

Exhibit 19.1

Critical Hours Study

Critical Hours Radiation Report

Proposed Station:

Call: WMFN.P
 Freq: 640 kHz
 PEOTONE, IL, US
 Hours: D
 Lat: 41-18-04 N
 Lng: 087-50-07 W
 Power: 4.4 kW
 Theo RMS: 592.57 mV/m @ 1km @ 4.4 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
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1	1.000	0.0	0.0	0.0	-999.0	0	1	63.0	12.0	0.0	0.0
2	1.060	-6.5	175.0	305.0	-999.0	0	1	70.0	12.0	0.0	0.0
3	1.110	108.5	84.0	250.0	-999.0	0	1	70.0	12.0	0.0	0.0
4	1.010	102.0	175.0	305.0	-999.0	1	1	63.0	12.0	0.0	0.0

Interpolation factors for 640 kHz:

K(500) = 0.720
 K(1000) = 0.280
 K(1600) = 0.000

Class A Protected Station(s):

Call: KFI.L Freq: 640 kHz
 LOS ANGELES, CA, US Hours: D
 Lat: 33-52-47 N Lng: 118-00-47 W
 Power: 50.0 kW Theo RMS: 374.98 mV/m @ 1km @ 1kW

Call: KYUK.L Freq: 640 kHz
 BETHEL, AK, US Hours: U
 Lat: 60-46-57 N Lng: 161-53-00 W
 Power: 10.0 kW Theo RMS: 282.00 mV/m @ 1km @ 1kW

Call: CBN.O Freq: 640 kHz
 ST. JOHN'S, NF, CA Hours: D
 Lat: 47-34-08 N Lng: 052-48-45 W
 Power: 10.0 kW Theo RMS: 292.63 mV/m @ 1km @ 1kW

Call: CBN.O Freq: 640 kHz
 ST. JOHN'S, NF, CA Hours: U
 Lat: 47-30-10 N Lng: 052-48-07 W
 Power: 10.0 kW Theo RMS: 300.95 mV/m @ 1km @ 1kW

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Critical Hours Study

Class A Protected Station:

Call: KFI.L
 Freq: 640 kHz
 LOS ANGELES, CA, US
 Hours: D
 Lat: 33-52-47 N
 Lng: 118-00-47 W
 Power: 50.0 kW
 Theo RMS: 374.98 mV/m @ 1km @ 1kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	-999.0	0	1	158.1	23.3	0.0	0.0

Permissible radiation calculated using FCC 73.190 curves.

Class A Azimuth (deg)	Reference Azimuth (deg)	Distance to 0.1 mV (km) / (mi)	Max Vert Angle (deg)	Max Rad Below Ang (mV/m@1km)	Permiss Radiation (mV/m@1km)	Margin (mV/m@1km)
101.50	256.00	2434.9 / 1512.9	0.1	55.45	8607.4	8551.9
96.82	257.00	2428.5 / 1509.0	0.1	51.23	8507.4	8456.2
92.23	258.00	2430.0 / 1509.9	0.1	47.04	8472.2	8425.2
86.66	259.00	2426.4 / 1507.7	0.1	42.93	8395.3	8352.4
79.31	260.00	2395.2 / 1488.3	0.3	38.97	8106.0	8067.0
72.85	261.00	2371.6 / 1473.6	0.4	35.25	7916.0	7880.7
67.06	262.00	2360.2 / 1466.5	0.5	31.86	7818.9	7787.0
61.53	263.00	2353.9 / 1462.6	0.5	28.94	7760.2	7731.3
56.09	264.00	2354.5 / 1463.0	0.5	26.66	7755.1	7728.4
50.53	265.00	2362.6 / 1468.1	0.4	25.15	7809.3	7784.2
44.69	266.00	2377.9 / 1477.6	0.4	24.55	7920.2	7895.7
38.35	267.00	2400.7 / 1491.7	0.3	24.88	8091.7	8066.8
30.54	268.00	2440.5 / 1516.5	0.1	26.06	8378.4	8352.3
17.76	269.00	2522.8 / 1567.6	0.0	27.94	8943.3	8915.3
344.38	270.00	2730.1 / 1696.4	0.0	30.32	10685.6	10655.2
340.52	271.00	2754.0 / 1711.3	0.0	33.05	10933.0	10900.0

