

July 30, 2021

Dell Power AECI

Subject: July vibration service report

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

Hi-Speed Industrial Service

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Cooling Tower Area

Cooling tower 2

Unit has what looks to be elevated fan blade pass vibration dominant in the motor axial as well as a lesser 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, 5, 8, 9

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

Cooling tower 6

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

Cooling tower 11

Unit still has an elevated motor speed vibration. Inspect the motor fasteners, fan, base, drive shaft, couplings, and alignment at the next opportunity. Rated a Class III Defect.

Gas Turbine Unit 1

Boiler feed water pump 1A

The nelson drive has an overall vibration at 0.25"/second velocity peak for the axials. The dominant peak is at 64.5 Hz, and we don't remember seeing this peak before. **Question**: Can the nelson drive run faster than the main motor which has a shaft speed of just under 60 Hz.? **Rated a Class I Defect.**

Gas Turbine Unit 2

Boiler feed water pump 2A

The nelson drive has an overall vibration at 0.4"/second velocity peak for the inboard axial. The dominant peak is at near 64.5 Hz, and we don't remember seeing this peak before but once before. **Question**: Can the nelson drive run faster than the main motor which has a shaft speed of just under 60 Hz.? **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

Vibration data is limited on this pump; however the motor was making odd sounds, the overall acceleration has dramatically increased, and the spectrum has multiple non-synchronous vibration peaks with associated harmonics for the top bearing. Since we are going to a quarterly service, we feel we need to adjust our ratings to be on the cautious side an make this **Rated a Class III Defect.**

Chiller Mod 1 Pumps
No Immediate issues
Chiller Mod 2 Pumps

No Immediate issues.

Abbreviated Last Measurement Summary ********

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

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD	EQUIPMENT SPEED
CTW1 - Cooling	Tower Fan 1	(28-Jul-21)	
_	OVERALL LEVEL	1K-20kHz	
MOH	.232 In/Sec	1.072 G-s	1780.0 RPM
MOP	.245 G-s		
MOV	.195 In/Sec	.661 G-s	
MIH	.195 In/Sec .197 In/Sec	.404 G-s	
MIP	.434 G-s		
MIV	.172 In/Sec	.603 G-s	
MIA	.405 In/Sec		
CTW2 - Cooling	J Tower Fan 2	(28-Jul-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.265 In/Sec	1.394 G-s	1780.0 RPM
MOP	.311 G-s		
MOV	.237 In/Sec .175 In/Sec	1.377 G-s	
MIH		2.882 G-s	
MIP	1.185 G-s		
MIV	.285 In/Sec	.945 G-s	
MIA	.521 In/Sec		
CTW3 - Cooling	Tower Fan 3	(28-Jul-21)	
	OVERALL LEVEL	1K-20kHz	
мон	.330 In/Sec	1.078 G-s	1780.0 RPM
MOP	.155 G-s	4 0== -	
MOV	.202 In/Sec .195 In/Sec	1.057 G-s	
MIH		.405 G-s	
MIP	.241 G-s .380 In/Sec	201 2	
MIV	.380 In/Sec		
MIA	.478 In/Sec	.588 G-s	
CTW4 - Cooling	Tower Fan 4	(28-Jul-21)	
	OVERALL LEVEL		
MOH		1.092 G-s	1780.0 RPM
MOP	.058 G-s		
VOM	.229 In/Sec .171 In/Sec	1.324 G-s	
MIH	.171 In/Sec	.476 G-s	
MIP	.092 G-s		
MIV	.274 In/Sec	1.015 G-s	
MIA	.353 In/Sec		
CTW5 - Cooling	J Tower Fan 5 OVERALL LEVEL	(28-Jul-21)	
	OVERALL LEVEL	1K-20kHz	
мон	.250 In/Sec	.686 G-s	1780.0 RPM
MOP	.030 G-s	1 061 -	
MOV	.245 In/Sec .247 In/Sec	1.261 G-s	
MIH	.247 In/Sec	.454 G-s	

