7030 Ryburn Dr. Millington, TN Phone: (901) 873-5300 Fax: (901) 873-5301 www.gohispeed.com

February 5, 2024

Dell Power Plant
Dell, AR

The following report is a summary of findings from the vibration survey that was performed on January 31, 2024. 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

## COOLING TOWER AREA

## Cooling Tower Fan 2 CLASS II

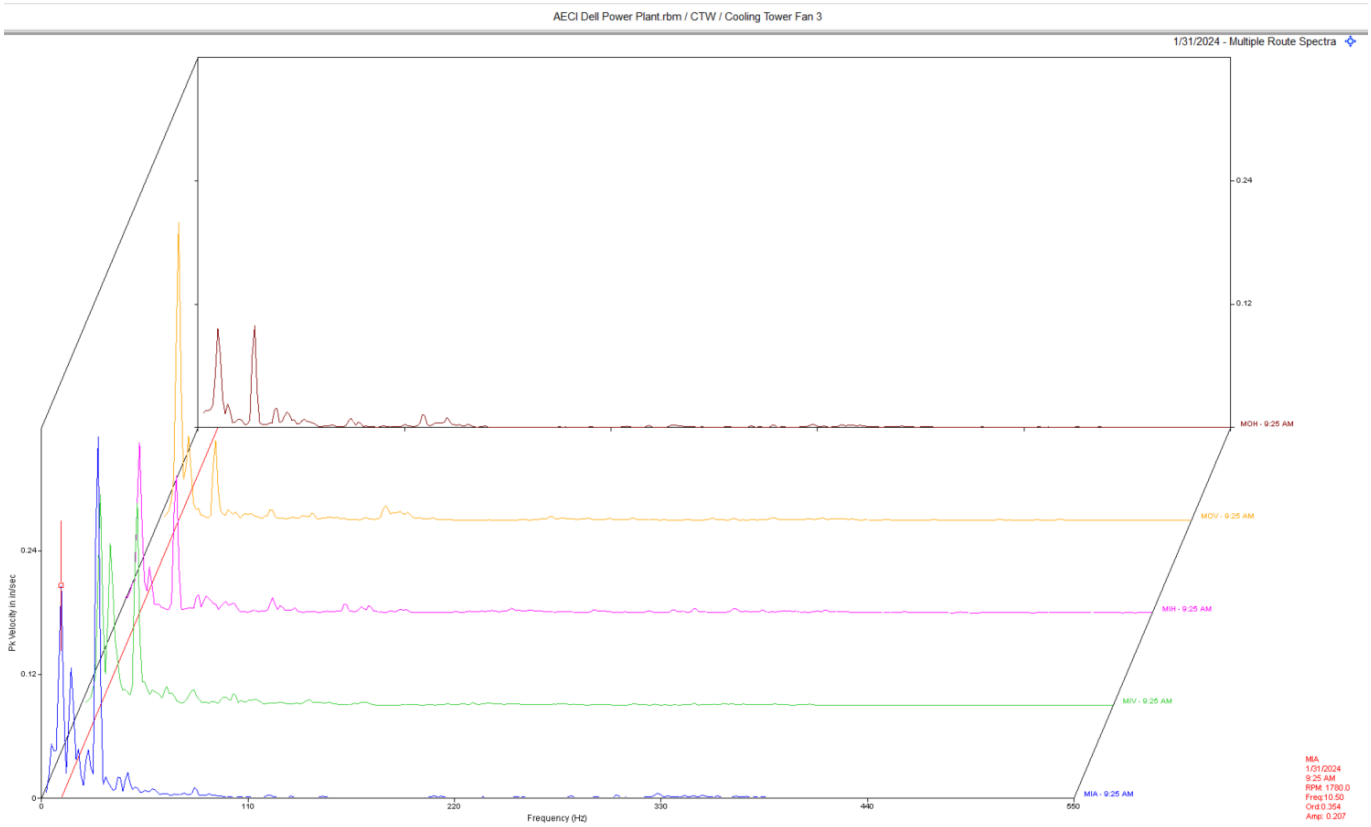

**Observation:**

Motor inboard peakvue spectral waterfall shows an increase amplitude over the past few surveys. Trend also shows some elevated overall G's

**Recommendation:**

Increased peakvue amplitudes are usually early signs of defects and or lube issue. There is some evidence of non-synchronous peaks in spectra, but velocity levels are very low at these peaks. For now, ensure motor has clean adequate amount of grease and inspect motor bearings for signs of defects.

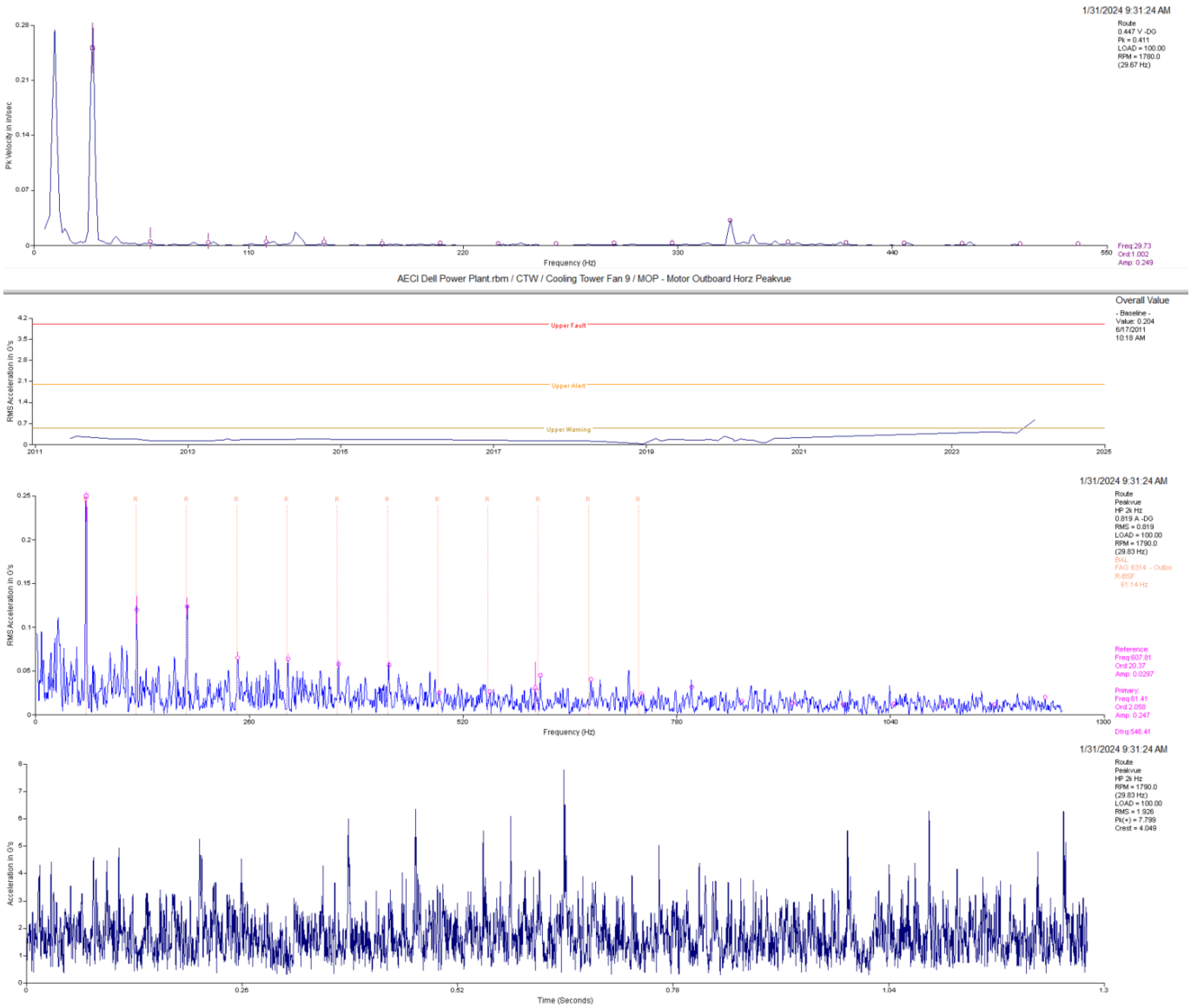
## Cooling Tower Fan 3 CLASS II




**Observation:**
Motor multi-point spectra shows a dominant vibration around 10 Hz. There is also some 1 x motor rpm vibration as well especially in the motor inboard axial (MIA).

