

October 7, 2021

Dell Power AECI

Subject: October vibration service report

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Most of the machines surveyed were found to be in good condition with the exception of the following:  
Supporting data included.

**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.

This completes our assessment of your equipment for this survey. Thank you for your business and don't hesitate to call if you have any comments or questions.

Sincerely,

*David W Shook*

David W. Shook  
Senior Reliability Specialists

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## **Cooling Tower Area**

### **Cooling tower fan 2**

Unit has what looks to be a fan blade pass vibration in the motor axial as well as a motor speed vibration. The motor data also shows what looks to be non-synchronous vibrations that we suspect are early bearing defect frequencies. Ensure the motor bearings are lubricated if applicable. Inspect the motor fasteners, base, drive shaft, couplings and alignment as time allows. **Rated a Class II Defect.**

### **Cooling tower fans 3, 4, 5, 6, 9, 10**

Units have an elevated motor speed vibration as well as suspected blade pass vibration in the motors. Inspect the motor fasteners, base, drive shaft, couplings and alignment as time allows. **Rated a Class I Defect.**

### **Cooling tower fan 8**

Unit has what looks to be elevated fan blade pass vibration or structural resonance in the motor. Inspect the unit fasteners and structures. **Rated a Class II Defect.**

### **Cooling tower fan 11**

Unit still has an elevated motor speed vibration in the motor but lower this survey. Inspect the motor fasteners, fan, base, drive shaft, couplings, and alignment at the next opportunity. **Rated a Class II Defect.**

## **Gas Turbine Unit 1**

### **Boiler feed water pump 1A**

The nelson drive overall vibration has continued to increase over time and is at 0.3"/second velocity peak for the axials now. The dominant peak is at 283.5 Hz with multiple harmonics. The apparent shaft speed vibration at 58.4 Hz is lower but has harmonics also and there is also a peak at 66.5 Hz with harmonics too. We suspect some looseness in the unit and possible early bearing distress. **Rated a Class II Defect.**

## **Gas Turbine Unit 2**

### **Boiler feed water pump 2A**

The nelson drive overall vibrations have dropped to below 0.2"/second velocity peak for all measurements. The dominant vibration is now in the motor inboard vertical at 0.29"/second peak overall and still consists of a shaft speed vibration and several similar harmonics. We suspect possible looseness in the bearing to shaft fits. **Rated a Class II Defect.**

## **Steam Turbine Unit**

### **Condensate Pump C**

Motor top vibration overall has slightly increased and is over 0.4"/second velocity peak and consists primarily of a shaft speed and 3x RPM vibrations. No immediate concern yet. **Rated a Class I Defect.**

### **Vacuum pump 2**

The pump data is still showing the fundamental vane pass and first harmonic in the outboard bearing and what looks to be cavitation. We recommend inspecting the unit and check that the pump is operating optimally. **Rated a Class I Defect.**

## **Service Water Pumps**

### **Service water pump 1A**

The pump vibrations seem to indicate cavitation in the pump plus possible non-synchronous peaks in the outboard axial that could indicate distress in that bearing. Check the operating parameters and ensure the bearings are lubricated. **Rated a Class II Defect.**

### **Deep Well Pump A**

The pump was started to perform a vibration check; however, there was an infestation of wasps that prevented safe data collection. The motor still had an audible sound that indicates bearing issues as previously stated. **Rated a Class III Defect.**

### **Deep Well Pump C**

Vibration data peaks match the defect frequency markers of the installed drive end bearing. The amplitudes do not warrant any immediate action as yet. **Rated a Class I Defect.**

## **Chiller Mod 1**

### **Chiller Pump TWP 102**

The pump motor top radial measurement is over 0.4"/second velocity peak at unit shaft speed. The unit could be slightly out of balance. Suggest a trim balance to reduce the vibration. **Rated a Class I Defect.**

## **Chiller Mod 2**

**No Immediate issues.**

Abbreviated Last Measurement Summary  
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Database: AECI Dell Power Plant.rbm  
Area: Cooling Tower  
Route No. 1: COOLING TOWER  
Report Date: 07-Oct-21 10:01

