motor Inboard Axial	.318 In/Sec	.495 G-s	
3CW-P-001	- Circ Water Pump 1A	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz	
MOH - Motor Outboard Horizontal	.113 In/Sec	.368 G-s	
MOP - Motor Outboard Horz Peakvue	.149 G-s		
MOV - Motor Outboard Vertical	.064 In/Sec	.282 G-s	
MIH - Motor Inboard Horizontal	.067 In/Sec	.337 G-s	
MIP - Motor Inboard Horz Peakvue	.185 G-s		
MIV - Motor Inboard Vertical	.050 In/Sec	.387 G-s	
MIA - Motor Inboard Axial	.031 In/Sec	.381 G-s	
	OVERALL LEVEL	1K-20kHz	
PIH - Pump Inboard Horizontal	.032 In/Sec	.493 G-s	
PIP - Pump Inboard Horz Peakvue	.246 G-s		
3CW-P-002	- Circ Water Pump 1B	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz	
MOH - Motor Outboard Horizontal	.143 In/Sec	.316 G-s	
MOP - Motor Outboard Horz Peakvue	.164 G-s		
MOV - Motor Outboard Vertical	.312 In/Sec	.229 G-s	
MIH - Motor Inboard Horizontal	.113 In/Sec	.128 G-s	
MIP - Motor Inboard Horz Peakvue	.056 G-s		
MIV - Motor Inboard Vertical	.130 In/Sec	.074 G-s	
MIA - Motor Inboard Axial	.061 In/Sec	.251 G-s	
	OVERALL LEVEL	1K-20kHz	
PIH - Pump Inboard Horizontal	.048 In/Sec	.426 G-s	
PIP - Pump Inboard Horz Peakvue	.130 G-s		
LFAA1	- LFAA 1A	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz	
MOH - Motor Outboard Horizontal	.618 In/Sec	.444 G-s	
MOP - Motor Outboard Horz Peakvue	.208 G-s		

MOV - Motor Outboard Vertical	.717 In/Sec	.462 G-s
MIH - Motor Inboard Horizontal	.390 In/Sec	.468 G-s
MIP - Motor Inboard Horz Peakvue	.282 G-s	
MIV - Motor Inboard Vertical	.479 In/Sec	.508 G-s
MIA - Motor Inboard Axial	.122 In/Sec	.332 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.027 In/Sec	.070 G-s
PIP - Pump Inboard Horz Peakvue	.029 G-s	
PIV - Pump Inboard Vertical	.034 In/Sec	.066 G-s
PIA - Pump Inboard Axial	.017 In/Sec	.134 G-s

Area: UNIT 1

MEASUREMENT POINT -----	OVERALL LEVEL -----	HFD / VHFD -----
LP #1 - LP recirc unit #1	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.186 In/Sec	1.500 G-s
MOP - Motor Outboard Horz Peakvue	.286 G-s	
MOV - Motor Outboard Vertical	.313 In/Sec	4.851 G-s
MIH - Motor Inboard Horizontal	.280 In/Sec	5.340 G-s
MIP - Motor Inboard Horz Peakvue	1.124 G-s	
MIV - Motor Inboard Vertical	.336 In/Sec	6.540 G-s
MIA - Motor Inboard Axial	.195 In/Sec	4.255 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.246 In/Sec	.484 G-s
PIP - Pump Inboard Horz Peakvue	.298 G-s	
PIV - Pump Inboard Vertical	.148 In/Sec	.446 G-s
POH - Pump Outboard Horizontal	.130 In/Sec	.507 G-s
POP - Pump Outboard Horz Peakvue	.164 G-s	
POV - Pump Outboard Vertical	.130 In/Sec	.399 G-s
POA - Pump Outboard Axial	.119 In/Sec	.525 G-s
1FD-P-001B - Boiler Feed Water 1B	(20-Jul-22)	
	OVERALL LEVEL	1K-20KHz
MOH - Motor Outboard Horizontal	.104 In/Sec	.303 G-s
MOP - Motor Outboard Horz Peakvue	.100 G-s	
MOV - Motor Outboard Vertical	.142 In/Sec	.691 G-s
MIH - Motor Inboard Horizontal	.106 In/Sec	.244 G-s
MIP - Motor Inboard Horz Peakvue	.081 G-s	
MIV - Motor Inboard Vertical	.179 In/Sec	.751 G-s
MIA - Motor Inboard Axial	.105 In/Sec	.618 G-s
	OVERALL LEVEL	1K-20kHz
NIA - NELSON INBOARD AXIAL	.077 In/Sec	.154 G-s
NIH - NELSON INBOARD HORIZONTAL	.044 In/Sec	.140 G-s
NIV - NELSON INBOARD VERTICAL	.042 In/Sec	.158 G-s
NOV - NELSON OUTBOARD VERTICAL	.035 In/Sec	.094 G-s
NOH - NELSON OUTBOARD HORIZONTAL	.051 In/Sec	.093 G-s
NOA - NELSON OUTBOARD AXIAL	.053 In/Sec	.111 G-s
	OVERALL LEVEL	1K-20KHz
BFA - BOILER FEEDWATER PUMP AXIAL	.020 In/Sec	.132 G-s
PIH - BFWP INBOARD HORIZONTAL	.051 In/Sec	.160 G-s
PIV - BFWP INBOARD VERTICAL	.061 In/Sec	.164 G-s
POV - BFWP OUTBOARD VERTICAL	.045 In/Sec	.086 G-s
POH - BFWP OUTBOARD HORIZONTAL	.062 In/Sec	.064 G-s
CT2 - CT Lube Oil Pump 2	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.026 In/Sec	.086 G-s
MOP - Motor Outboard Horz Peakvue	.050 G-s	
CTHYD ! - CT Hyd Pump 1	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.112 In/Sec	.193 G-s
MOP - Motor Outboard Horz Peakvue	.097 G-s	
MOV - Motor Outboard Vertical	.052 In/Sec	.493 G-s
MIH - Motor Inboard Horizontal	.047 In/Sec	.211 G-s
MIP - Motor Inboard Horz Peakvue	.088 G-s	