	MIP	.138 G-s		
	MIV	.185 In/Sec	857 G-s	
	MIA	.528 In/Sec	1.497 G-s	
		, 525 2, 555	21121 2 2	
CTW6	_	Cooling Tower Fan 6	(28-Jul-21)	
		OVERALL LEVEL	1K-20kHz	
	MOH	.209 In/Sec	1.356 G-s	1780.0 RPM
	MOP	.121 G-s		
	MOV	.184 In/Sec	1.050 G-s	
	MIH	.175 In/Sec	.602 G-s	
	MIP	.278 G-s		
	MIV	.312 In/Sec	1.275 G-s	
	MIA	.618 In/Sec	.302 G-s	
CTW7	-	Cooling Tower Fan 7	(28-Jul-21)	
		OVERALL LEVEL .220 In/Sec	1K-20kHz	
	MOH	.220 In/Sec	1.056 G-s	1780.0 RPM
	MOP	.323 G-s		
	MOV	.252 In/Sec	1.242 G-s	
	MIH	.162 In/Sec	.702 G-s	
	MIP	.276 G-s		
	MIV	.274 In/Sec	.782 G-s	
	MIA	.276 In/Sec	.885 G-s	
CTW8	-	Cooling Tower Fan 8		
		OVERALL LEVEL	1K-20kHz	
	MOH	.264 In/Sec	1.795 G-s	1780.0 RPM
	MOP	.077 G-s		
	MOV	.222 In/Sec	1.623 G-s	
	MIH	.150 In/Sec	.426 G-s	
	MIP	.286 G-s		
	MIV	.264 In/Sec	.614 G-s	
	MIA	.434 In/Sec	.268 G-s	
CTW9	_	Cooling Tower Fan 9	(28-Jul-21)	
00		OVERALL LEVEL		
	МОН	.492 In/Sec	2.611 G-s	1780.0 RPM
	MOP	.059 G-s		
	MOV	.370 In/Sec	.887 G-s	
	MIH	.370 In/Sec .401 In/Sec	1.006 G-s	
	MIP	.328 G-s		
	MIV	.309 In/Sec	.850 G-s	
	MIA	.344 In/Sec	1.112 G-s	
CTW10	-	Cooling Tower Fan 10	(28-Jul-21)	
		OVERALL LEVEL	1K-20kHz	
	MOH	.289 In/Sec	.801 G-s	1780.0 RPM
	MOP	.088 G-s		
	MOV	.286 In/Sec	.812 G-s	
	MIH	.197 In/Sec	.491 G-s	
	MIP	.304 G-s		
	VIM	.256 In/Sec		
	MIA	.362 In/Sec	.558 G-s	
OPT-4 4		Garatina massa = 44	(00 = 3 01)	
CTW11	-	Cooling Tower Fan 11	(28-Jul-21)	
		OVERALL LEVEL	1K-20kHz	1700 0
	MOH	1.036 In/Sec	1.119 G-s	1780.0 RPM

MOP			
VOM		1.390 G-s	
MIH	•	.422 G-s	
MIP			
MIV	.316 In/Sec	2.059 G-s	
MIA	.531 In/Sec	.502 G-s	
CTW12	- Cooling Tower Fan 12	(28-Jul-21)	
	OVERALL LEVEL		
MOH		.907 G-s	1780.0 RPM
MOP			
MOV	.324 In/Sec	1.854 G-s	
MIH	•	.660 G-s	
MIP			
MIV	.272 In/Sec	1.155 G-s	
MIA	.323 In/Sec	.365 G-s	
20W D 001	- Circ Water Pump 1	(20 T-1 21)	
2CM-5-001	- Circ water Pump I OVERALL LEVEL	(ZO-JUI-ZI)	
МОН			507.0 RPM
MOH MOP		.227 G-s	SUI.U KPM
MOV		.360 G-s	
MOV		.360 G-S	
MIP		.290 G-S	
MIV		247 C-0	
MIA		.347 G-s .358 G-s	
MIA	OVERALL LEVEL		
PIH		.527 G-s	
PIP		.527 6 5	
3CW-P-002	- Circ Water Pump 2	(28-Jul-21)	
	OVERALL LEVEL	1K-20kHz	
мон		.216 G-s	507.0 RPM
MOP			
MOV		.204 G-s	
MIH	_		
MIP			
MIV	_	.215 G-s	
MIA	.043 In/Sec	.278 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	_	.319 G-s	
PIP	.088 G-s		
LFAA2	- LFAA 1B	(28-Jul-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.070 In/Sec	.495 G-s	1770.0 RPM
MOP	.279 G-s		
MOV	.059 In/Sec	.459 G-s	
MIH	.055 In/Sec	.301 G-s	
MIP	.134 G-s		
MIV	· · · · · · · · · · · · · · · · · · ·	.353 G-s	
MIA	.023 In/Sec	.379 G-s	
	OVERALL LEVEL		
PIH	.012 In/Sec	.109 G-s	
PIP	.014 G-s		