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD	EQUIPMENT SPEED
CTW1 - Cooling Tower Fan 1		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.206 In/Sec	1.736 G-s	1780.0 RPM
MOP	.139 G-s		
MOV	.174 In/Sec	.513 G-s	
MIH	.142 In/Sec	.354 G-s	
MIP	.213 G-s		
MIV	.144 In/Sec	.787 G-s	
MIA	.231 In/Sec	.344 G-s	
CTW2 - Cooling Tower Fan 2		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.210 In/Sec	1.506 G-s	1780.0 RPM
MOP	.323 G-s		
MOV	.161 In/Sec	.581 G-s	
MIH	.218 In/Sec	2.625 G-s	
MIP	1.040 G-s		
MIV	.211 In/Sec	1.083 G-s	
MIA	.336 In/Sec	.832 G-s	
CTW3 - Cooling Tower Fan 3		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.272 In/Sec	.909 G-s	1780.0 RPM
MOP	.148 G-s		
MOV	.188 In/Sec	.738 G-s	
MIH	.139 In/Sec	.320 G-s	
MIP	.174 G-s		
MIV	.216 In/Sec	.536 G-s	
MIA	.385 In/Sec	.568 G-s	
CTW4 - Cooling Tower Fan 4		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.191 In/Sec	1.250 G-s	1780.0 RPM
MOP	.065 G-s		
MOV	.226 In/Sec	.702 G-s	
MIH	.167 In/Sec	.436 G-s	
MIP	.119 G-s		
MIV	.214 In/Sec	.561 G-s	
MIA	.373 In/Sec	.206 G-s	
CTW5 - Cooling Tower Fan 5		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.249 In/Sec	.773 G-s	1780.0 RPM

	MOP	.150 G-s		
	MOV	.183 In/Sec	.720 G-s	
	MIH	.212 In/Sec	.351 G-s	
	MIP	.108 G-s		
	MIV	.198 In/Sec	.658 G-s	
	MIA	.315 In/Sec	.423 G-s	
CTW6	- Cooling Tower Fan 6		(06-Oct-21)	
	OVERALL LEVEL		1K-20kHz	
	MOH	.258 In/Sec	1.739 G-s	1780.0 RPM
	MOP	.094 G-s		
	MOV	.190 In/Sec	.819 G-s	
	MIH	.182 In/Sec	.269 G-s	
	MIP	.078 G-s		
	MIV	3.531 In/Sec	.579 G-s	
	MIA	.448 In/Sec	.274 G-s	
CTW7	- Cooling Tower Fan 7		(06-Oct-21)	
	OVERALL LEVEL		1K-20kHz	
	MOH	.152 In/Sec	1.060 G-s	1780.0 RPM
	MOP	.100 G-s		
	MOV	.245 In/Sec	.967 G-s	
	MIH	.128 In/Sec	.616 G-s	
	MIP	.311 G-s		
	MIV	.260 In/Sec	.735 G-s	
	MIA	.258 In/Sec	1.145 G-s	
CTW8	- Cooling Tower Fan 8		(06-Oct-21)	
	OVERALL LEVEL		1K-20kHz	
	MOH	.319 In/Sec	1.842 G-s	1780.0 RPM
	MOP	.081 G-s		
	MOV	.254 In/Sec	1.481 G-s	
	MIH	.185 In/Sec	.455 G-s	
	MIP	.212 G-s		
	MIV	.349 In/Sec	.486 G-s	
	MIA	.551 In/Sec	.541 G-s	
CTW9	- Cooling Tower Fan 9		(06-Oct-21)	
	OVERALL LEVEL		1K-20kHz	
	MOH	.267 In/Sec	2.271 G-s	1780.0 RPM
	MOP	.213 G-s		
	MOV	.345 In/Sec	1.204 G-s	
	MIH	.217 In/Sec	.775 G-s	
	MIP	.190 G-s		
	MIV	.289 In/Sec	.800 G-s	
	MIA	.441 In/Sec	.889 G-s	
CTW10	- Cooling Tower Fan 10		(06-Oct-21)	
	OVERALL LEVEL		1K-20kHz	
	MOH	.226 In/Sec	1.119 G-s	1780.0 RPM
	MOP	.062 G-s		
	MOV	.432 In/Sec	.587 G-s	
	MIH	.173 In/Sec	.287 G-s	
	MIP	.105 G-s		
	MIV	.351 In/Sec	.748 G-s	
	MIA	.310 In/Sec	.509 G-s	