**Recommendation:**
Data shows a sub-synchronous vibration that is related to fan speed. Check gearbox foot bolts/structure and fan hub as time allows. Ensure all are tight.

## Cooling Tower Fan 9 CLASS II



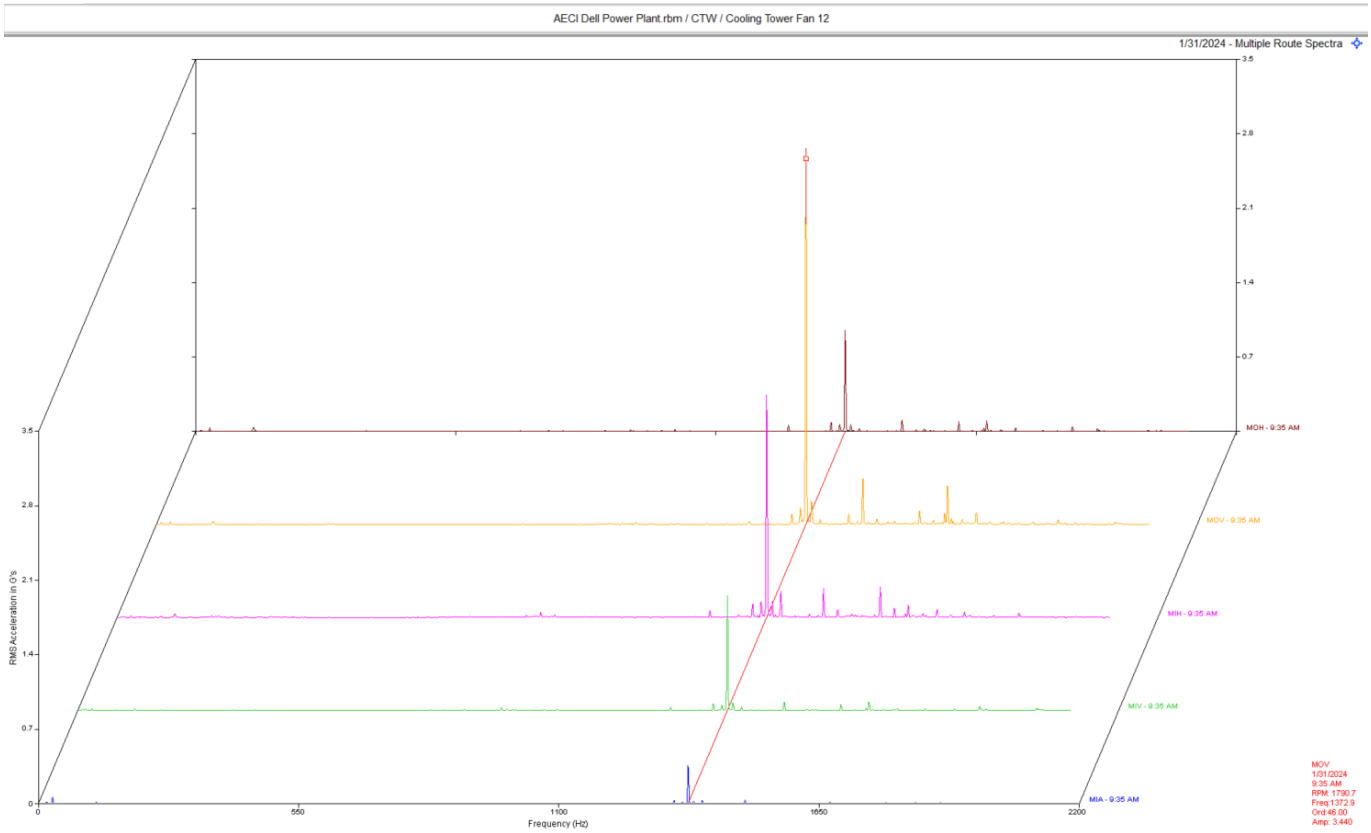

## Observation:

Motor inboard axial (first plot) shows a large sub-synchronous peak (likely fan speed related) with a high 1 x motor rpm peak present as well. Motor outboard horizontal (MOH) peakvue data shows an increase in peakvue amplitude (second plot) and also shows a non-synchronous peak at 2.058 orders of rpm with harmonics present in the spectrum (third plot). This peak may be a defect frequency (BSF or ball spin frequency) of the bearing. The fourth plot is peakvue waveform data and it shows amplitude of 7.7 g's peak. Last survey this reading was 2.8 g's peak.

## Recommendation:

Vibration data suggests to check motor bearings for signs of defects and ensure lube is ok in motor bearings. Inpsect all motor and gearbox fasteners Check output gearbox shaft for run out if possible and coupling/spacer shaft also. Inspect structural/base fasteners as well.