Class A Azimuth (deg)	Reference Azimuth (deg)	Distance to 0.1 mV (km) / (mi)	K(500) Value (mV/m@1km)	K(1000) Value (mV/m@1km)	Permiss Radiation (mV/m@1km)
101.50	256.00	2434.9 / 1512.9	10460.56	3842.03	8607.4
96.82	257.00	2428.5 / 1509.0	10337.44	3801.71	8507.4
92.23	258.00	2430.0 / 1509.9	10292.84	3790.67	8472.2
86.66	259.00	2426.4 / 1507.7	10197.56	3761.06	8395.3
79.31	260.00	2395.2 / 1488.3	9844.44	3635.76	8106.0
72.85	261.00	2371.6 / 1473.6	9618.27	3538.69	7916.0
67.06	262.00	2360.2 / 1466.5	9503.99	3485.83	7818.9
61.53	263.00	2353.9 / 1462.6	9435.96	3451.12	7760.2
56.09	264.00	2354.5 / 1463.0	9433.17	3439.95	7755.1
50.53	265.00	2362.6 / 1468.1	9503.30	3453.32	7809.3
44.69	266.00	2377.9 / 1477.6	9643.63	3488.65	7920.2
38.35	267.00	2400.7 / 1491.7	9859.42	3546.07	8091.7
30.54	268.00	2440.5 / 1516.5	10207.19	3675.63	8378.4
17.76	269.00	2522.8 / 1567.6	10871.00	3986.20	8943.3
344.38	270.00	2730.1 / 1696.4	12972.43	4805.03	10685.6
340.52	271.00	2754.0 / 1711.3	13272.81	4916.41	10933.0

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Critical Hours Study

Class A Protected Station:

Call: KYUK.L
 Freq: 640 kHz
 BETHEL, AK, US
 Hours: U
 Lat: 60-46-57 N
 Lng: 161-53-00 W
 Power: 10.0 kW
 Theo RMS: 282.00 mV/m @ 1km @ 1kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	49.7	21.1	0.0	0.0

Permissible radiation calculated using FCC 73.190 curves.

Class A Azimuth (deg)	Reference Azimuth (deg)	Distance to 0.1 mV (km) / (mi)	Max Vert Angle (deg)	Max Rad Below Ang (mV/m@1km)	Permiss Radiation (mV/m@1km)	Margin (mV/m@1km)
186.20	314.00	5472.2 / 3400.3	0.0	116.50	15999.4	15882.9 **
182.24	315.00	5405.9 / 3359.1	0.0	120.43	16068.6	15948.2 **
179.25	316.00	5360.9 / 3331.1	0.0	124.73	16093.4	15968.7 **
176.17	317.00	5326.4 / 3309.7	0.0	129.44	16093.4	15964.0 **
152.13	318.00	5230.6 / 3250.1	0.0	134.57	16093.4	15958.9 **
113.20	319.00	5128.2 / 3186.5	0.0	140.14	16093.4	15953.3 **
87.11	320.00	5095.4 / 3166.1	0.0	146.18	16093.4	15947.3 **
63.42	321.00	5096.1 / 3166.6	0.0	152.71	16093.4	15940.7 **
40.22	322.00	5120.6 / 3181.8	0.0	159.74	16093.4	15933.7 **
14.27	323.00	5186.5 / 3222.7	0.0	167.30	16093.4	15926.1 **

Class A Azimuth (deg)	Reference Azimuth (deg)	Distance to 0.1 mV (km) / (mi)	K(500) Value (mV/m@1km)	K(1000) Value (mV/m@1km)	Permiss Radiation (mV/m@1km)
186.20	314.00	5472.2 / 3400.3	16093.44	15757.41	15999.4 **
182.24	315.00	5405.9 / 3359.1	16093.44	16004.68	16068.6 **
179.25	316.00	5360.9 / 3331.1	16093.44	16093.44	16093.4 **
176.17	317.00	5326.4 / 3309.7	16093.44	16093.44	16093.4 **
152.13	318.00	5230.6 / 3250.1	16093.44	16093.44	16093.4 **
113.20	319.00	5128.2 / 3186.5	16093.44	16093.44	16093.4 **
87.11	320.00	5095.4 / 3166.1	16093.44	16093.44	16093.4 **
63.42	321.00	5096.1 / 3166.6	16093.44	16093.44	16093.4 **
40.22	322.00	5120.6 / 3181.8	16093.44	16093.44	16093.4 **
14.27	323.00	5186.5 / 3222.7	16093.44	16093.44	16093.4 **

** Indicates that the distance and/or azimuth was out of the range of the 73.190 permissible radiation graphs. The calculated permissible radiation is invalid.