CTW11	- Cooling Tower Fan 11	(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.271 In/Sec	.941 G-s	1780.0 RPM
MOP	.135 G-s		
MOV	.527 In/Sec	.718 G-s	
MIH	.600 In/Sec	.549 G-s	
MIP	.046 G-s		
MIV	.296 In/Sec	1.059 G-s	
MIA	.427 In/Sec	.718 G-s	
CTW12	- Cooling Tower Fan 12	(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.179 In/Sec	.694 G-s	1780.0 RPM
MOP	.231 G-s		
MOV	.291 In/Sec	1.131 G-s	
MIH	.180 In/Sec	.694 G-s	
MIP	.233 G-s		
MIV	.244 In/Sec	1.275 G-s	
MIA	.297 In/Sec	.347 G-s	
3CW-P-001	- Circ Water Pump 1	(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.070 In/Sec	.354 G-s	507.0 RPM
MOP	.120 G-s		
MOV	.043 In/Sec	.360 G-s	
MIH	.051 In/Sec	.213 G-s	
MIP	.120 G-s		
MIV	.028 In/Sec	.186 G-s	
MIA	.027 In/Sec	.253 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.027 In/Sec	.301 G-s	
PIP	.139 G-s		
3CW-P-002	- Circ Water Pump 2	(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.202 In/Sec	.186 G-s	507.0 RPM
MOP	.133 G-s		
MOV	.109 In/Sec	.198 G-s	
MIH	.141 In/Sec	.177 G-s	
MIP	.087 G-s		
MIV	.048 In/Sec	.372 G-s	
MIA	.056 In/Sec	.140 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.032 In/Sec	.214 G-s	
PIP	.035 G-s		
LFAA1	- LFAA 1A	(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.066 In/Sec	.509 G-s	1770.0 RPM
MOP	.296 G-s		
MOV	.061 In/Sec	.458 G-s	
MIH	.052 In/Sec	.345 G-s	
MIP	.115 G-s		
MIV	.056 In/Sec	.356 G-s	
MIA	.026 In/Sec	.302 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.012 In/Sec	.122 G-s	

PIP .011 G-s

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Clarification Of Vibration Units:

Acc --> G-s RMS

Vel --> In/Sec PK

Abbreviated Last Measurement

Summary

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Database: AECI Dell Power Plant.rbm

Area: UNIT 1

Route No. 1: UNIT 1

Report Date: 07-Oct-21 10:01

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD	EQUIPMENT SPEED
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LP #1 - LP recirc unit #1		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.088 In/Sec	.179 G-s	3565.0 RPM
MOP	.037 G-s		
MOV	.076 In/Sec	.159 G-s	
MIH	.096 In/Sec	.231 G-s	
MIP	.077 G-s		
MIV	.143 In/Sec	.441 G-s	
MIA	.168 In/Sec	.454 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.245 In/Sec	.246 G-s	
PIP	.098 G-s		
PIV	.136 In/Sec	.218 G-s	
POH	.111 In/Sec	.253 G-s	
POP	.029 G-s		
POV	.076 In/Sec	.172 G-s	
POA	.094 In/Sec	.140 G-s	
1FD-P-001A - Boiler Feed Water 1A		(06-Oct-21)	
	OVERALL LEVEL	1K-20KHz	
MOH	.142 In/Sec	.801 G-s	3567.0 RPM
MOP	.051 G-s		
MOV	.153 In/Sec	.780 G-s	
MIH	.169 In/Sec	.204 G-s	
MIP	.086 G-s		
MIV	.149 In/Sec	.366 G-s	
MIA	.075 In/Sec	.465 G-s	
	OVERALL LEVEL	1K-20kHz	
NIA	.243 In/Sec	1.384 G-s	
NIH	.097 In/Sec	.781 G-s	
NIV	.084 In/Sec	.701 G-s	
NOV	.128 In/Sec	1.149 G-s	
NOH	.147 In/Sec	.663 G-s	
NOA	.305 In/Sec	.832 G-s	
	OVERALL LEVEL	1K-20KHz	
BFA	.060 In/Sec	.205 G-s	
PIH	.060 In/Sec	.163 G-s	
PIV	.066 In/Sec	.153 G-s	
POV	.051 In/Sec	.094 G-s	
POH	.072 In/Sec	.128 G-s	