## Cooling Tower Fan 12 CLASS I



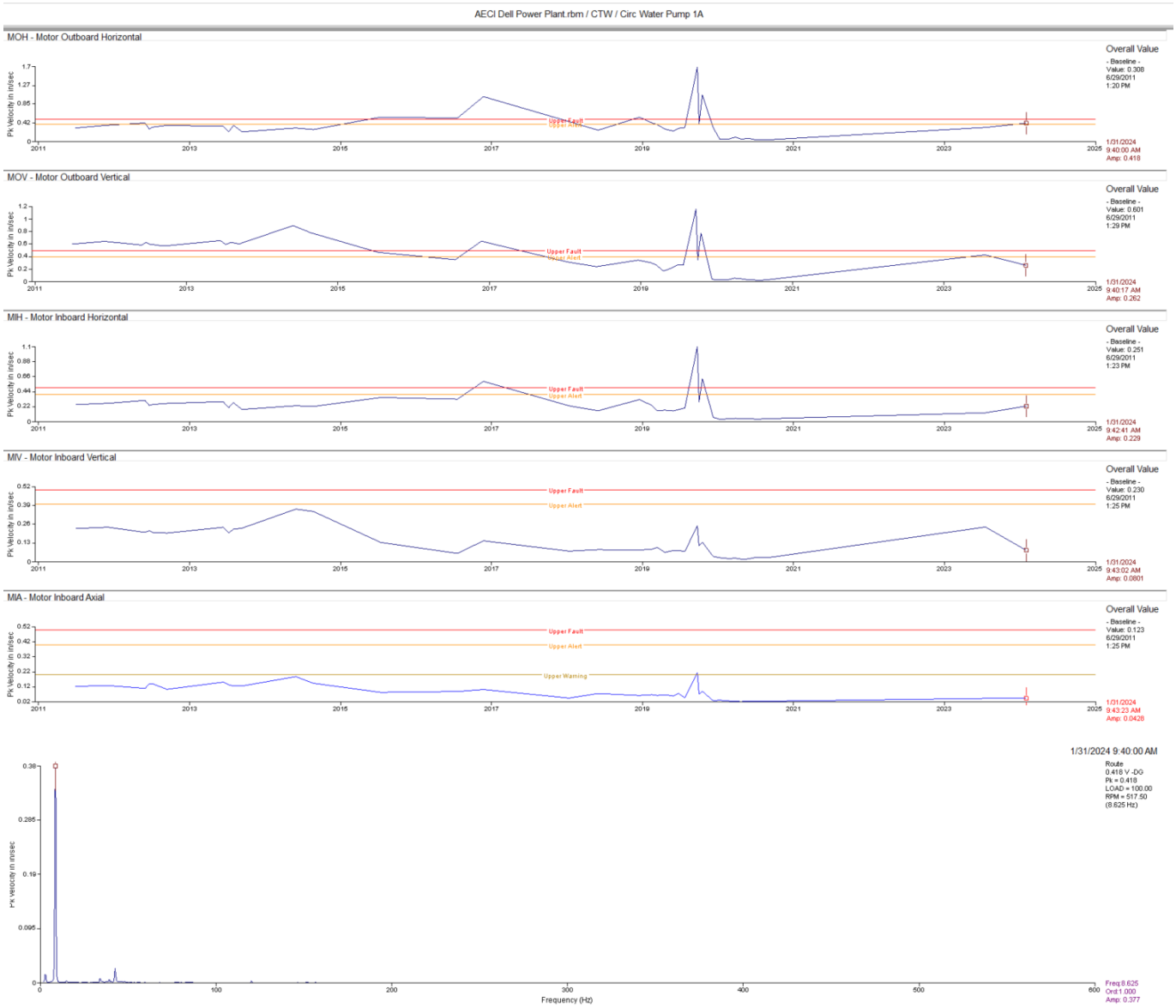

**Observation:**

There appears to be a dominant vibration in the motor that is electrical in nature. This peak at 46 orders of rpm is likely related to rotor bar bass frequency. We would need the number of bars in the rotor to confirm.

**Recommendation:**

The number of rotor bars would be helpful. For now, ensure motor current is equal across all phases. Ensure motor current load isn't higher than the other motors.

## Circ Water Pump 1A CLASS I



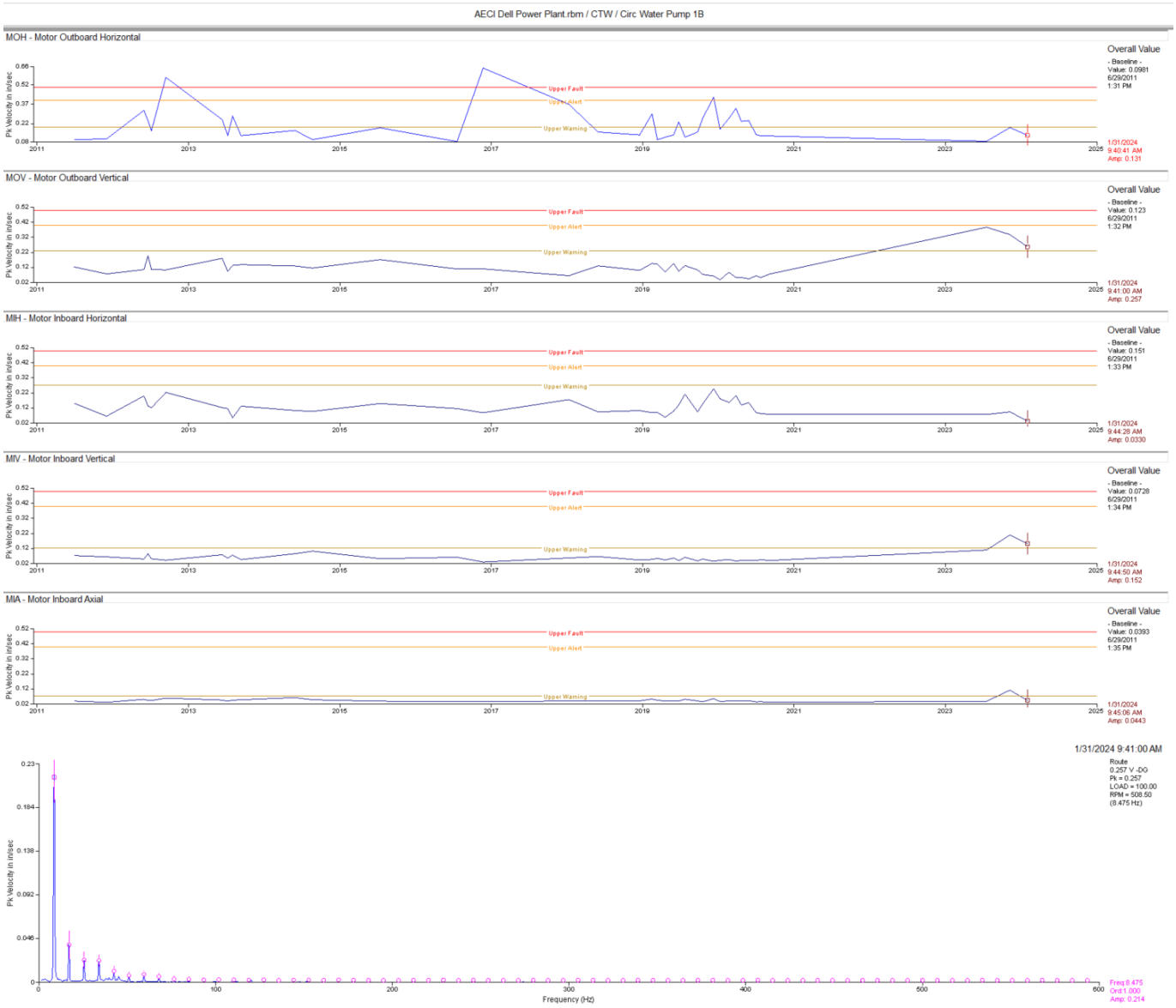

## Observation:

Motor trend plots above show overall pk velocity for each point. 1 x rpm vibration can be seen in the MOH velocity spectrum (bottom plot).

## Recommendation:

Overall, the velocity amplitudes of the motor are around average or below according to trend data. The 1 x motor rpm vibration seen in the MOH can possibly be influenced by the pump if the pump has internal issues. We are monitoring this closely.

