OEIS Data Request 1.4

Regarding Weather Station Standards - On page 216 of its WMP, PacifiCorp states that it, "...has complete control and knowledge of [its weather station] network calibration and maintenance to ensure that the weather data used to support operational decision making is of the highest quality." PacifiCorp also states that its weather stations are calibrated annually before wildfire season to ensure accuracy of the data throughout fire season (p. 213). Please provide the following:

- i. The installation and equipment standard that governs PacifiCorp's weather station installation, including height from ground, direction of cross-arm, and which side of the pole/tower they are installed on.
- ii. The total number of stations that were serviced annually over the past 3 years and the maintenance preformed on each station in accordance with PacifiCorp Procedure 069, Policy 001, Policy 356, as listed in Appendix F of PacifiCorp's WMP (p. 387).
- iii. The total number of stations not serviced annually over the past 3 years, including an explanation as to why they did not receive the annual maintenance/calibration and how many attempts were made to perform the annual maintenance/calibration.
- iv. The estimated life span of each sensor and the replacement cycle for each.
- v. The total number of repair requests initiated per year over the past 3 years, including the duration from initiation to completion of the repair.
- vi. A copy PacifiCorp's Policy 001 on the maintenance of weather station assets.

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- Please refer to Attachment OEIS 14.3 which provides a copy of "EA500 Pole-Mounted Weather Monitoring Station"; the construction standard used when installing weather stations. Weather stations can be placed on the pole in any direction.
- ii. The maintenance performed on the weather stations ensures that the stations are operational. The stations have each sensor (wind monitor, temperature/relative humidity sensor, rain gauge) checked individually at each station. At the end of the maintenance the station is confirmed to be operational with the weather station vendor. If a sensor measured outside of the tolerance levels the equipment is either replaced with spares on hand or with a new sensor ordered.

Table 1 Weather Stations Maintained Annually

2020	2021	2022
10	12	34

- iii. All stations were calibrated annually in 2020, 2021 and 2022.
- iv. Please refer to the table below which provides the estimated lifespans for the sensors as provided by the weather station vendor:

Part	Lifespan
Datalogger	10-15 Years
Charging Regulator	10-15 Years
Temp/RH Sensor	10-15 Years
Wind Sensor	10-15 Years
Rain Gauge	10-15 Years
Cellular Modem	As technology advances
New Power Relay	10 Years
New Power-over-Ethernet Injector	10 Years
Satellite Terminal	5 Years
Satellite Terminal Mounting bracket	20+ Years
Satellite Power Cable	5 Years
Sealed Lead Acid Battery	2-5 Years
Lithium Battery	10-20 Years
Enclosure	5-10 Years
65W Solar Panel	10-15 Years
4ft Crossarm	20+ Years

v. The average time from corrective maintenance (CM) initiation to completion was around two to three months. This includes ordering material to completion.

Table 2 Weather Station CM Required

2020	2021	2022
4	9	1

vi. Please refer to Attachment OEIS 1.4 which provides a copy of Policy 001-PP. Weather station maintenance in Policy 001 is provided in tab "Wires".

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.