CTHYD !1 - CT Hyd Pump 2		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.055 In/Sec	.157 G-s	1780.0 RPM
MOP	.018 G-s		
MOV	.091 In/Sec	.236 G-s	
MIH	.041 In/Sec	.318 G-s	
MIP	.042 G-s		
MIV	.031 In/Sec	.273 G-s	
MIA	.078 In/Sec	.269 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.086 In/Sec	2.268 G-s	
PIP	1.254 G-s		
PIV	.115 In/Sec	1.990 G-s	
PIA	.112 In/Sec	1.232 G-s	

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

## Summary

Database: AECI Dell Power Plant.rbm  
Area: UNIT 2  
Route No. 1: UNIT 2  
Report Date: 07-Oct-21 10:01

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD	EQUIPMENT SPEED
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LP #2	- LP recirc unit #2	(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.077 In/Sec	.393 G-s	3565.0 RPM
MOP	.165 G-s		
MOV	.137 In/Sec	.127 G-s	
MIH	.125 In/Sec	.605 G-s	
MIP	.368 G-s		
MIV	.218 In/Sec	.764 G-s	
MIA	.239 In/Sec	.136 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.260 In/Sec	.560 G-s	
PIP	.118 G-s		
PIV	.142 In/Sec	.463 G-s	
POH	.104 In/Sec	.420 G-s	
POP	.094 G-s		
POV	.097 In/Sec	.267 G-s	



POA	.136 In/Sec	.324 G-s	
2FD-P-002A - Boiler Feed Water 2A (06-Oct-21)			
	OVERALL LEVEL	1K-20KHz	
MOH	.179 In/Sec	.663 G-s	3567.0 RPM
MOP	.212 G-s		
MOV	.171 In/Sec	1.342 G-s	
MIH	.144 In/Sec	.180 G-s	
MIP	.039 G-s		
MIV	.292 In/Sec	.240 G-s	
MIA	.210 In/Sec	.370 G-s	
	OVERALL LEVEL	1K-20kHz	
NIA	.184 In/Sec	.292 G-s	
NIH	.139 In/Sec	.053 G-s	
NIV	.124 In/Sec	.062 G-s	
NOV	.111 In/Sec	.109 G-s	
NOH	.178 In/Sec	.294 G-s	
NOA	.183 In/Sec	.544 G-s	
	OVERALL LEVEL	1K-20KHz	
BFA	.125 In/Sec	.153 G-s	
PIH	.105 In/Sec	.177 G-s	
PIV	.170 In/Sec	.147 G-s	
POV	.039 In/Sec	.115 G-s	
POH	.085 In/Sec	.057 G-s	
CT2 - CT Lube Oil Pump 2 (06-Oct-21)			
	OVERALL LEVEL	1K-20kHz	
MOH	.053 In/Sec	.171 G-s	3570.0 RPM
MOP	.054 G-s		
MOV	.048 In/Sec	.333 G-s	
MIH	.029 In/Sec	.183 G-s	
MIP	.043 G-s		
MIV	.033 In/Sec	.227 G-s	
MIA	.043 In/Sec	.172 G-s	
CTHYD !1 - CT Hyd Pump 2 (06-Oct-21)			
	OVERALL LEVEL	1K-20kHz	
MOH	.050 In/Sec	.124 G-s	1780.0 RPM
MOP	.037 G-s		
MOV	.057 In/Sec	.220 G-s	
MIH	.035 In/Sec	.517 G-s	
MIP	.122 G-s		
MIV	.035 In/Sec	.394 G-s	
MIA	.050 In/Sec	.102 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.124 In/Sec	1.068 G-s	
PIP	.286 G-s		
PIV	.049 In/Sec	.887 G-s	
PIA	.118 In/Sec	1.368 G-s	
ABF - Aux Boiler Fan (06-Oct-21)			
	OVERALL LEVEL	1K-20kHz	
MOH	.111 In/Sec	.202 G-s	3550.0 RPM
MOP	.036 G-s		
MOV	.291 In/Sec	.451 G-s	
MIH	.068 In/Sec	.306 G-s	
MIP	.071 G-s		