## Circ Water Pump 1B CLASS I




## Observation:

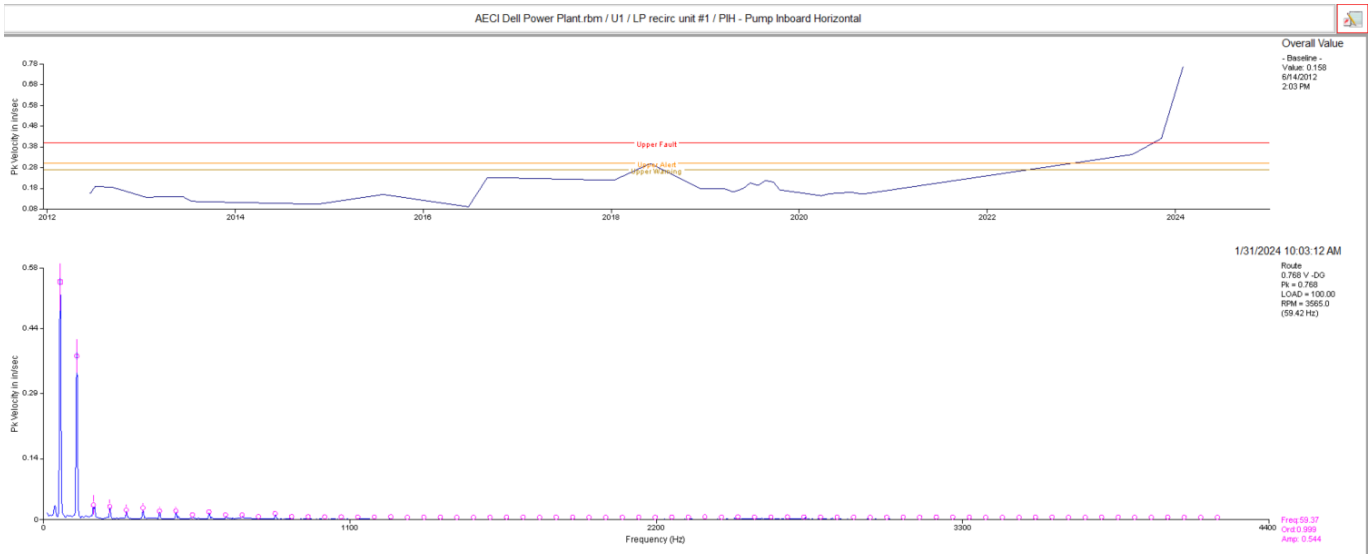
Motor trend plots above show overall pk velocity for each point. 1 x rpm vibration with some small harmonics of rpm can be seen in the MOV velocity spectrum (bottom plot).

## Recommendation:

Amplitudes are below alarm level; however, there appears to be some slightly elevated vibration at the MOV. Spectral data at this point shows some small harmonics of rpm. This may indicate some type of mechanical looseness beginning to occur in the motor or pump. This will be monitored closely.

## GAS TURBINE UNIT 1

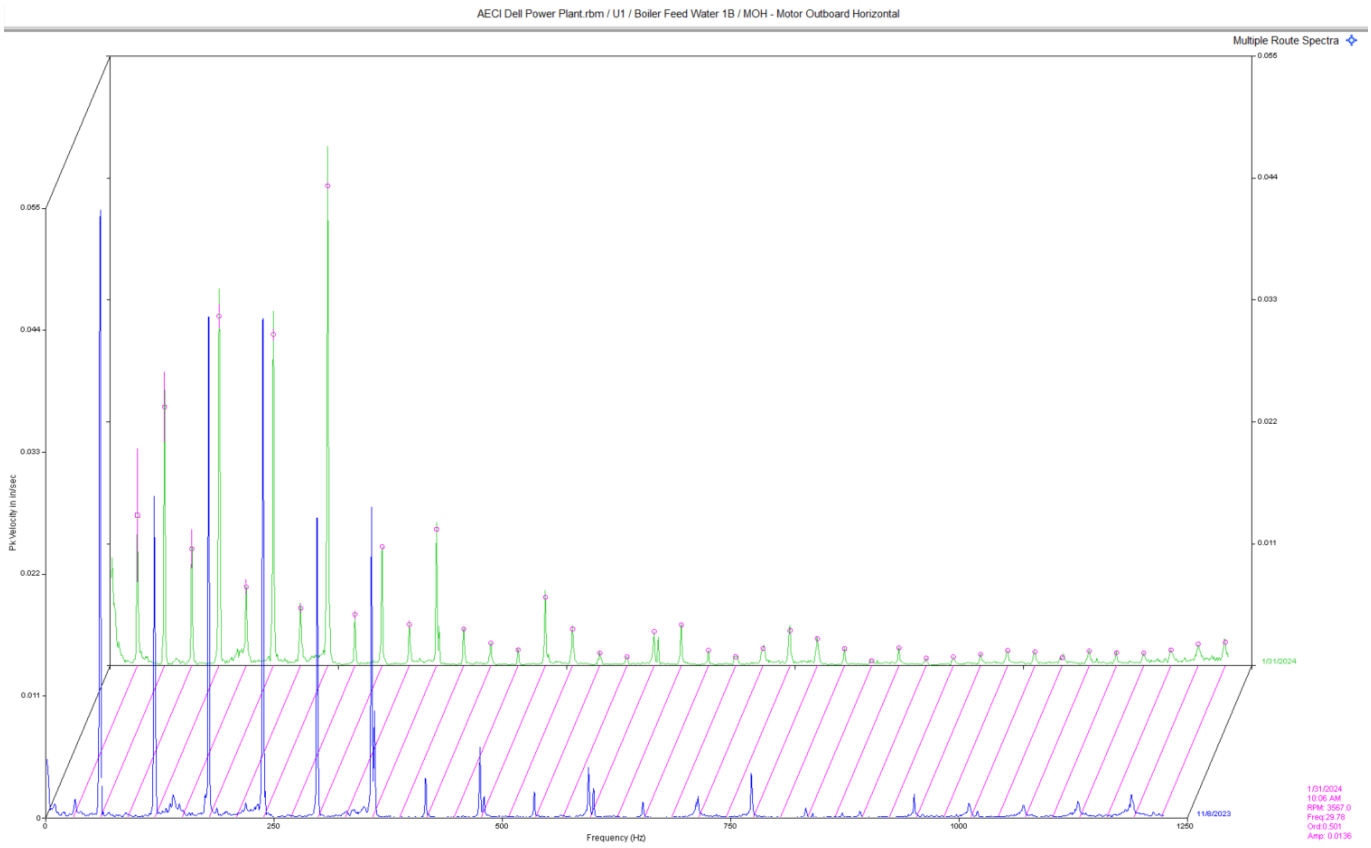
## LP Recirc Unit 1 CLASS II




**Observation:**
Pump inboard horizontal trend show another increase in vibration this survey. Spectral data shows a 1 and 2 x rpm vibration mainly.

**Recommendation:**
Data suggests a coupling issue, or issue with pump. Check pump coupling for wear and check pump shaft for run out as time allows.