Clarification Of Vibration Units:

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

Abbreviated Last Measurement

Summary

Database: AECI Dell Power Plant.rbm Area: UNIT 1

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD	EQUIPMENT SPEED
LP #1 - LP rec	irc unit #1	(28-Jul-21)	
LP #1 - LP rec	OVERALL LEVEL	1K-20kHz	
MOH	.103 In/Sec	.169 G-s	3565.0 RPM
MOP	.026 G-s		
MOV	.077 In/Sec	.309 G-s	
MIH	.101 In/Sec		
MIP	.181 G-s		
MIV	.110 In/Sec	.384 G-s	
MIA	.148 In/Sec	.326 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.250 In/Sec	.296 G-s	
PIP	.131 G-s		
PIV	.152 In/Sec	.230 G-s	
POH	.152 In/Sec .123 In/Sec	.345 G-s	
POP	.045 G-s		
POV	.099 In/Sec	.185 G-s	
POA	.099 In/Sec .126 In/Sec	.361 G-s	
1FD-P-001A - Boiler			
	OVERALL LEVEL	1K-20KHz	
MOH	.190 In/Sec	.465 G-s	3567.0 RPM
MOP	.045 G-s		
VOM	.190 In/Sec		
MIH	.198 In/Sec	.176 G-s	
MIP	.089 G-s		
MIV	.166 In/Sec		
MIA	.105 In/Sec	.235 G-s	
	OVERALL LEVEL		
NIA	.245 In/Sec	.469 G-s .909 G-s	
NIH	.107 In/Sec	.909 G-s	
NIV	.075 In/Sec	.861 G-s	
NOV	.114 In/Sec	.941 G-s	
NOH	.131 In/Sec		
NOA	.258 In/Sec OVERALL LEVEL	.237 G-s	
	OVERALL LEVEL		
BFA	.049 In/Sec	.286 G-s .195 G-s	
PIH	.062 In/Sec	.195 G-s	
PIV	.064 In/Sec	.119 G-s	
POV	.066 In/Sec .083 In/Sec	.078 G-s	
РОН			
CT1 - CT Lub	e Oil Pump 1	(28-Jul-21)	
	OVERALL LEVEL		
MOH	.047 In/Sec	.124 G-s	3570.0 RPM

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MOP
                    .032 G-s
                    .041 In/Sec
      MIH
                                   .149 G-s
                     .052 G-s
      MIP
      MIA
                     .040 In/Sec
                                    .251 G-s
CTHYD ! - CT Hyd Pump 1
                                     (28-Jul-21)
                   OVERALL LEVEL 1K-20kHz
.125 In/Sec 1.707 G-s
      MOH
                                                 1780.0 RPM
                     .064 G-s
      MOP
                    .098 In/Sec
.059 In/Sec
                                    .724 G-s
      MOV
      MIH
                                    .794 G-s
      MIP
                    .059 G-s
                   .056 In/Sec 1.302 G-s
.084 In/Sec .634 G-s
OVERALL LEVEL 1K-20KHz
      MIV
      MIA
                   .146 In/Sec 1.747 G-s
      PIH
                    .586 G-s
      PIP
                    .339 In/Sec 2.318 G-s
      PIV
                                   .518 G-s
      PIA
                    .213 In/Sec
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Clarification Of Vibration Units:

Acc --> G-s RMS

--> In/Sec PK Vel Abbreviated Last Measurement

Summary

Database: AECI Dell Power Plant.rbm

Area: UNIT 2

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD	EQUIPMENT SPEED
ID #2 - ID 70	circ unit #2	/29-Tul-21\	
TE #Z _ TE 16	OVERALL LEVEL		
MOH		.395 G-s	3565 0 PDM
MOP	.079 G-s	.555 & 5	3303.0 RFM
MOV	.073 In/Sec	114 G-s	
MIH	.085 In/Sec		
MIP	.394 G-s	.027 0 0	
MIV	.134 In/Sec	.699 G-s	
MIA	.197 In/Sec		
	OVERALL LEVEL		
PIH	.219 In/Sec		
PIP	.171 G-s		
PIV	.105 In/Sec	.418 G-s	
POH	.079 In/Sec	.368 G-s	
POP	.197 G-s		
POV	.109 In/Sec	.231 G-s	
POA	.162 In/Sec	.406 G-s	
2FD-P-002A - Boile	r Feed Water 2A	(28-Jul-21)	
	OVERALL LEVEL		
MOH	.147 In/Sec	.417 G-s	3567.0 RPM
MOP	.204 G-s		
MOV	.135 In/Sec	1.967 G-s	
	•		

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MIH
                    .171 In/Sec
                                   .234 G-s
                    .082 G-s
      MIP
                                   .190 G-s
                    .342 In/Sec
      MIV
      MIA
                     .201 In/Sec
                                    .214 G-s
                    OVERALL LEVEL 1K-20kHz
                                  .124 G-s
      NIA
                    .412 In/Sec
                     .161 In/Sec
                                    .140 G-s
      NIH
      NIV
                     .105 In/Sec
                                    .156 G-s
                                   .234 G-s
      NOV
                    .081 In/Sec
                    .126 In/Sec
                                   .280 G-s
      NOH
                    .234 In/Sec
      NOA
                                   .263 G-s
                    OVERALL LEVEL 1K-20KHz
                                  .127 G-s
      BFA
                    .227 In/Sec
                                   .071 G-s
      PIH
                    .120 In/Sec
      PIV
                    .225 In/Sec
                                   .099 G-s
                    .059 In/Sec
                                   .104 G-s
      POV
                    .101 In/Sec
                                   .059 G-s
      POH
                   il Pump 1 (28-Jul
OVERALL LEVEL 1K-20kHz
.058 In/Sec .230 G-s
CT1
      - CT Lube Oil Pump 1
                                    (28-Jul-21)
                                  .230 G-s
      MOH
                                            3570.0 RPM
      MOP
                     .078 G-s
                                   .097 G-s
                    .053 In/Sec
      MTH
      MIP
                    .012 G-s
                     .040 In/Sec
                                   .447 G-s
      MIA
CTHYD ! - CT Hyd Pump 1
                                    (28-Jul-21)
                   OVERALL LEVEL 1K-20kHz
      MOH
                    .075 In/Sec
                                   .329 G-s
                                               1780.0 RPM
                    .087 G-s
      MOP
                                  .509 G-s
      MOV
                    .071 In/Sec
                    .026 In/Sec
      MIH
                                   .622 G-s
      MIP
                    .307 G-s
                                   .607 G-s
      MIV
                    .022 In/Sec
      MIA
                     .041 In/Sec
                                    .849 G-s
                    OVERALL LEVEL 1K-20KHz
      PIH
                     .478 In/Sec
                                   .0010 G-s
       - Aux Boiler Fan
ABF
                                    (28-Jul-21)
                   OVERALL LEVEL 1K-20kHz
      MOH
                    .134 In/Sec
                                   .204 G-s
                                                3550.0 RPM
      MOP
                    .066 G-s
                    .303 In/Sec
      MOV
                                   .153 G-s
      MIH
                    .053 In/Sec
                                   .257 G-s
                    .062 G-s
      MIP
                   .040 In/Sec
                                   .256 G-s
      MIV
      MIA
                    .147 In/Sec
                                    .097 G-s
______
  Clarification Of Vibration Units:
    Acc --> G-s RMS
            --> In/Sec PK
    Vel
                                            Abbreviated Last Measurement
Summary
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Database: AECI Dell Power Plant.rbm

