Q4. Provide an Excel table of all distribution circuits existing in 2020 (as rows) that includes the following information in separate columns. Items (a) through (k) are features of the circuit. Items (l) through (ggg) pertain to work performed for each circuit.

| a. Circuit Name | b. Circuit ID Number | c. Total Circuit Miles | d. Circuit Miles in non-High Fire Threat District (HFTD) Areas | e. Circuit Miles in HFTD Tier 2 | f. Circuit Miles in HFTD Tier 3 | g. Circuit Voltage | h. Wildfire Risk Level2 | i. Circuit SAIDI (System Average Interruption Duration Index) for 2020 | j. Circuit SAIFI (System Average Interruption Frequency Index) for 2020 | k. Circuit MAIFI (Momentary Average Interruption Frequency Index) for 2020 | l. Miles of Enhanced Vegetation Management (EVM) Work in Non-High-Fire Threat District (HFTD) Areas in 2020 | m. Miles of EVM Work in HFTD Tier 2 in 2020 | n. Miles of EVM Work in HFTD Tier 3 in 2020 | o. Miles of Routine Vegetation Management Work in Non-High-Fire Threat District (HFTD) Areas in 2020 | p. Miles of Routine Vegetation Management Work in HFTD Tier 2 in 2020 | q. Miles of Routine Vegetation Management Work in HFTD Tier 3 in 2020 | r. Miles of Covered Conductor Installed in Non-HFTD in 2018 | s. Miles of Covered Conductor Installed in Non-HFTD in 2019 | t. Miles of Covered Conductor Installed in Non-HFTD in 2020 | u. Miles of Covered Conductor Installed in HFTD Tier 2 in 2018 | v. Miles of Covered Conductor Installed in HFTD Tier 2 in 2019 | w. Miles of Covered Conductor Installed in HFTD Tier 2 in 2020 | x. Miles of Covered Conductor Installed in HFTD Tier 3 in 2018 | y. Miles of Covered Conductor Installed in HFTD Tier 3 in 2019 | z. Miles of Covered Conductor Installed in HFTD Tier 3 in 2020 | aa. Number of Poles Replaced in Non-HFTD in 2018 | bb. Number of Poles Replaced in Non-HFTD in 2019 | cc. Number of Poles Replaced in Non-HFTD in 2020 | dd. Number of Poles Replaced HFTD Tier 2 in 2018 | ee. Number of Poles Replaced HFTD Tier 2 in 2019 | ff. Number of Poles Replaced HFTD Tier 2 in 2020 | gg. Number of Poles Replaced HFTD Tier 3 in 2018 | hh. Number of Poles Replaced HFTD Tier 3 in 2019 | ii. Number of Poles Replaced HFTD Tier 3 in 2020 | jj. Underground Conductor Installation in Non-HFTD in 2018 | kk. Miles of Underground Conductor Installation in Non-HFTD in 2019 | ll. Miles of Underground Conductor Installation in Non-HFTD in 2020 | mm. Miles of Underground Conductor Installation in HFTD Tier 2 in 2018 | nn. Miles of Underground Conductor Installation in HFTD Tier 2 in 2019 | oo. Miles of Underground Conductor Installation in HFTD Tier 2 in 2020 | pp. Miles of Underground Conductor Installation in HFTD Tier 3 in 2018 | qq. Miles of Underground Conductor Installation in HFTD Tier 3 in 2019 | rr. Miles of Underground Conductor Installation in HFTD Tier 3 in 2020 | ss. Miles of Light Detection and Ranging (LiDAR) Inspection in Non-HFTD in 2020 | tt. Miles of LiDAR Inspection HFTD Tier 2 in 2020 | uu. Miles of LiDAR Inspection HFTD Tier 3 in 2020 | vv. Number of Detailed Overhead Inspections in Non-HFTD in 2020 | ww. Number of Detailed Overhead Inspections HFTD Tier 2 in 2020 | xx. Number of Detailed Overhead Inspections HFTD Tier 3 in 2020 | yy. Number of Substation Devices Installed in Non-HFTD in 2018 | zz. Number of Substation Devices Installed in Non-HFTD in 2019 | aaa. Number of Substation Devices Installed in Non-HFTD in 2020 | bbb. Number of Substation Devices Installed in HFTD Tier 2 in 2018 | ccc. Number of Substation Devices Installed in HFTD Tier 2 in 2019 | ddd. Number of Substation Devices Installed HFTD Tier 2 in 2020 | eee. Number of Substation Devices Installed HFTD Tier 3 in 2018 | fff. Number of Substation Devices Installed HFTD Tier 3 in 2019 | ggg. Number of Substation Devices Installed HFTD Tier 3 in 2020 | hhh. Number of Substation Devices Installed HFTD Tier 3 in 2020 |
|---|---|---