MIV - Motor Inboard Vertical	.033 In/Sec	.173 G-s
CTHYD !1 - CT Hyd Pump 2 (20-Jul-22)		
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.126 In/Sec	.981 G-s
MOP - Motor Outboard Horz Peakvue	.174 G-s	
MOV - Motor Outboard Vertical	.083 In/Sec	.641 G-s
MIH - Motor Inboard Horizontal	.028 In/Sec	.765 G-s
MIP - Motor Inboard Horz Peakvue	.357 G-s	
MIV - Motor Inboard Vertical	.074 In/Sec	1.252 G-s

Area: UNIT 2

MEASUREMENT POINT -----	OVERALL LEVEL -----	HFD / VHFD -----
LP #2 - LP recirc unit #2 (20-Jul-22)		
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.116 In/Sec	.341 G-s
MOP - Motor Outboard Horz Peakvue	.120 G-s	
MOV - Motor Outboard Vertical	.070 In/Sec	.507 G-s
MIH - Motor Inboard Horizontal	.103 In/Sec	.768 G-s
MIP - Motor Inboard Horz Peakvue	.294 G-s	
MIV - Motor Inboard Vertical	.077 In/Sec	.547 G-s
MIA - Motor Inboard Axial	.186 In/Sec	.837 G-s
	OVERALL LEVEL	1K-20kHz
PIH - Pump Inboard Horizontal	.117 In/Sec	.664 G-s
PIP - Pump Inboard Horz Peakvue	.347 G-s	
PIV - Pump Inboard Vertical	.083 In/Sec	.750 G-s
POH - Pump Outboard Horizontal	.103 In/Sec	.744 G-s
POP - Pump Outboard Horz Peakvue	.428 G-s	
POV - Pump Outboard Vertical	.093 In/Sec	.910 G-s
POA - Pump Outboard Axial	.077 In/Sec	1.273 G-s
2FD-P-002B - Boiler Feed Water 2B (20-Jul-22)		
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.028 In/Sec	.148 G-s
MOP - Motor Outboard Horz Peakvue	.111 G-s	
MOV - Motor Outboard Vertical	.065 In/Sec	.368 G-s
MIH - Motor Inboard Horizontal	.063 In/Sec	.215 G-s
MIP - Motor Inboard Horz Peakvue	.117 G-s	
MIV - Motor Inboard Vertical	.044 In/Sec	.408 G-s
MIA - Motor Inboard Axial	.057 In/Sec	.181 G-s
	OVERALL LEVEL	1K-20kHz
NIA - NELSON INBOARD AXIAL	.262 In/Sec	.441 G-s
NIH - NELSON INBOARD HORIZONTAL	.553 In/Sec	.304 G-s
NIV - NELSON INBOARD VERTICAL	.174 In/Sec	.571 G-s
NOV - NELSON OUTBOARD VERTICAL	.284 In/Sec	.315 G-s
NOH - NELSON OUTBOARD HORIZONTAL	.631 In/Sec	.329 G-s
NOA - NELSON OUTBOARD AXIAL	.261 In/Sec	.476 G-s
	OVERALL LEVEL	1K-20kHz
BFA - BOILER FEEDWATER PUMP AXIAL	.025 In/Sec	.252 G-s
PIH - BFWP INBOARD HORIZONTAL	.102 In/Sec	.214 G-s
PIV - BFWP INBOARD VERTICAL	.069 In/Sec	.166 G-s
POV - BFWP OUTBOARD VERTICAL	.071 In/Sec	.144 G-s
POH - BFWP OUTBOARD HORIZONTAL	.101 In/Sec	.085 G-s
CTHYD !1 - CT Hyd Pump 2 (20-Jul-22)		
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.052 In/Sec	.349 G-s
MOP - Motor Outboard Horz Peakvue	.178 G-s	
MOV - Motor Outboard Vertical	.072 In/Sec	.337 G-s
MIH - Motor Inboard Horizontal	.028 In/Sec	.456 G-s
MIP - Motor Inboard Horz Peakvue	.199 G-s	
MIV - Motor Inboard Vertical	.058 In/Sec	.339 G-s
MIA - Motor Inboard Axial	.027 In/Sec	.173 G-s
CTHYD ! - CT Hyd Pump 1 (20-Jul-22)		
	OVERALL LEVEL	1K-20kHz