Area: UNIT STEAM TURBINE

MEASUREMENT POINT			EQUIPMENT SPEED
3CW-P-003 - CCW Bo	oster Pump 1	(28-Jul-21)	
30 2 333 33 23	OVERALL LEVEL	1K-20kHz	
MOH		.215 G-s	1775.0 RPM
MOP	.022 G-s	,	211010 1121
MOV	.088 In/Sec	335 G-s	
MIH	.058 In/Sec		
MIP	.131 G-s	.454 0 5	
MIV	.050 In/Sec	394 G-s	
MIA	.074 In/Sec		
	OVERALL LEVEL		
PIH	.101 In/Sec	.384 G-s	
PIP	.047 G-s	.504 0 5	
PIV	.047 G S	509 G-s	
PIA	.037 In/Sec	.139 G-s	
	1007 2, 200		
OCC-P-002 - CLosed	Cooling Water 2	(28-Jul-21)	
	OVERALL LEVEL		
MOH	.074 In/Sec	.371 G-s	1775.0 RPM
MOP	.038 G-s		
MOV	.038 In/Sec	.573 G-s	
MIH	.086 In/Sec	.237 G-s	
MIP	.077 G-s		
MIV	.033 In/Sec	.280 G-s	
MIA	.029 In/Sec	.243 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.184 In/Sec	.080 G-s	
PIP	.011 G-s		
POH	.100 In/Sec	.266 G-s	
POP	.145 G-s		
POV	.078 In/Sec	.325 G-s	
POA	.099 In/Sec	.608 G-s	
207 P 0013 Garden		(00 T-1 01)	
3CH-P-001A - Conden		(28-Jul-21)	
14017	OVERALL LEVEL	.177 G-s	1700 0 ppv
MOH	.148 In/Sec	.1// G-s	1780.0 RPM
MOP	.028 G-s	200 0	
VOM	.140 In/Sec	.292 G-s	
MIH	.057 In/Sec	.218 G-s	
MIP	.061 G-s	222 -	
MIV	.045 In/Sec		
MIA	.040 In/Sec		
	OVERALL LEVEL		
PIH	.035 In/Sec	1.641 G-s	
PIP	.846 G-s		
3CH-P-001C - Conden	sate PumpC	(28-Jul-21)	
conden	OVERALL LEVEL		
MOH	.347 In/Sec	.208 G-s	1780.0 RPM
MOP	.050 G-s	.200 G 5	1,00.0 REM
MOV	.424 In/Sec	.433 G-s	
MIH	.248 In/Sec	.435 G-s	
MIP	.055 G-s	.215 6 5	
PILE	.033 G-S		