## Boiler Feed Water Pump 1B  CLASS I




**Observation:**

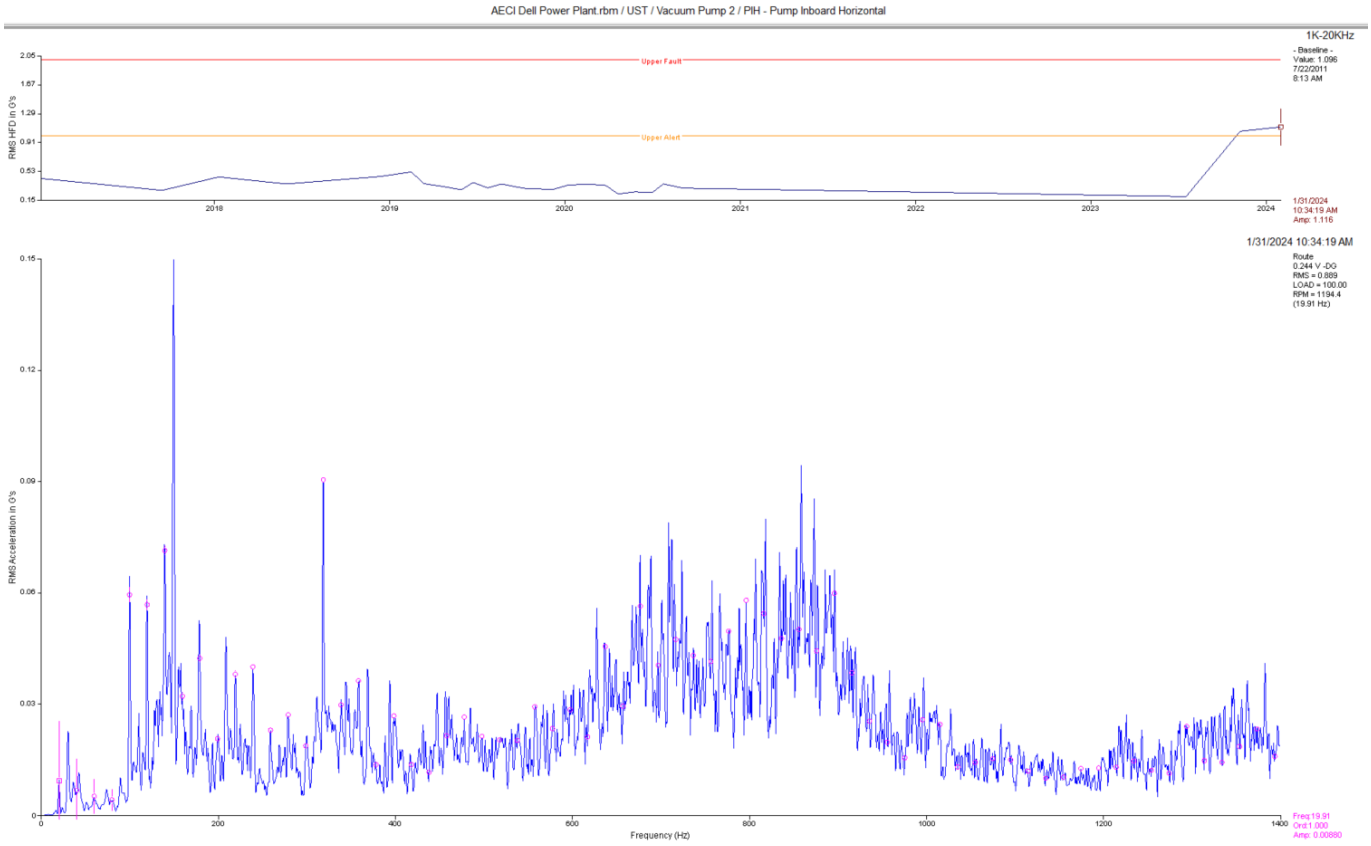
MOH spectral waterfall show an increase in ½ rpm harmonics as compared to last reading in November 2023.

**Recommendation:**

Overall amplitudes are slightly lower in the motor; however, the ½ harmonics in the spectrum are concerning considering these are sleeved bearings. We will continue to monitor this closely.

**STEAM TURBINE UNIT**

## Vacuum Pump 2 CLASS II



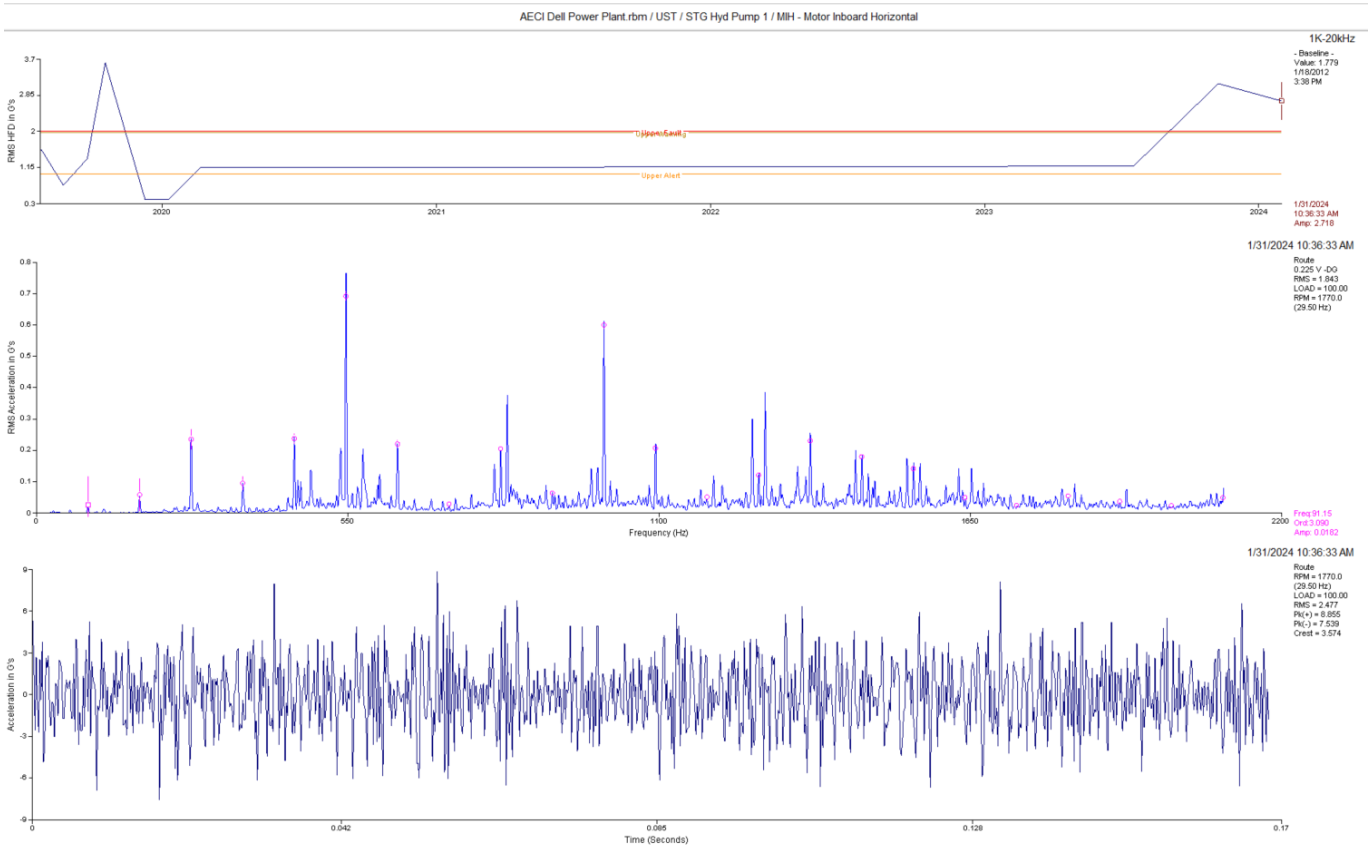

**Observation:**

Pump inboard data shows some non-synchronous peaks that have appeared since the last survey. The PIH 1-20 Khz trend shows increased amplitude as well.

**Recommendation:**

Pump bearings are likely showing signs of defects/wear. Inspect pump as time allows.

## STG Hydraulic Pump 1 CLASS III




**Observation:**

Multiple harmonics 3.09 orders can be seen in the MIH spectral data. Trend data shows an increase in overall amplitude in G's. Waveform also shows high g's with pk-pk amplitude of 16 g's.

**Recommendation:**

Motor data suggests bearing defects in the motor. Pump may also have some internal wear. Inspect/replace soon.

