Jan 25 meeting prepare

Yujie Xu

1/25/2019

# Top 10 rules by

## mCost

|  |  |
| --- | --- |
| rule | mCost |
| Chilled Water Pressure Setpoint Unreachable | 115,040 |
| AHU Discharge Pressure Setpoint Unreachable | 37,552 |
| AHU Discharge Temperature Setpoint Unreachable | 35,544 |
| AHU Discharge Fan Failure | 30,826 |
| AHU Excessive Discharge Fan Speed | 27,720 |
| Chiller Cycling | 23,849 |
| Chilled Water System Failure | 22,882 |
| Chiller Running During Unoccupied Periods | 22,712 |
| Pump Cycling | 20,195 |
| Heat Exchanger Temp Setpoint Unreachable | 19,668 |
| AHU Cooling Failure | 15,786 |
| Unoccupied Cooling Setpoint Out of Range | 15,145 |
| AHU Heating Failure | 14,656 |
| Hot Water Pressure Setpoint Unreachable | 14,269 |
| AHU Cooling Valve Leaking | 14,060 |
| AHU Outside Damper Stuck Closed | 11,249 |
| AHU Excessive Outside Air During Unoccupancy | 10,978 |
| Boiler Cycling | 10,639 |
| AHU Heating Valve Leaking | 10,415 |
| AHU Cooling Valve Unstable | 10,096 |
| Heat Exchanger Temp Unstable | 9,066 |
| Occupied Cooling Setpoint Out of Range | 8,758 |
| Terminal Unit Airflow Setpoint Unreachable | 7,670 |
| AHU Damper Unstable | 7,461 |
| Hot Water System Failure | 7,219 |
| AHU Excessive Return Fan Speed | 5,645 |
| AHU Economizing & Heating Simultaneously | 5,490 |
| AHU Discharge Temperature Unstable | 5,270 |
| AHU Heating Valve Unstable | 5,110 |
| AHU Outside Damper Stuck Open | 4,690 |
| Occupied Zone Temperature Out of Range | 4,454 |
| AHU Economizing & Cooling Simultaneously | 3,984 |
| Chilled Water Pressure Unstable | 3,904 |
| Zone Pressure Setpoint Unreachable | 3,322 |
| AHU Return Pressure Setpoint Unreachable | 2,778 |
| Hot Water Pressure Unstable | 2,775 |
| Cooling Tower Temperature Setpoint Unreachable | 2,369 |
| AHU Cooling & Heating Simultaneously | 1,856 |
| Boilers Running During Warm Weather | 1,051 |
| AHU Outside Airflow Too Low | 923 |
| AHU Discharge Fan Unstable | 602 |
| Terminal Unit Heating Valve Leaking | 493 |
| AHU Discharge Pressure Unstable | 286 |
| Terminal Unit Heating Failure | 268 |
| Occupied Heating Setpoint Out of Range | 241 |
| Cooling Tower Temperature Unstable | 126 |
| AHU Cooling & Heating Cycling | 85 |
| Zone Heating Damper Malfunction | 79 |
| Zone Over Heating | 42 |
| Unoccupied Zone Temperature Out of Range | 40 |
| Terminal Unit Airflow Unstable | 38 |
| Zone Over Cooling | 10 |
| AHU Outside Airflow Unstable | 4 |
| Hot Water Circ Pump Running | 1 |