MIV	.049 In/Sec	.197 G-s
MIA	.237 In/Sec	.125 G-s

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Clarification Of Vibration Units:

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

Abbreviated Last Measurement

Summary

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Database: AECI Dell Power Plant.rbm  
Area: UNIT STEAM TURBINE  
Route No. 1: STEAM TURBINE  
Report Date: 07-Oct-21 10:02

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD	EQUIPMENT SPEED
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3CW-P-004 - CCW Booster Pump 2		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.105 In/Sec	.195 G-s	1775.0 RPM
MOP	.029 G-s		
MOV	.063 In/Sec	.140 G-s	
MIH	.049 In/Sec	.187 G-s	
MIP	.059 G-s		
MIV	.059 In/Sec	.110 G-s	
MIA	.054 In/Sec	.245 G-s	
	OVERALL LEVEL	1K-20kHz	
PIH	.095 In/Sec	.113 G-s	
PIP	.059 G-s		
PIV	.082 In/Sec	.141 G-s	
PIA	.047 In/Sec	.071 G-s	
0CC-P-001 - Closed Cooling Water 1		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.123 In/Sec	.293 G-s	1775.0 RPM
MOP	.066 G-s		
MOV	.047 In/Sec	.337 G-s	
MIH	.133 In/Sec	.390 G-s	
MIP	.062 G-s		
MIV	.045 In/Sec	.350 G-s	
MIA	.046 In/Sec	.440 G-s	
	OVERALL LEVEL	1K-20kHz	
PIH	.091 In/Sec	.325 G-s	
PIP	.070 G-s		
POH	.136 In/Sec	.359 G-s	
POP	.043 G-s		
POV	.069 In/Sec	.437 G-s	
POA	.082 In/Sec	.679 G-s	
0CC-P-002 - Closed Cooling Water 2		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.100 In/Sec	.310 G-s	1775.0 RPM
MOP	.023 G-s		
MOV	.042 In/Sec	.586 G-s	
MIH	.103 In/Sec	.246 G-s	
MIP	.066 G-s		

MIV	.035 In/Sec	.256 G-s	
MIA	.041 In/Sec	.221 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.095 In/Sec	.250 G-s	
PIP	.045 G-s		
POH	.093 In/Sec	.353 G-s	
POP	.072 G-s		
POV	.069 In/Sec	.351 G-s	
POA	.084 In/Sec	.480 G-s	
3CH-P-001A - Condensate Pump A		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.163 In/Sec	.093 G-s	1780.0 RPM
MOP	.035 G-s		
MOV	.155 In/Sec	.161 G-s	
MIH	.068 In/Sec	.204 G-s	
MIP	.048 G-s		
MIV	.044 In/Sec	.271 G-s	
MIA	.043 In/Sec	.118 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.031 In/Sec	.396 G-s	
PIP	.230 G-s		
3CH-P-001 - Condensate Pump B		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.047 In/Sec	.491 G-s	1780.0 RPM
MOP	.120 G-s		
MOV	.051 In/Sec	.638 G-s	
MIH	.053 In/Sec	1.039 G-s	
MIP	.384 G-s		
MIV	.037 In/Sec	1.225 G-s	
MIA	.032 In/Sec	2.537 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.039 In/Sec	.277 G-s	
PIP	.131 G-s		
3CH-P-001C - Condensate PumpC		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.311 In/Sec	.181 G-s	1780.0 RPM
MOP	.047 G-s		
MOV	.408 In/Sec	.236 G-s	
MIH	.180 In/Sec	.257 G-s	
MIP	.053 G-s		
MIV	.140 In/Sec	.221 G-s	
MIA	.079 In/Sec	.240 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.038 In/Sec	2.190 G-s	
PIP	1.064 G-s		
3AE-P-002 - Vacuum Pump 2		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.122 In/Sec	.471 G-s	1185.0 RPM
MOP	.134 G-s		
MOV	.162 In/Sec	.423 G-s	
MIH	.157 In/Sec	.113 G-s	
MIP	.052 G-s		
MIV	.221 In/Sec	.254 G-s	