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Critical Hours Study

Class A Protected Station:

Call: CBN.O
 Freq: 640 kHz
 ST. JOHN'S, NF, CA
 Hours: D
 Lat: 47-34-08 N
 Lng: 052-48-45 W
 Power: 10.0 kW
 Theo RMS: 292.63 mV/m @ 1km @ 1kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	70.0	0	0	0.0	0.0	0.0	0.0

Permissible radiation calculated using US/CA agreement formula.

Class A Azimuth (deg)	Reference Azimuth (deg)	Distance to 0.1 mV (km) / (mi)	Max Vert Angle (deg)	Max Rad Below Ang (mV/m@1km)	Permiss Radiation (mV/m@1km)	Margin (mV/m@1km)	
354.31	46.00	2901.4 / 1802.8	0.0	1436.78	2321.2	884.5	
352.88	47.00	2871.2 / 1784.1	0.0	1424.38	2294.1	869.7	
351.52	48.00	2845.5 / 1768.1	0.0	1410.92	2270.9	860.0	
350.18	49.00	2823.3 / 1754.3	0.0	1396.42	2251.0	854.5	
347.13	50.00	2784.4 / 1730.1	0.0	1380.93	2215.9	835.0	
344.63	51.00	2757.3 / 1713.3	0.0	1364.46	2191.6	827.1	
343.63	52.00	2749.7 / 1708.6	0.0	1347.06	2184.8	837.7	
342.63	53.00	2744.6 / 1705.4	0.0	1328.77	2180.1	851.3	
341.63	54.00	2741.7 / 1703.6	0.0	1309.60	2177.6	868.0	
340.63	55.00	2741.3 / 1703.3	0.0	1289.62	2177.1	887.5	
339.44	56.00	2741.6 / 1703.5	0.0	1268.84	2177.4	908.6	
337.89	57.00	2742.5 / 1704.1	0.0	1247.32	2178.3	930.9	
336.33	58.00	2746.8 / 1706.8	0.0	1225.09	2182.1	957.0	
334.14	59.00	2751.2 / 1709.5	0.0	1202.20	2186.1	983.9	
328.06	60.00	2744.8 / 1705.5	0.0	1178.68	2180.3	1001.6	
314.78	61.00	2720.3 / 1690.3	0.0	1154.58	2158.2	1003.7	
296.89	62.00	2684.1 / 1667.9	0.0	1129.95	2125.7	995.8	
281.05	63.00	2653.9 / 1649.0	0.0	1104.81	2098.5	993.7	
268.10	64.00	2623.1 / 1629.9	0.0	1079.22	2070.8	991.6	
260.46	65.00	2535.1 / 1575.2	0.0	1053.23	1991.6	938.3	
252.22	66.00	2548.0 / 1583.3	0.0	1026.86	2003.2	976.4	
242.14	67.00	2583.9 / 1605.6	0.0	1000.17	2035.5	1035.4	Clipped at 0.11 mV/m
229.88	68.00	2629.3 / 1633.8	0.0	973.20	2076.4	1103.2	
227.59	69.00	2601.9 / 1616.7	0.0	945.99	2051.7	1105.7	
225.45	70.00	2579.8 / 1603.0	0.0	918.59	2031.8	1113.3	
189.59	71.00	2803.4 / 1741.9	0.0	891.02	2233.0	1342.0	
186.99	72.00	2817.7 / 1750.8	0.0	863.34	2245.9	1382.6	
184.68	73.00	2835.0 / 1761.6	0.0	835.58	2261.5	1425.9	
183.61	74.00	2846.4 / 1768.7	0.0	807.79	2271.8	1464.0	
182.52	75.00	2860.7 / 1777.5	0.0	780.00	2284.6	1504.6	
181.42	76.00	2877.8 / 1788.2	0.0	752.25	2300.0	1547.8	
180.29	77.00	2898.0 / 1800.8	0.0	724.58	2318.2	1593.7	
175.21	78.00	2970.1 / 1845.5	0.0	697.02	2383.1	1686.1	