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.149 In/Sec .349 G-s
.099 In/Sec .194 G-s
OVERALL LEVEL 1K-20KHz
       MIV
       MIA
       PIH
                      .053 In/Sec
                                     1.047 G-s
       PIP
                      .416 G-s
 3AE-P-002 - Vacuum Pump 2
                                       (28-Jul-21)
                    OVERALL LEVEL 1K-20kHz
       MOH
                      .123 In/Sec
                                      .413 G-s
                                                    1185.0 RPM
       MOP
                      .123 G-s
       MOV
                      .150 In/Sec
                                     .299 G-s
       MIH
                     .166 In/Sec
                                      .346 G-s
       MIP
                     .210 G-s
                     .219 In/Sec
                                     .169 G-s
       MIV
                      .151 In/Sec
       MIA
                                      .129 G-s
                    OVERALL LEVEL 1K-20KHz
.190 In/Sec .641 G-s
                                     .641 G-s
       PIH
                     .467 G-s
       PIP
                     .226 In/Sec
.215 In/Sec
                                    .710 G-s
.693 G-s
       PIV
       POH
       POP
                      .355 G-s
       POV
                      .364 In/Sec
                                      .840 G-s
                      .364 In/Sec .840 G-s
.211 In/Sec 1.111 G-s
       POA
 STG1
       - STG Lube Oil Pump 1
                                       (28-Jul-21)
                    Oil Pump 1 (28-Jul-
OVERALL LEVEL 1K-20kHz
                                     .092 G-s
       MOH
                      .052 In/Sec
                                                     3560.0 RPM
                     .017 G-s
       MOP
                                     .010 G-s
       MOV
                     .097 In/Sec
                      .025 In/Sec
       MIH
                                      .035 G-s
       MIP
                     .0070 G-s
                     .025 In/Sec
                                     .043 G-s
       MIV
       MIA
                      .103 In/Sec
                                      .122 G-s
 STGHyd1 - STG Hyd Pump 1
                                       (28-Jul-21)
                    OVERALL LEVEL 1K-20kHz
                      .063 In/Sec
       MOH
                                      .326 G-s
                                                    1770.0 RPM
                      .102 G-s
       MOP
       MOV
                      .064 In/Sec
                                      .333 G-s
                      .058 In/Sec
       MIH
                                      .554 G-s
       MIP
                     .134 G-s
                                     .579 G-s
                     .070 In/Sec
       MIV
                    .062 In/Sec .250 G-s
OVERALL LEVEL 1K-20KHz
       MIA
                                      .250 G-s
       PIH
                    .090 In/Sec
                                    1.224 G-s
                     .628 G-s
       PIP
                     .187 In/Sec
       PIV
                                     .552 G-s
                                    1.045 G-s
       PIA
______
  Clarification Of Vibration Units:
     Acc --> G-s RMS
             --> In/Sec PK
     Vel
                                                Abbreviated Last Measurement
Summary
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Area: WATER PUMPS AND VACUUM PUMPS

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD	EQUIPMENT SPEED
OSW-P-001A - Service	Water Pump 1A	(28-Jul-21)	
0011 00111 0011100	OVERALL LEVEL	1K-20kHz	
мон	.048 In/Sec	.154 G-s	1780.0 RPM
MOP	.018 G-s	.101 0 0	1,00.0 1011
MOV	.030 In/Sec	.249 G-s	
MIH	.060 In/Sec	.140 G-s	
MIP	.034 G-s	.210 0 0	
MIV	.039 In/Sec	.249 G-s	
MIA	.052 In/Sec	.126 G-s	
	OVERALL LEVEL		
PIH	.167 In/Sec		
PIP	.360 G-s		
PIV	.205 In/Sec	.624 G-s	
РОН	.178 In/Sec		
POP	.336 G-s		
POV	.161 In/Sec	1.007 G-s	
POA	.213 In/Sec		
	•		
ORW-P-002A - Deep We	ll Pump A	(28-Jul-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.245 In/Sec	2.315 G-s	1780.0 RPM
MOP	.487 G-s		
MOV	.141 In/Sec		
MIH	.087 In/Sec	1.070 G-s	
MIP	.152 G-s		
MIV	.075 In/Sec		
MIA	.104 In/Sec	1.527 G-s	
	OVERALL LEVEL		
PIH	.045 In/Sec	.391 G-s	
PIP	.183 G-s		
ORW-P-001B - Deep We	ll Dumo B	(28-Jul-21)	
ORW I COID Deep We	OVERALL LEVEL	1K-20kH-	
мон		.097 G-s	1780 O RPM
MOP	.049 G-s	.037 & 5	1700.0 KIM
MOV	.131 In/Sec	092 G-s	
MIH	.044 In/Sec		
MIP	.046 G-s	.005 0 5	
MIV	.045 In/Sec	.062 G-s	
MIA	.029 In/Sec	.108 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.031 In/Sec	.050 G-s	
PIP	.027 G-s		
ORW-P-001C - Deep We	-	(28-Jul-21)	
	OVERALL LEVEL	1K-20kHz	4800 0
МОН	.157 In/Sec	.501 G-s	1780.0 RPM
MOP	.281 G-s	201 ~	
MOV	.134 In/Sec	.801 G-s	
MIH	.073 In/Sec	.996 G-s	
MIP	.491 G-s		