MOH - Motor Outboard Horizontal	.028 In/Sec	.159 G-s
ABF - Aux Boiler Fan	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.114 In/Sec	.185 G-s
MOP - Motor Outboard Horz Peakvue	.079 G-s	
MOV - Motor Outboard Vertical	.264 In/Sec	.340 G-s
MIH - Motor Inboard Horizontal	.055 In/Sec	.330 G-s
MIP - Motor Inboard Horz Peakvue	.127 G-s	
MIV - Motor Inboard Vertical	.041 In/Sec	.283 G-s
MIA - Motor Inboard Axial	.140 In/Sec	.057 G-s

Area: UNIT STEAM TURBINE

MEASUREMENT POINT -----	OVERALL LEVEL -----	HFD / VHFD -----
3CW-P-003 - CCW Booster Pump 1	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.091 In/Sec	.429 G-s
MOP - Motor Outboard Horz Peakvue	.109 G-s	
MOV - Motor Outboard Vertical	.082 In/Sec	.434 G-s
MIH - Motor Inboard Horizontal	.067 In/Sec	.457 G-s
MIP - Motor Inboard Horz Peakvue	.270 G-s	
MIV - Motor Inboard Vertical	.047 In/Sec	.582 G-s
MIA - Motor Inboard Axial	.066 In/Sec	.449 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.088 In/Sec	.328 G-s
PIP - Pump Inboard Horz Peakvue	.194 G-s	
PIV - Pump Inboard Vertical	.076 In/Sec	.296 G-s
PIA - Pump Inboard Axial	.059 In/Sec	.563 G-s
0CC-P-002 - CLosed Cooling Water 2	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.070 In/Sec	.316 G-s
MOP - Motor Outboard Horz Peakvue	.137 G-s	
MOV - Motor Outboard Vertical	.029 In/Sec	.432 G-s
MIH - Motor Inboard Horizontal	.077 In/Sec	.491 G-s
MIP - Motor Inboard Horz Peakvue	.281 G-s	
MIV - Motor Inboard Vertical	.026 In/Sec	.445 G-s
MIA - Motor Inboard Axial	.051 In/Sec	.673 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.055 In/Sec	.269 G-s
PIP - Pump Inboard Horz Peakvue	.133 G-s	
PIV - Pump Inboard Vertical	.055 In/Sec	.408 G-s
POH - Pump Outboard Horizontal	.053 In/Sec	.350 G-s
POP - Pump Outboard Horz Peakvue	.167 G-s	
POV - Pump Outboard Vertical	.054 In/Sec	.347 G-s
POA - Pump Outboard Axial	.090 In/Sec	.239 G-s
3CH-P-001A - Condensate Pump A	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.162 In/Sec	.140 G-s
MOP - Motor Outboard Horz Peakvue	.023 G-s	
MOV - Motor Outboard Vertical	.158 In/Sec	.574 G-s
MIH - Motor Inboard Horizontal	.073 In/Sec	.283 G-s
MIP - Motor Inboard Horz Peakvue	.112 G-s	
MIV - Motor Inboard Vertical	.058 In/Sec	.445 G-s
MIA - Motor Inboard Axial	.055 In/Sec	.316 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.058 In/Sec	.671 G-s
PIP - Pump Inboard Horz Peakvue	.380 G-s	
PIV - Pump Inboard Vertical	.043 In/Sec	.465 G-s
3CH-P-001C - Condensate PumpC	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.214 In/Sec	.139 G-s
MOP - Motor Outboard Horz Peakvue	.058 G-s	
MOV - Motor Outboard Vertical	.308 In/Sec	.835 G-s