QS- Provide an Excel table of all transmission circuits existing in 2020 (as rows) that includes the following information in separate columns. Items (a) through (e) are features of the circuit. Items (f) through (ggg) pertain to work performed for each circuit.

| a. Circuit Name | b. Circuit ID Number | c. Total Circuit Miles | d. Circuit Miles in Non-High Fire Threat District (HFTD) Areas | e. Circuit Miles in HFTD Tier 2 | f. Circuit Miles in HFTD Tier 3 | g. Circuit Voltage | h. Wildfire Risk Level2 | i. Circuit SAIDI (System Average Interruption Duration Index) for 2020 | j. Circuit SAIFI (System Average Interruption Frequency Index) for 2020 | k. Circuit MAIFI (Momentary Average Interruption Frequency Index) for 2020 | l. Miles of Enhanced Vegetation Management (EVM) Work in Non-High-Fire Threat District (HFTD) Areas in 2020 | m. Miles of EVM Work in HFTD Tier 2 in 2020 | n. Miles of EVM Work in HFTD Tier 3 in 2020 | o. Miles of Routine Vegetation Management Work in Non-High-Fire Threat District (HFTD) Areas in 2020 | p. Miles of Routine Vegetation Management Work in HFTD Tier 2 in 2020 | q. Miles of Routine Vegetation Management Work in HFTD Tier 3 in 2020 | r. Miles of Covered Conductor Installed in Non-HFTD in 2019 | s. Miles of Covered Conductor Installed in Non-HFTD in 2020 | t. Miles of Covered Conductor Installed in Non-HFTD in 2018 | u. Miles of Covered Conductor Installed in HFTD Tier 2 in 2019 | v. Miles of Covered Conductor Installed in HFTD Tier 2 in 2020 | w. Miles of Covered Conductor Installed in HFTD Tier 2 in 2018 | x. Miles of Covered Conductor Installed in HFTD Tier 3 in 2019 | y. Miles of Covered Conductor Installed in HFTD Tier 3 in 2020 | z. Miles of Covered Conductor Installed in HFTD Tier 3 in 2018 | aa. Number of Poles Replaced in Non-HFTD in 2019 | bb. Number of Poles Replaced in Non-HFTD in 2020 | cc. Number of Poles Replaced in Non-HFTD in 2018 | dd. Number of Poles Replaced HFTD Tier 2 in 2019 | ee. Number of Poles Replaced HFTD Tier 2 in 2020 | ff. Number of Poles Replaced HFTD Tier 2 in 2018 | gg. Number of Poles Replaced HFTD Tier 3 in 2019 | hh. Number of Poles Replaced HFTD Tier 3 in 2020 | ii. Number of Poles Replaced HFTD Tier 3 in 2018 | jj. Miles of Underground Conductor Installation in Non-HFTD in 2018 | kk. Miles of Underground Conductor Installation in Non-HFTD in 2019 | ll. Miles of Underground Conductor Installation in Non-HFTD in 2020 | mm. Miles of Underground Conductor Installation in HFTD Tier 2 in 2018 | nn. Miles of Underground Conductor Installation in HFTD Tier 2 in 2019 | oo. Miles of Underground Conductor Installation in HFTD Tier 2 in 2020 | pp. Miles of Underground Conductor Installation in HFTD Tier 3 in 2018 | qq. Miles of Underground Conductor Installation in HFTD Tier 3 in 2019 | rr. Miles of Underground Conductor Installation in HFTD Tier 3 in 2020 | ss. Miles of Underground Conductor Installation in HFTD Tier 2 in 2020 | tt. Miles of Light Detection and Ranging (LiDAR) Inspection in Non-HFTD in 2020 | uu. Miles of LiDAR Inspection HFTD Tier 2 in 2020 | vv. Miles of LiDAR Inspection HFTD Tier 3 in 2020 | ww. Number of Detailed Overhead Inspections in Non-HFTD in 2020 | xx. Number of Detailed Overhead Inspections HFTD Tier 2 in 2020 | yy. Number of Detailed Overhead Inspections HFTD Tier 3 in 2020 | zz. Number of Sectionalization Devices Installed in Non-HFTD in 2018 | aaa. Number of Sectionalization Devices Installed in Non-HFTD in 2019 | bbb. Number of Sectionalization Devices Installed in Non-HFTD in 2020 | ccc. Number of Sectionalization Devices Installed HFTD Tier 2 in 2018 | ddd. Number of Sectionalization Devices Installed HFTD Tier 2 in 2019 | eee. Number of Sectionalization Devices Installed HFTD Tier 2 in 2020 | fff. Number of Sectionalization Devices Installed HFTD Tier 3 in 2018 | ggg. Number of Sectionalization Devices Installed HFTD Tier 3 in 2019 | hhh. Number of Sectionalization Devices Installed HFTD Tier 3 in 2020 |
|---|---|---