# Abbreviated Last Measurement Summary

**********

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

| MEASUREMENT POINT | OVERALL LEVEL | HFD / VHFD |
|---|---|---|
| CTW1 - Cooling Tower Fan 1 | (31-Jan-24) | |
| | OVERALL LEVEL | 1K-20kHz |
| MOH | .202 In/Sec | 1.238 G-s |
| MOP | .228 G-s | |
| MOV | .194 In/Sec | .876 G-s |
| MIH | .180 In/Sec | .661 G-s |
| MIP | .248 G-s | |
| MIV | .237 In/Sec | .606 G-s |
| MIA | .258 In/Sec | .400 G-s |
| CTW2 - Cooling Tower Fan 2 | (31-Jan-24) | |
| | OVERALL LEVEL | 1K-20kHz |
| MOH | .381 In/Sec | 1.787 G-s |
| MOP | .625 G-s | |
| MOV | .203 In/Sec | 1.751 G-s |
| MIH | .236 In/Sec | 2.534 G-s |
| MIP | 1.525 G-s | |
| MIV | .210 In/Sec | 2.545 G-s |
| MIA | .293 In/Sec | 1.862 G-s |
| CTW3 - Cooling Tower Fan 3 | (31-Jan-24) | |
| | OVERALL LEVEL | 1K-20kHz |
| MOH | .175 In/Sec | 1.063 G-s |
| MOP | .244 G-s | |
| MOV | .329 In/Sec | .771 G-s |
| MIH | .242 In/Sec | .596 G-s |
| MIP | .268 G-s | |
| MIV | .356 In/Sec | .800 G-s |
| MIA | .461 In/Sec | 1.052 G-s |
| CTW4 - Cooling Tower Fan 4 | (31-Jan-24) | |
| | OVERALL LEVEL | 1K-20kHz |
| MOH | .340 In/Sec | .833 G-s |
| MOP | .231 G-s | |
| MOV | .395 In/Sec | 1.186 G-s |
| MIH | .327 In/Sec | .821 G-s |
| MIP | .268 G-s | |
| MIV | .348 In/Sec | .820 G-s |
| MIA | .283 In/Sec | .515 G-s |
| CTW5 - Cooling Tower Fan 5 | (31-Jan-24) | |
| | OVERALL LEVEL | 1K-20kHz |
| MOH | .271 In/Sec | 1.024 G-s |
| MOP | .252 G-s | |
| MOV | .239 In/Sec | 1.046 G-s |
| MIH | .254 In/Sec | 1.773 G-s |
| MIP | .240 G-s | |
| MIV | .214 In/Sec | .769 G-s |
| MIA | .312 In/Sec | .763 G-s |
| CTW6 - Cooling Tower Fan 6 | (31-Jan-24) | |
| | OVERALL LEVEL | 1K-20kHz |
| MOH | .236 In/Sec | 1.664 G-s |
| MOP | .556 G-s | |
| MOV | .222 In/Sec | 1.080 G-s |
| MIH | .281 In/Sec | 1.076 G-s |
| MIP | .288 G-s | |
| MIV | .248 In/Sec | 1.673 G-s |
| MIA | .373 In/Sec | .909 G-s |

| | | | | |
|---|---|---|---|---|
| CTW7 | - Cooling Tower Fan 7 | | (31-Jan-24) | |
| | | OVERALL LEVEL | | 1K-20kHz |
| | MOH | .133 In/Sec | | 1.229 G-s |
| | MOP | .626 G-s | | |
| | MOV | .257 In/Sec | | .946 G-s |
| | MIH | .148 In/Sec | | 1.563 G-s |
| | MIP | .826 G-s | | |
| | MIV | .205 In/Sec | | 1.161 G-s |
| | MIA | .298 In/Sec | | 1.038 G-s |
| CTW8 | - Cooling Tower Fan 8 | | (31-Jan-24) | |
| | | OVERALL LEVEL | | 1K-20kHz |
| | MOH | .305 In/Sec | | 1.588 G-s |
| | MOP | .262 G-s | | |
| | MOV | .205 In/Sec | | 1.277 G-s |
| | MIH | .281 In/Sec | | 1.647 G-s |
| | MIP | .349 G-s | | |
| | MIV | .214 In/Sec | | .897 G-s |
| | MIA | .497 In/Sec | | .668 G-s |
| CTW9 | - Cooling Tower Fan 9 | | (31-Jan-24) | |
| | | OVERALL LEVEL | | 1K-20kHz |
| | MOH | .447 In/Sec | | 2.977 G-s |
| | MOP | .819 G-s | | |
| | MOV | .258 In/Sec | | 1.718 G-s |
| | MIH | .270 In/Sec | | 1.975 G-s |
| | MIP | .339 G-s | | |
| | MIV | .337 In/Sec | | 1.470 G-s |
| | MIA | .322 In/Sec | | 1.259 G-s |
| CTW10 | - Cooling Tower Fan 10 | | (31-Jan-24) | |
| | | OVERALL LEVEL | | 1K-20kHz |
| | MOH | .155 In/Sec | | .253 G-s |
| | MOP | .124 G-s | | |
| | MOV | .096 In/Sec | | .284 G-s |
| | MIH | .163 In/Sec | | .552 G-s |
| | MIP | .336 G-s | | |
| | MIV | .102 In/Sec | | .349 G-s |
| | MIA | .133 In/Sec | | .345 G-s |
| CTW11 | - Cooling Tower Fan 11 | | (31-Jan-24) | |
| | | OVERALL LEVEL | | 1K-20kHz |
| | MOH | .126 In/Sec | | .357 G-s |
| | MOP | .152 G-s | | |
| | MOV | .098 In/Sec | | .332 G-s |
| | MIH | .137 In/Sec | | .791 G-s |
| | MIP | .430 G-s | | |
| | MIV | .068 In/Sec | | .598 G-s |
| | MIA | .115 In/Sec | | 1.301 G-s |
| CTW12 | - Cooling Tower Fan 12 | | (31-Jan-24) | |
| | | OVERALL LEVEL | | 1K-20kHz |
| | MOH | .199 In/Sec | | 1.399 G-s |
| | MOP | .613 G-s | | |
| | MOV | .312 In/Sec | | 3.784 G-s |
| | MIH | .210 In/Sec | | 2.407 G-s |
| | MIP | .177 G-s | | |
| | MIV | .204 In/Sec | | 1.642 G-s |
| | MIA | .256 In/Sec | | .914 G-s |
| 3CW-P-001 | - Circ Water Pump 1A | | (31-Jan-24) | |
| | | OVERALL LEVEL | | 1K-20kHz |
| | MOH | .417 In/Sec | | .241 G-s |
| | MOP | .111 G-s | | |
| | MOV | .262 In/Sec | | .170 G-s |
| | MIH | .229 In/Sec | | .065 G-s |
| | MIP | .033 G-s | | |
| | MIV | .080 In/Sec | | .086 G-s |
| | MIA | .043 In/Sec | | .161 G-s |

| | | | |
|---|---|---|---|
| 3CW-P-002 - Circ Water Pump 1B | | | (31-Jan-24) |
| | | OVERALL LEVEL | 1K-20kHz |
| | MOH | .131 In/Sec | .305 G-s |
| | MOP | .179 G-s | |
| | MOV | .257 In/Sec | .186 G-s |
| | MIH | .033 In/Sec | .091 G-s |
| | MIP | .047 G-s | |
| | MIV | .152 In/Sec | .135 G-s |
| | MIA | .044 In/Sec | .440 G-s |
| LFAA2 - LFAA 1B | | | (31-Jan-24) |
| | | OVERALL LEVEL | 1K-20kHz |
| | MOH | .051 In/Sec | .468 G-s |
| | MOP | .290 G-s | |
| | MOV | .046 In/Sec | .603 G-s |
| | MIH | .082 In/Sec | .452 G-s |
| | MIP | .494 G-s | |
| | MIV | .061 In/Sec | .486 G-s |
| | MIA | .066 In/Sec | .695 G-s |
| | | OVERALL LEVEL | 1K-20KHz |
| | PIH | .025 In/Sec | .165 G-s |
| | PIP | .077 G-s | |