## eCost

|  |  |
| --- | --- |
| rule | eCost |
| Unoccupied Cooling Setpoint Out of Range | 2,020,031.1 |
| Occupied Cooling Setpoint Out of Range | 1,167,872.4 |
| AHU Cooling Valve Leaking | 1,125,184.6 |
| Chiller Running During Unoccupied Periods | 993,454.5 |
| AHU Discharge Temperature Setpoint Unreachable | 879,538.2 |
| AHU Heating Valve Leaking | 721,229.9 |
| Terminal Unit Airflow Setpoint Unreachable | 613,797.9 |
| AHU Cooling Failure | 421,110.6 |
| AHU Heating Failure | 351,864.2 |
| Boiler Cycling | 317,203.5 |
| AHU Outside Damper Stuck Closed | 306,862.4 |
| Chilled Water System Failure | 297,188.4 |
| AHU Cooling & Heating Simultaneously | 282,280.0 |
| Chiller Cycling | 278,306.2 |
| AHU Damper Unstable | 274,244.2 |
| AHU Cooling Valve Unstable | 269,327.5 |
| Heat Exchanger Temp Setpoint Unreachable | 268,509.2 |
| AHU Excessive Outside Air During Unoccupancy | 263,121.7 |
| AHU Outside Damper Stuck Open | 215,235.3 |
| AHU Discharge Pressure Setpoint Unreachable | 195,172.2 |
| AHU Discharge Fan Failure | 155,691.2 |
| AHU Economizing & Heating Simultaneously | 131,808.7 |
| AHU Heating Valve Unstable | 122,677.9 |
| AHU Excessive Discharge Fan Speed | 113,988.7 |
| AHU Discharge Temperature Unstable | 108,253.8 |
| AHU Economizing & Cooling Simultaneously | 106,267.6 |
| Occupied Zone Temperature Out of Range | 96,529.2 |
| Zone Pressure Setpoint Unreachable | 65,654.5 |
| AHU Return Pressure Setpoint Unreachable | 44,564.9 |
| Chilled Water Pressure Setpoint Unreachable | 34,567.8 |
| Occupied Heating Setpoint Out of Range | 28,983.1 |
| Terminal Unit Heating Valve Leaking | 23,676.5 |
| AHU Excessive Return Fan Speed | 23,013.8 |
| Hot Water System Failure | 22,497.9 |
| Heat Exchanger Temp Unstable | 10,314.3 |
| AHU Outside Airflow Too Low | 7,959.1 |
| Terminal Unit Heating Failure | 6,425.1 |
| Cooling Tower Temperature Setpoint Unreachable | 6,322.0 |
| AHU Cooling & Heating Cycling | 5,158.7 |
| Hot Water Pressure Setpoint Unreachable | 4,297.2 |
| Zone Over Heating | 4,008.2 |
| AHU Discharge Fan Unstable | 2,477.8 |
| Zone Heating Damper Malfunction | 1,896.9 |
| Hot Water Pressure Unstable | 1,487.3 |
| AHU Discharge Pressure Unstable | 1,310.9 |
| Zone Over Cooling | 1,083.9 |
| Terminal Unit Airflow Unstable | 1,001.6 |
| Unoccupied Zone Temperature Out of Range | 950.8 |
| Chilled Water Pressure Unstable | 758.5 |
| Pump Cycling | 494.0 |
| Cooling Tower Temperature Unstable | 337.3 |
| AHU Outside Airflow Unstable | 46.1 |
| Hot Water Circ Pump Running | 12.5 |
| Boilers Running During Warm Weather | 0.2 |

## sCost

|  |  |
| --- | --- |
| rule | sCost |
| AHU Discharge Pressure Setpoint Unreachable | 980,739 |
| AHU Discharge Fan Failure | 810,235 |
| AHU Excessive Discharge Fan Speed | 766,090 |
| Occupied Zone Temperature Out of Range | 663,316 |
| AHU Cooling Valve Leaking | 520,133 |
| AHU Discharge Temperature Setpoint Unreachable | 426,586 |
| AHU Heating Valve Leaking | 392,107 |
| Occupied Cooling Setpoint Out of Range | 352,967 |
| Chilled Water Pressure Setpoint Unreachable | 351,702 |
| Terminal Unit Airflow Setpoint Unreachable | 337,093 |
| AHU Outside Damper Stuck Closed | 305,083 |
| AHU Cooling Failure | 240,083 |
| AHU Heating Failure | 216,047 |
| AHU Outside Damper Stuck Open | 195,350 |
| Heat Exchanger Temp Setpoint Unreachable | 161,008 |
| AHU Excessive Return Fan Speed | 154,004 |
| AHU Cooling Valve Unstable | 151,424 |
| AHU Excessive Outside Air During Unoccupancy | 99,208 |
| AHU Damper Unstable | 97,364 |
| AHU Economizing & Heating Simultaneously | 95,020 |
| AHU Cooling & Heating Simultaneously | 94,342 |
| AHU Economizing & Cooling Simultaneously | 72,891 |
| AHU Discharge Temperature Unstable | 68,952 |
| AHU Heating Valve Unstable | 57,016 |
| Hot Water Pressure Setpoint Unreachable | 50,952 |
| Hot Water System Failure | 35,141 |
| Chilled Water System Failure | 26,658 |
| Zone Pressure Setpoint Unreachable | 24,303 |
| AHU Return Pressure Setpoint Unreachable | 18,813 |
| Terminal Unit Heating Failure | 15,284 |
| Chilled Water Pressure Unstable | 12,267 |
| Terminal Unit Heating Valve Leaking | 12,012 |
| AHU Discharge Pressure Unstable | 8,842 |
| Occupied Heating Setpoint Out of Range | 7,775 |
| AHU Outside Airflow Too Low | 7,246 |
| Hot Water Pressure Unstable | 5,659 |
| AHU Discharge Fan Unstable | 5,578 |
| Boilers Running During Warm Weather | 4,089 |
| Zone Heating Damper Malfunction | 2,032 |
| AHU Cooling & Heating Cycling | 1,491 |
| Zone Over Heating | 1,398 |
| Zone Over Cooling | 750 |
| Terminal Unit Airflow Unstable | 694 |
| AHU Outside Airflow Unstable | 32 |
| Boiler Cycling | 0 |
| Chiller Cycling | 0 |
| Chiller Running During Unoccupied Periods | 0 |
| Cooling Tower Temperature Setpoint Unreachable | 0 |
| Cooling Tower Temperature Unstable | 0 |
| Heat Exchanger Temp Unstable | 0 |
| Hot Water Circ Pump Running | 0 |
| Pump Cycling | 0 |
| Unoccupied Cooling Setpoint Out of Range | 0 |
| Unoccupied Zone Temperature Out of Range | 0 |