MIH - Motor Inboard Horizontal	.128 In/Sec	.345 G-s
MIP - Motor Inboard Horz Peakvue	.113 G-s	
MIV - Motor Inboard Vertical	.123 In/Sec	.567 G-s
MIA - Motor Inboard Axial	.076 In/Sec	.210 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.131 In/Sec	.693 G-s
PIP - Pump Inboard Horz Peakvue	.465 G-s	
PIV - Pump Inboard Vertical	.109 In/Sec	.585 G-s

3AE-P-002 - Vacuum Pump 2	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.097 In/Sec	.312 G-s
MOP - Motor Outboard Horz Peakvue	.156 G-s	
MOV - Motor Outboard Vertical	.121 In/Sec	1.025 G-s
MIH - Motor Inboard Horizontal	.158 In/Sec	.476 G-s
MIP - Motor Inboard Horz Peakvue	.240 G-s	
MIV - Motor Inboard Vertical	.252 In/Sec	.279 G-s
MIA - Motor Inboard Axial	.159 In/Sec	.186 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.222 In/Sec	1.305 G-s
PIP - Pump Inboard Horz Peakvue	.997 G-s	
PIV - Pump Inboard Vertical	.270 In/Sec	1.141 G-s
POH - Pump Outboard Horizontal	.224 In/Sec	.509 G-s
POP - Pump Outboard Horz Peakvue	.646 G-s	
POV - Pump Outboard Vertical	.344 In/Sec	1.455 G-s
POA - Pump Outboard Axial	.195 In/Sec	.662 G-s

STG1 - STG Lube Oil Pump 1	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.080 In/Sec	.316 G-s
MOP - Motor Outboard Horz Peakvue	.101 G-s	
MOV - Motor Outboard Vertical	.040 In/Sec	.336 G-s
MIH - Motor Inboard Horizontal	.056 In/Sec	.338 G-s
MIP - Motor Inboard Horz Peakvue	.202 G-s	
MIV - Motor Inboard Vertical	.033 In/Sec	.394 G-s
MIA - Motor Inboard Axial	.110 In/Sec	.189 G-s

STGHyd1 - STG Hyd Pump 1	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.098 In/Sec	.663 G-s
MOP - Motor Outboard Horz Peakvue	.146 G-s	
MOV - Motor Outboard Vertical	.094 In/Sec	.754 G-s
MIH - Motor Inboard Horizontal	.074 In/Sec	2.056 G-s
MIP - Motor Inboard Horz Peakvue	.679 G-s	
MIV - Motor Inboard Vertical	.120 In/Sec	1.814 G-s
MIA - Motor Inboard Axial	.091 In/Sec	.865 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.125 In/Sec	1.367 G-s
PIP - Pump Inboard Horz Peakvue	.671 G-s	
PIV - Pump Inboard Vertical	.217 In/Sec	.624 G-s

Area: WATER PUMPS AND VACUUM PUMPS

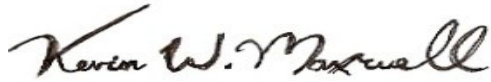
MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
-----	-----	-----
OSW-P-001B - Service Water Pump 1B	(20-Jul-22)	
	OVERALL LEVEL	1K-20kHz
MOH - Motor Outboard Horizontal	.163 In/Sec	.243 G-s
MOP - Motor Outboard Horz Peakvue	.117 G-s	
MOV - Motor Outboard Vertical	.161 In/Sec	.266 G-s
MIH - Motor Inboard Horizontal	.066 In/Sec	.123 G-s
MIP - Motor Inboard Horz Peakvue	.067 G-s	
MIV - Motor Inboard Vertical	.069 In/Sec	.180 G-s
MIA - Motor Inboard Axial	.052 In/Sec	.120 G-s
	OVERALL LEVEL	1K-20KHz
PIH - Pump Inboard Horizontal	.036 In/Sec	.042 G-s
PIP - Pump Inboard Horz Peakvue	.038 G-s	
PIV - Pump Inboard Vertical	.020 In/Sec	.056 G-s

Clarification Of Vibration Units:

Acc	-->	G-s	RMS
Vel	-->	In/Sec	PK

As always, it has been a pleasure to serve AECI Dell Power Plant. If there are any comments or questions, do not hesitate to contact us.

Sincerely,



Category III Vibration Analyst

Cell: 901-486-4565

Email: kwilliam@gohispeed.com