MIA	.156 In/Sec	.281 G-s
	OVERALL LEVEL	1K-20KHz
PIH	.191 In/Sec	.519 G-s
PIP	.376 G-s	
PIV	.257 In/Sec	.785 G-s
POH	.214 In/Sec	.372 G-s
POP	.227 G-s	
POV	.360 In/Sec	.553 G-s
POA	.217 In/Sec	.553 G-s

STG1	- STG Lube Oil Pump 1	(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.054 In/Sec	.377 G-s	3560.0 RPM
MOP	.131 G-s		
MOV	.075 In/Sec	.139 G-s	
MIH	.029 In/Sec	.203 G-s	
MIP	.041 G-s		
MIV	.033 In/Sec	.225 G-s	
MIA	.070 In/Sec	.168 G-s	

STGHyd1	- STG Hyd Pump 1	(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.045 In/Sec	.224 G-s	1770.0 RPM
MOP	.056 G-s		
MOV	.054 In/Sec	.252 G-s	
MIH	.076 In/Sec	.308 G-s	
MIP	.113 G-s		
MIV	.044 In/Sec	.469 G-s	
MIA	.036 In/Sec	.285 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.108 In/Sec	.554 G-s	
PIP	.124 G-s		
PIV	.202 In/Sec	.194 G-s	
PIA	.351 In/Sec	.536 G-s	

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Clarification Of Vibration Units:

Acc	-->	G-s	RMS	
Vel	-->	In/Sec	PK	Abbreviated Last Measurement

Summary

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Database: AECI Dell Power Plant.rbm  
 Area: WATER PUMPS AND VACUUM PUMPS  
 Route No. 1: UTILITY PUMPS  
 Report Date: 07-Oct-21 10:02

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD	EQUIPMENT SPEED
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OSW-P-001A - Service Water Pump 1A		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.036 In/Sec	.054 G-s	1780.0 RPM
MOP	.016 G-s		
MOV	.037 In/Sec	.156 G-s	
MIH	.043 In/Sec	.092 G-s	
MIP	.045 G-s		

MIV	.047 In/Sec	.167 G-s
MIA	.038 In/Sec	.366 G-s
	OVERALL LEVEL	1K-20KHz
PIH	.223 In/Sec	.757 G-s
PIP	.172 G-s	
PIV	.234 In/Sec	.886 G-s
POH	.195 In/Sec	.874 G-s
POP	.404 G-s	
POV	.173 In/Sec	.865 G-s
POA	.182 In/Sec	2.820 G-s

OSW-P-001B - Service Water Pump 1B		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.160 In/Sec	.197 G-s	1780.0 RPM
MOP	.046 G-s		
MOV	.066 In/Sec	.261 G-s	
MIH	.329 In/Sec	.320 G-s	
MIP	.150 G-s		
MIV	.066 In/Sec	.262 G-s	
MIA	.073 In/Sec	.302 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.249 In/Sec	1.478 G-s	
PIP	.835 G-s		
PIV	.239 In/Sec	1.154 G-s	
POH	.237 In/Sec	1.002 G-s	
POP	.566 G-s		
POV	.305 In/Sec	1.760 G-s	
POA	.200 In/Sec	2.673 G-s	

ORW-P-001B - Deep Well Pump B		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.109 In/Sec	.071 G-s	1780.0 RPM
MOP	.031 G-s		
MOV	.113 In/Sec	.093 G-s	
MIH	.032 In/Sec	.054 G-s	
MIP	.039 G-s		
MIV	.041 In/Sec	.058 G-s	
MIA	.034 In/Sec	.131 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.020 In/Sec	.044 G-s	
PIP	.023 G-s		

ORW-P-001C - Deep Well Pump C		(06-Oct-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.157 In/Sec	.441 G-s	1780.0 RPM
MOP	.252 G-s		
MOV	.142 In/Sec	.479 G-s	
MIH	.080 In/Sec	1.494 G-s	
MIP	.895 G-s		
MIV	.068 In/Sec	3.170 G-s	
MIA	.044 In/Sec	.198 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.064 In/Sec	.624 G-s	
PIP	.190 G-s		

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Clarification Of Vibration Units:

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

Abbreviated Last Measurement

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Database: AECI Dell Power Plant.rbm  
 Area: Chiller Module 1  
 Route No. 1: CHILLER MOD 1  
 Report Date: 07-Oct-21 10:02