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.074 In/Sec .894 G-s
.034 In/Sec .893 G-s
OVERALL LEVEL 1K-20KHz
.035 In/Sec .537 G-s
       MIV
       MIA
       PIH
                     .035 In/Sec
                                     .537 G-s
       PIP
                      .200 G-s
______
  Clarification Of Vibration Units:
    Acc --> G-s RMS
            --> In/Sec PK
     Vel
                                                Abbreviated Last Measurement
Summary
                    ********
             Database: AECI Dell Power Plant.rbm
             Area: Chiller Module 1
             Report Date: 02-Aug-21 07:45
MEASUREMENT POINT
                   OVERALL LEVEL HFD / VHFD EQUIPMENT SPEED
 _____
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                                      -----
                                                    -----
TWP 101 - Chiller Cooling Tower Pump 1 (28-Jul-21)
                     OVERALL LEVEL 1K-20kHz
                                     .707 G-s 1185.0 RPM
                      .074 In/Sec
       MOH
                      .204 G-s
       MOP
                    .065 In/Sec 1.316 G-s
.049 In/Sec .298 G-s
.066 In/Sec .379 G-s
.050 In/Sec .401 G-s
OVERALL LEVEL 1K-20KHz
.048 In/Sec .253 G-s
       MOV
       MIH
       MIV
       MIA
       PIH
                      .164 G-s
       PIP
                    OVERALL LEVEL 1K-20kHz
.127 In/Sec .469 G-s
.044 G-s
                                       (28-Jul-21)
 CHWP 102 - Chilled Water Pump 2
       MOH
                                      .469 G-s
                                                  1780.0 RPM
       MOP
                      .112 In/Sec .354 G-s
.092 In/Sec .299 G-s
       MOV
                                      .354 G-s
       MIH
                     .015 G-s
       MIP
                                     .170 G-s
       MIV
                   .117 In/Sec
       MIA
                                      .210 G-s
       PIH
                                     .133 G-s
                     .012 G-s
       PIP
                     .066 In/Sec
                                     .077 G-s
       PIV
```

Clarification Of Vibration Units:

Abbreviated Last Measurement

Summary

Database: AECI Dell Power Plant.rbm

Area: Chiller Module 2 Report Date: 02-Aug-21 07:45

TWP 202 - Chiller	Cooling Tower Pump	o 2 (28-Jul-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.101 In/Sec	.985 G-s	1185.0 RPM
MOP	.450 G-s		
MOV	.087 In/Sec	1.582 G-s	
MIH	.063 In/Sec	.344 G-s	
MIV	.076 In/Sec	.484 G-s	
MIA	.051 In/Sec	.341 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.052 In/Sec	.388 G-s	
PIP	.240 G-s		
PIV	.062 In/Sec	.317 G-s	
CHWP 202 - Chilled	l Water Pump 2	(28-Jul-21)	
	OVERALL LEVEL	1K-20kHz	
MOH	.096 In/Sec	.569 G-s	1780.0 RPM
MOP	.026 G-s		
MOV	.089 In/Sec	.236 G-s	
MIH	.047 In/Sec	.206 G-s	
MIP	.021 G-s		
MIV	.063 In/Sec	.278 G-s	
MIA	.035 In/Sec	.145 G-s	
	OVERALL LEVEL	1K-20KHz	
PIH	.038 In/Sec	.098 G-s	
PIP	.035 G-s		
PIV	.036 In/Sec	.115 G-s	
Clarification Of V	Vibration Units:		
Acc> 0	L-c PMC		

MEASUREMENT POINT OVERALL LEVEL HFD / VHFD EQUIPMENT SPEED

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

Summary