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 ST. JOHN'S, NF, CA
 Hours: U
 Lat: 47-30-10 N
 Lng: 052-48-07 W
 Power: 10.0 kW
 Theo RMS: 300.95 mV/m @ 1km @ 1kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	70.2	0	0	0.0	0.0	0.0	0.0

Permissible radiation calculated using US/CA agreement formula.

Class A Azimuth (deg)	Reference Azimuth (deg)	Distance to 0.1 mV (km)/ (mi)	Max Vert Angle (deg)	Max Rad Below Ang (mV/m@1km)	Permiss Radiation (mV/m@1km)	Margin (mV/m@1km)
354.76	47.00	2898.3 / 1800.9	0.0	1424.38	2318.5	894.1
353.19	48.00	2867.7 / 1781.9	0.0	1410.92	2290.9	880.0
351.68	49.00	2841.6 / 1765.7	0.0	1396.42	2267.5	871.0
350.22	50.00	2819.5 / 1752.0	0.0	1380.93	2247.6	866.7
347.39	51.00	2785.9 / 1731.1	0.0	1364.46	2217.4	852.9
344.77	52.00	2759.8 / 1714.9	0.0	1347.06	2193.9	846.8
343.71	53.00	2753.2 / 1710.7	0.0	1328.77	2187.8	859.1
342.66	54.00	2748.9 / 1708.1	0.0	1309.60	2184.0	874.4
341.62	55.00	2747.1 / 1707.0	0.0	1289.62	2182.4	892.8
340.56	56.00	2747.7 / 1707.4	0.0	1268.84	2183.0	914.1
339.10	57.00	2747.9 / 1707.5	0.0	1247.32	2183.1	935.8
337.14	58.00	2748.8 / 1708.0	0.0	1225.09	2183.9	958.8
335.15	59.00	2753.5 / 1711.0	0.0	1202.20	2188.2	986.0
330.71	60.00	2752.3 / 1710.2	0.0	1178.68	2187.1	1008.4
316.90	61.00	2723.5 / 1692.3	0.0	1154.58	2161.1	1006.6
299.03	62.00	2685.9 / 1668.9	0.0	1129.95	2127.3	997.4
283.46	63.00	2659.1 / 1652.3	0.0	1104.81	2103.2	998.3
270.03	64.00	2633.7 / 1636.5	0.0	1079.22	2080.3	1001.1
259.05	65.00	2617.7 / 1626.5	0.0	1053.23	2065.9	1012.7
251.70	66.00	2580.1 / 1603.2	0.0	1026.86	2032.1	1005.2
236.96	67.00	2643.0 / 1642.3	0.0	1000.17	2088.7	1088.5
233.67	68.00	2608.4 / 1620.8	0.0	973.20	2057.6	1084.4
232.11	69.00	2570.3 / 1597.1	0.0	945.99	2023.2	1077.3
230.64	70.00	2537.7 / 1576.8	0.0	918.59	1993.9	1075.3
192.99	71.00	2785.5 / 1730.8	0.0	891.02	2216.9	1325.9
190.69	72.00	2794.9 / 1736.7	0.0	863.34	2225.4	1362.0
189.36	73.00	2801.4 / 1740.7	0.0	835.58	2231.2	1395.7
188.54	74.00	2806.7 / 1744.0	0.0	807.79	2236.1	1428.3
187.72	75.00	2814.2 / 1748.7	0.0	780.00	2242.8	1462.8
186.90	76.00	2823.8 / 1754.6	0.0	752.25	2251.4	1499.2
186.06	77.00	2835.7 / 1762.0	0.0	724.58	2262.2	1537.6
185.19	78.00	2850.2 / 1771.0	0.0	697.02	2275.2	1578.1
181.57	79.00	2901.8 / 1803.1	0.0	669.61	2321.6	1652.0