Table A
Initiative: EVM

Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	-
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	-
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	-
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	-
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	-
Total	Entire service territory	-

Table A
Initiative: Covered Conductor

Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020 (miles)
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	4.42
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	2.40
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	-

61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	-
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	-
Total	Entire service territory	6.82

Table A
Initiative: Pole Replacement

Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020 (poles)
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	37
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	58
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	6
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	7
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	-
Total	Entire service territory	108

Table A
Initiative: Undergrounding

Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020 (miles)

0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	-
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	1.78
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	-
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	-
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	-
Total	Entire service territory	1.78

Table A
Initiative: Grid Sectionalization

Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020 (sectionalizing devices)
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	4
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	6
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	1
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	-

81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	1
Total	Entire service territory	12

Table A
Initiative: Climbing inspections*

Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020 (poles)
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	8,388
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	3,561
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	4,190
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	3,617
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	1,758
Total	Entire service territory	21,514

*Liberty performed detailed (non-climbing) inspections on all of its poles.

Table A
Initiative: Aerial inspections

Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	-

21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	-
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	-
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	-
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	-
Total	Entire service territory	-

Table A
Initiative: LiDAR inspections

Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020 (primary and secondary miles)
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	568.45
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	266.74
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	59.31
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	4.13
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	-
Total	Entire service territory	898.62

Table B
Initiative: EVM

Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020 (miles)
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	-
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	-
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	11.00
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	3.00
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	-
Total	Entire service territory	14.00

Table B
Initiative: Covered Conductor

Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	-
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	-
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	-

61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	-
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	-
Total	Entire service territory	-

Table B
Initiative: Pole Replacement

Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	-
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	-
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	-
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	-
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	-
Total	Entire service territory	-

Table B
Initiative: Undergrounding

Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020

0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	-
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	-
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	-
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	-
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	-
Total	Entire service territory	-

Table B
Initiative: Grid Sectionalization

Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	-
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	-
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	-
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	-

81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	-
Total	Entire service territory	-

Table B
Initiative: Climbing inspections*

Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	166
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	18
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	100
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	-
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	1
Total	Entire service territory	285

*Liberty performed detailed (non-climbing) inspections on all of its poles.

Table B
Initiative: Aerial inspections

Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	-

21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	-
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	-
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	-
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	-
Total	Entire service territory	-

Table B
Initiative: LiDAR inspections

Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020 (miles)
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	6.41
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	8.07
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	0.38
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	-
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	-
Total	Entire service territory	14.86

Q13. Provide an Excel table of all defects in the year 2020 found by the Wildfire Safety Division's Compliance Branch (as rows) that includes the following information in separate columns.

Defect Identified by WSD in 2020	a. Associated Circuit Name	b. Defect Type	c. Description of Defect	d. WMP initiative associated with defect	e. Date that defect was identified	f. Date that defect was corrected	g. Priority level of corresponding corrective tag	h. Location of defect (latitude/longitude)
QP-LU-001 Defect Item #2	WSH201; Pole ID 183519	WSD Defect Code 1109: Ground wire broken or uncovered	Exposed ground wire which is a violation of GO 95 Rule 54.6B	Asset Management and Inspections	10/20/2020	11/12/2020	Priority 3	39.524753 / -120.0044691
QP-LU-001 Defect Item #7	TRK7203; Pole ID 05636698	WSD Defect Code 1109: Ground wire broken or uncovered	Exposed ground wire which is a violation of GO 95 Rule 54.6B	Asset Management and Inspections	10/20/2020	N/A	No Priority Level. WSD stated a defect on a pole that does not belong to Liberty.	39.317012 / -120.1656967
QP-LU-001 Defect Item #11	TRK7202; Pole ID 18597	WSD Defect Code 200: Advanced weather monitoring and weather stations	Unable to locate weather station on utility pole at the GPS coordinates provided	Situational Awareness and Forecasting	10/20/2020	12/15/2020	No priority level. Notified WSD that the weather station was located 5 spans to the north.	39.29200719 / -120.2152
QP-LU-002 Defect Item #5	SRB51; Pole ID 145061	WSD Defect Code 419: Ground wire broken or uncovered	Ground moulding cracking and separating from pole exposing the ground wire	Asset Management and Inspections	10/29/2020	No corrected	Priority 3	39.6434509 / -120.2137311
QP-LU-002 Defect Item #6	SRB51; Pole ID 145060	WSD Defect Code 419: Ground wire broken or uncovered	Ground moulding separating from pole exposing the ground wire.	Asset Management and Inspections	10/29/2020		Priority 3	39.6439332 / -120.2144931