Area: UNIT 1

| MEASUREMENT POINT | | OVERALL LEVEL | HFD / VHFD |
|---|---|---|---|
| LP #1 - LP recirc unit #1 | | | (31-Jan-24) |
| | | OVERALL LEVEL | 1K-20kHz |
| | MOH | .100 In/Sec | .302 G-s |
| | MOP | .086 G-s | |
| | MOV | .181 In/Sec | .299 G-s |
| | MIH | .079 In/Sec | .765 G-s |
| | MIP | .356 G-s | |
| | MIV | .123 In/Sec | .589 G-s |
| | MIA | .227 In/Sec | .604 G-s |
| | | OVERALL LEVEL | 1K-20KHz |
| | PIH | .768 In/Sec | .465 G-s |
| | PIP | .316 G-s | |
| | PIV | 1.284 In/Sec | .358 G-s |
| | POH | .240 In/Sec | .247 G-s |
| | POP | .090 G-s | |
| | POV | .649 In/Sec | .345 G-s |
| | POA | .731 In/Sec | .505 G-s |
| 1FD-P-001B - Boiler Feed Water 1B | | | (31-Jan-24) |
| | | OVERALL LEVEL | 1K-20KHz |
| | MOH | .086 In/Sec | .389 G-s |
| | MOP | .066 G-s | |
| | MOV | .104 In/Sec | .014 G-s |
| | MIH | .102 In/Sec | .149 G-s |
| | MIP | .034 G-s | |
| | MIV | .162 In/Sec | .028 G-s |
| | MIA | .121 In/Sec | .086 G-s |
| | | OVERALL LEVEL | 1K-20kHz |
| | NIA | .062 In/Sec | .202 G-s |
| | NIH | .070 In/Sec | .171 G-s |
| | NIV | .040 In/Sec | .169 G-s |
| | NOV | .051 In/Sec | .081 G-s |
| | NOH | .050 In/Sec | .059 G-s |
| | NOA | .115 In/Sec | .421 G-s |
| | | OVERALL LEVEL | 1K-20KHz |
| | BFA | .024 In/Sec | .162 G-s |
| | PIH | .067 In/Sec | .181 G-s |
| | PIV | .090 In/Sec | .136 G-s |
| | POV | .090 In/Sec | .084 G-s |
| | POH | .087 In/Sec | .108 G-s |

| | | | |
|---|---|---|---|
| CT1 | - CT Lube Oil Pump 1 | (31-Jan-24) | |
| | | OVERALL LEVEL | 1K-20kHz |
| | MOH | .076 In/Sec | .193 G-s |
| | MOP | .051 G-s | |
| | MOV | .044 In/Sec | .368 G-s |
| | MIH | .054 In/Sec | .059 G-s |
| | MIP | .022 G-s | |
| | MIV | .038 In/Sec | .166 G-s |
| | MIA | .045 In/Sec | .148 G-s |
| CTHYD !1 | - CT Hyd Pump 2 | (31-Jan-24) | |
| | | OVERALL LEVEL | 1K-20kHz |
| | MOH | .072 In/Sec | .075 G-s |
| | MOP | .017 G-s | |
| | MOV | .121 In/Sec | .161 G-s |
| | MIH | .064 In/Sec | .530 G-s |
| | MIP | .272 G-s | |
| | MIV | .120 In/Sec | .161 G-s |
| | MIA | .070 In/Sec | .370 G-s |

Area: UNIT 2

| MEASUREMENT POINT | | OVERALL LEVEL | HFD / VHFD |
|---|---|---|---|
| LP #2 | - LP recirc unit #2 | (31-Jan-24) | |
| | | OVERALL LEVEL | 1K-20kHz |
| | MOH | .159 In/Sec | .677 G-s |
| | MOP | .235 G-s | |
| | MOV | .111 In/Sec | .812 G-s |
| | MIH | .136 In/Sec | .819 G-s |
| | MIP | .490 G-s | |
| | MIV | .132 In/Sec | .848 G-s |
| | MIA | .179 In/Sec | 1.388 G-s |
| | | OVERALL LEVEL | 1K-20KHz |
| | PIH | .157 In/Sec | 1.159 G-s |
| | PIP | .777 G-s | |
| | PIV | .105 In/Sec | .781 G-s |
| | POH | .133 In/Sec | .965 G-s |
| | POP | .591 G-s | |
| | POV | .166 In/Sec | 1.502 G-s |
| | POA | .122 In/Sec | 2.410 G-s |
| 2FD-P-002B | - Boiler Feed Water 2B | (31-Jan-24) | |
| | | OVERALL LEVEL | 1K-20KHz |
| | MOH | .020 In/Sec | .957 G-s |
| | MOP | .562 G-s | |
| | MOV | .062 In/Sec | .458 G-s |
| | MIH | .056 In/Sec | 1.283 G-s |
| | MIP | .564 G-s | |
| | MIV | .030 In/Sec | .347 G-s |
| | MIA | .041 In/Sec | 1.223 G-s |
| | | OVERALL LEVEL | 1K-20kHz |
| | NIA | .104 In/Sec | .535 G-s |
| | NIH | .044 In/Sec | .322 G-s |
| | NIV | .030 In/Sec | .265 G-s |
| | NOV | .022 In/Sec | .185 G-s |
| | NOH | .052 In/Sec | .123 G-s |
| | NOA | .073 In/Sec | .386 G-s |
| | | OVERALL LEVEL | 1K-20KHz |
| | BFA | .042 In/Sec | .337 G-s |
| | PIH | .084 In/Sec | .276 G-s |
| | PIV | .125 In/Sec | .270 G-s |
| | POV | .088 In/Sec | .195 G-s |
| | POH | .131 In/Sec | .140 G-s |
| CT1 | - CT Lube Oil Pump 1 | (31-Jan-24) | |
| | | OVERALL LEVEL | 1K-20kHz |
| | MOH | .069 In/Sec | .123 G-s |

| | | | | |
|---|---|---|---|---|
| | MOP | .036 G-s | | |
| | MOV | .056 In/Sec | .042 G-s | |
| | MIH | .038 In/Sec | .063 G-s | |
| | MIP | .022 G-s | | |
| | MIV | .044 In/Sec | .085 G-s | |
| | MIA | .122 In/Sec | .085 G-s | |
| CTHYD ! | - CT Hyd Pump 1 | (31-Jan-24) | | |
| | | OVERALL LEVEL | 1K-20kHz | |
| | MOH | .075 In/Sec | .258 G-s | |
| | MOP | .069 G-s | | |
| | MOV | .073 In/Sec | .179 G-s | |
| | MIH | .026 In/Sec | .384 G-s | |
| | MIP | .178 G-s | | |
| | MIV | .047 In/Sec | .765 G-s | |
| | MIA | .043 In/Sec | .422 G-s | |
| ABF | - Aux Boiler Fan | (31-Jan-24) | | |
| | | OVERALL LEVEL | 1K-20kHz | |
| | MOH | .138 In/Sec | .454 G-s | |
| | MOP | .074 G-s | | |
| | MOV | .338 In/Sec | .363 G-s | |
| | MIH | .075 In/Sec | .845 G-s | |
| | MIP | .086 G-s | | |
| | MIV | .076 In/Sec | .489 G-s | |
| | MIA | .250 In/Sec | .326 G-s | |

