# Monitoring & Trending Request Form

**Project:**

| To: | | | Unit ID(s): _____ | Unit ID(s): _____ | |
| --- | --- | --- | --- | --- | --- |
| From:<br>Date: | | | Trend Period:<br>_____<br>thru_____ | Trend Period:<br>_____<br>thru_____ | |

| ID | Trend Group ID [4] | Point | Method: (EMS or DL) [1] | Give SetPt & Sched Y/N | Trend Point? Y / N | Time Step (min) | Trend Point? Y / N | Time Step (min) | Purpose of Monitoring |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **COOLING PLANT** | | | | | | | | | |
| 1 | | OSAT | | | | | | | |
| 2 | | Chiller status | | | | | | | |
| 3 | | LCHW temp | | | | | | | |
| 4 | | ECHW temp | | | | | | | |
| 5 | | ECDW temp | | | | | | | |
| 6 | | LCDW temp | | | | | | | |
| 7 | | CHW flow through bypass | | | | | | | |
| 8 | | CHW flow direction in bypass | | | | | | | |
| 9 | | Secondary CHW flow or current | | | | | | | |
| 10 | | CHWP __ (lead secondary) RPM or amps | | | | | | | |
| 11 | | CHWP __ (lag secondary) RPM or amps | | | | | | | |
| 12 | | DP controlling secondary CHW pumps | | | | | | | |
| 13 | | DP across CHWP___ (lead primary) | | | | | | | |
| 14 | | DP across CHWP___ (lead secondary) | | | | | | | |
| 15 | | Status of CHWP___ (lag primary) | | | | | | | |
| 16 | | CT valve position (% open) | | | | | | | |
| 17 | | CT bypass valve position (% open) | | | | | | | |
| 18 | | CT fan speed or current | | | | | | | |
| 19 | | Chiller kW | | | | | | | |
| 20 | | Chiller compressor current | | | | | | | |
| 21 | | Primary chilled water pump current | | | | | | | |
| 22 | | Condenser water pump current | | | | | | | |
| 23 | | Alarms | | | | | | | |
| 24 | | Unit run change of state & command (ON/OFF) and reason (schedule or process) | | | | na | | na | |
| 25 | | | | | | | | | |
| 26 | | | | | | | | | |
| 27 | | | | | | | | | |
| 28 | | | | | | | | | |

Abbreviations:

| | | | |
| --- | --- | --- | --- |
| CD = condenser water | DL = dataloggers | MA = mixed air | RH = relative humidity |
| CH = chiller | DP = differential pressure | Min. = minutes | SA = supply air |
| CHW = chilled water | EMS = energy manage. sys. | OSA = outside air | SP = static pressure |
| CT = cooling tower | HW = hot water | ...P = pump | ...S = supply |
| DA = discharge air near coil | L & E = leaving & entering | R = return | T = temperature |
| | | RA = return air | VFD = variable freq. drive |

**NOTES:**

1. All trends are assumed to be via the EMS, unless noted "DL" for DataLogger, in the "EMS or DL" column.

2. Provide an explanation of the trend column heading abbreviations and provide current setpoints applicable for interpreting the

data and the schedule for this equipment to be ON or OFF, as requested in the "Give SetPt & Sched" column

3. Trend output data must be in an ASCII delimited text file with time continuous down left column and point values in column(s) to the right.

Alternating from one time point to the next down the file with groups of trend points is not acceptable. If there is a question about the trend output format, contact the commissioning agent.

4. All trends for points of a group must start at the same moment in time, unless specifically OK'd otherwise with the commissioning agent.