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD	EQUIPMENT SPEED
TWP 102 - Chiller Cooling Tower Pump 2 (06-Oct-21)			
	OVERALL LEVEL	1K-20kHz	
MOH	.413 In/Sec	.619 G-s	1185.0 RPM
MOP	.204 G-s		
MOV	.376 In/Sec	.332 G-s	
MIH	.148 In/Sec	.142 G-s	
MIV	.121 In/Sec	.177 G-s	
MIA	.054 In/Sec	.227 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.142 In/Sec	.253 G-s	
PIP	.166 G-s		
PIV	.051 In/Sec	.235 G-s	
CHWP 102 - Chilled Water Pump 2 (06-Oct-21)			
	OVERALL LEVEL	1K-20kHz	
MOH	.125 In/Sec	.466 G-s	1780.0 RPM
MOP	.025 G-s		
MOV	.138 In/Sec	.512 G-s	
MIH	.136 In/Sec	.178 G-s	
MIP	.104 G-s		
MIV	.118 In/Sec	.239 G-s	
MIA	.052 In/Sec	.286 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.059 In/Sec	.112 G-s	
PIP	.014 G-s		
PIV	.058 In/Sec	.079 G-s	
Comp Mtr B - Chiller compressor Mtr. B (06-Oct-21)			
	OVERALL LEVEL	1K-20kHz	
M1H	.103 In/Sec	.815 G-s	3564.0 RPM
M1P	.187 G-s		
M1V	.092 In/Sec	1.003 G-s	
M2H	.058 In/Sec	.250 G-s	
M2P	.0081 G-s		
M2V	.042 In/Sec	.544 G-s	
M2A	.058 In/Sec	1.406 G-s	
C1H	.052 In/Sec		
C1P	.058 G-s		
C1V	.033 In/Sec		
C1A	.040 In/Sec		
C2H	.037 In/Sec		
C2P	.221 G-s		
C2V	.045 In/Sec		

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Clarification Of Vibration Units:
  Acc    -->  G-s      RMS
  Vel    -->  In/Sec   PK
Summary
Abbreviated Last Measurement

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Database:  AECI Dell Power Plant.rbm
Area:      Chiller Module 2
Route No. 1:  CHILLER MOD 2
Report Date: 07-Oct-21   10:02

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MEASUREMENT POINT      OVERALL LEVEL      HFD / VHFD      EQUIPMENT SPEED
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TWP 201    - Chiller Cooling Tower Pump 1    (06-Oct-21)
              OVERALL LEVEL      1K-20kHz
MOH          .122 In/Sec          1.196 G-s          1185.0 RPM
MOP          .551 G-s
MOV          .085 In/Sec          .762 G-s
MIH          .059 In/Sec          .364 G-s
MIV          .050 In/Sec          .253 G-s
MIA          .046 In/Sec          .557 G-s
              OVERALL LEVEL      1K-20kHz
PIH          .045 In/Sec          .236 G-s
PIP          .169 G-s
PIV          .039 In/Sec          .250 G-s

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CHWP 201    - Chilled Water Pump 1            (06-Oct-21)
              OVERALL LEVEL      1K-20kHz
MOH          .110 In/Sec          .453 G-s          1780.0 RPM
MOP          .112 G-s
MOV          .147 In/Sec          .426 G-s
MIH          .089 In/Sec          .327 G-s
MIP          .099 G-s
MIV          .133 In/Sec          .123 G-s
MIA          .049 In/Sec          .314 G-s
              OVERALL LEVEL      1K-20kHz
PIH          .066 In/Sec          .085 G-s
PIP          .031 G-s
PIV          .055 In/Sec          .092 G-s

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Comp A      - Chiller compressor Mtr. A        (06-Oct-21)
              OVERALL LEVEL      1K-20kHz
M1H          .062 In/Sec          .242 G-s          3564.0 RPM
M1P          .023 G-s
M1V          .065 In/Sec          .202 G-s
M2H          .037 In/Sec          .313 G-s
M2P          .017 G-s
M2V          .032 In/Sec          .314 G-s
M2A          .032 In/Sec          .162 G-s
C1H          .040 In/Sec
C1P          .044 G-s
C1V          .045 In/Sec
C1A          .042 In/Sec

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Clarification Of Vibration Units:

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