Area: UNIT STEAM TURBINE

| MEASUREMENT POINT | | OVERALL LEVEL | HFD / VHFD |
|---|---|---|---|
| 3CW-P-003 | - CCW Booster Pump 1 | (31-Jan-24) | |
| | | OVERALL LEVEL | 1K-20kHz |
| | MOH | .059 In/Sec | .257 G-s |
| | MOP | .030 G-s | |
| | MOV | .055 In/Sec | .353 G-s |
| | MIH | .048 In/Sec | .334 G-s |
| | MIP | .181 G-s | |
| | MIV | .041 In/Sec | .256 G-s |
| | MIA | .054 In/Sec | .409 G-s |
| | | OVERALL LEVEL | 1K-20KHz |
| | PIH | .072 In/Sec | .386 G-s |
| | PIP | .322 G-s | |
| | PIV | .102 In/Sec | .344 G-s |
| | PIA | .061 In/Sec | .693 G-s |
| 0CC-P-001 | - CLosed Cooling Water 1 | (31-Jan-24) | |
| | | OVERALL LEVEL | 1K-20kHz |
| | MOH | .079 In/Sec | .356 G-s |
| | MOP | .079 G-s | |
| | MOV | .043 In/Sec | .427 G-s |
| | MIH | .081 In/Sec | .925 G-s |
| | MIP | .090 G-s | |
| | MIV | .044 In/Sec | .587 G-s |
| | MIA | .076 In/Sec | 1.109 G-s |
| | | OVERALL LEVEL | 1K-20KHz |
| | PIH | .047 In/Sec | .597 G-s |
| | PIP | .277 G-s | |
| | PIV | .036 In/Sec | 1.723 G-s |
| | POH | .046 In/Sec | .723 G-s |
| | POP | .294 G-s | |
| | POV | .034 In/Sec | 1.275 G-s |
| | POA | .090 In/Sec | 1.712 G-s |
| 3CH-P-001A | - Condensate Pump A | (31-Jan-24) | |
| | | OVERALL LEVEL | 1K-20kHz |
| | MOH | .183 In/Sec | .873 G-s |
| | MOP | .062 G-s | |

| | | | |
|---|---|---|---|
| MOV | .174 In/Sec | .258 G-s | |
| MIH | .061 In/Sec | .373 G-s | |
| MIP | .136 G-s | | |
| MIV | .085 In/Sec | .214 G-s | |
| MIA | .032 In/Sec | .147 G-s | |
| | OVERALL LEVEL | 1K-20KHz | |
| PIH | .054 In/Sec | .392 G-s | |
| PIP | .233 G-s | | |
| PIV | .073 In/Sec | .401 G-s | |
| PIA | .034 In/Sec | .370 G-s | |

3CH-P-001C - Condensate PumpC (31-Jan-24)

| | | | |
|---|---|---|---|
| | OVERALL LEVEL | 1K-20kHz | |
| MOH | .355 In/Sec | 1.148 G-s | |
| MOP | .112 G-s | | |
| MOV | .233 In/Sec | .317 G-s | |
| MIH | .135 In/Sec | .582 G-s | |
| MIP | .232 G-s | | |
| MIV | .139 In/Sec | .794 G-s | |
| MIA | .055 In/Sec | .629 G-s | |
| | OVERALL LEVEL | 1K-20KHz | |
| PIH | .156 In/Sec | .965 G-s | |
| PIP | .469 G-s | | |
| PIV | .139 In/Sec | .414 G-s | |
| PIA | .039 In/Sec | .916 G-s | |

3AE-P-002 - Vacuum Pump 2 (31-Jan-24)

| | | | |
|---|---|---|---|
| | OVERALL LEVEL | 1K-20kHz | |
| MOH | .133 In/Sec | 1.025 G-s | |
| MOP | .197 G-s | | |
| MOV | .161 In/Sec | .927 G-s | |
| MIH | .190 In/Sec | .332 G-s | |
| MIP | .157 G-s | | |
| MIV | .230 In/Sec | 1.266 G-s | |
| MIA | .176 In/Sec | .182 G-s | |
| | OVERALL LEVEL | 1K-20KHz | |
| PIH | .244 In/Sec | 1.116 G-s | |
| PIP | 1.047 G-s | | |
| PIV | .401 In/Sec | .390 G-s | |
| POH | .255 In/Sec | .502 G-s | |
| POP | .535 G-s | | |
| POV | .443 In/Sec | 1.076 G-s | |
| POA | .195 In/Sec | .708 G-s | |

STG2 - STG Lube Oil Pump 2 (31-Jan-24)

| | | | |
|---|---|---|---|
| | OVERALL LEVEL | 1K-20kHz | |
| MOH | .071 In/Sec | .128 G-s | |
| MOP | .026 G-s | | |
| MOV | .047 In/Sec | .437 G-s | |
| MIH | .038 In/Sec | .420 G-s | |
| MIP | .188 G-s | | |
| MIV | .034 In/Sec | .555 G-s | |
| MIA | .040 In/Sec | .179 G-s | |

STGHyd1 - STG Hyd Pump 1 (31-Jan-24)

| | | | |
|---|---|---|---|
| | OVERALL LEVEL | 1K-20kHz | |
| MOH | .224 In/Sec | 1.406 G-s | |
| MOP | .876 G-s | | |
| MOV | .162 In/Sec | 1.566 G-s | |
| MIH | .225 In/Sec | 2.718 G-s | |
| MIP | 1.443 G-s | | |
| MIV | .183 In/Sec | 4.229 G-s | |
| MIA | .170 In/Sec | 1.840 G-s | |
| | OVERALL LEVEL | 1K-20KHz | |
| PIH | .255 In/Sec | .810 G-s | |
| PIP | .495 G-s | | |
| PIV | .338 In/Sec | 1.964 G-s | |
| PIA | .300 In/Sec | 3.353 G-s | |

Area: WATER PUMPS AND VACUUM PUMPS

| MEASUREMENT POINT | OVERALL LEVEL | HFD / VHFD |
|---|---|---|
| OSW-P-001B - Service Water Pump 1B (31-Jan-24) | | |
| | OVERALL LEVEL | 1K-20kHz |
| MOH | .664 In/Sec | .486 G-s |
| MOP | .290 G-s | |
| MOV | .231 In/Sec | .575 G-s |
| MIH | .666 In/Sec | .986 G-s |
| MIP | .570 G-s | |
| MIV | .135 In/Sec | .457 G-s |
| MIA | .208 In/Sec | .420 G-s |
| | OVERALL LEVEL | 1K-20KHz |
| PIH | .454 In/Sec | 1.174 G-s |
| PIP | .790 G-s | |
| PIV | .273 In/Sec | 1.035 G-s |
| POH | .238 In/Sec | 1.041 G-s |
| POP | .494 G-s | |
| POV | .263 In/Sec | 1.851 G-s |
| POA | .224 In/Sec | 1.324 G-s |

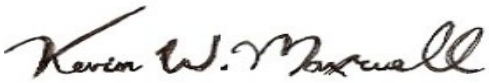
---

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