

Exhibit 15-1
Limits to Proposed Nighttime Operation
(Limits Above 5,000 mV/m Removed)

Call: WRCA

1992 Allocation Rules

Transmitter site coordinates: N 42 17 20 W 71 11 21

Frequency: 1330 kHz

Point		Distance (km)	Bearing (degs)	Theta	Theta	RSS	Reqd.	Skywv.	Allowed
				Min. (degs)	Max. (degs)	Limit (mV/m)	Prot. (mV/m)	Mlt. (uV/m)	Radiation (mV/m @ 1 km)
WATR	*	173.8	241.9	39.2	53.6	8.02	20.05	311.24	322.1
WARL	*	38.4	197.3	75.0	80.8	7.09	17.73	451.65	196.3
WLS	*	1096.0	276.9	5.0	9.8	9.55	23.87	27.62	4322.2
WCOG	*	1014.1	230.6	5.8	11.0	12.06	29.30	37.37	3919.6
WDER	*	64.7	352.9	65.6	74.7	12.87	32.17	429.50	374.6
WOBL	*	920.2	266.6	6.8	12.5	11.98	29.94	39.57	3783.0
WTKZ	*	404.1	243.6	18.7	29.7	11.18	27.94	140.67	993.1
WGET	*	574.2	243.7	12.8	21.3	19.84	49.60	87.65	2829.5
WJAS	*	756.5	257.0	9.1	15.8	4.34	10.85	56.34	962.9
WJAS	*	753.8	257.4	9.1	15.9	4.30	10.76	56.61	950.6
WLSW	*	1261.2	226.3	3.7	7.9	10.58	26.45	26.49	4991.8
ZYI-533		5372.1	148.9	.0	.0	.72	.36	.40	4498.8
CKLD		420.2	357.9	23.6	23.6	27.20	23.92	138.99	860.5
CMCP		2397.0	208.8	.0	.0	4.25	2.06	2.56	4028.1
CMKM		2406.3	191.5	.0	.0	3.30	1.65	2.53	3264.6
4VJD		2639.6	182.7	.0	.0	4.56	1.14	1.96	2914.5
KWKW		4168.8	273.3	.0	.0	4.54	1.14	1.87	3043.2
WMLT		1491.2	227.3	2.2	5.7	12.83	3.21	20.04	800.2
KWLO		1726.7	277.8	.9	4.0	6.62	1.63	11.02	740.7
WHI		1468.3	256.8	2.3	5.9	9.15	2.29	18.00	635.3
KFH		2267.3	265.8	.0	.9	4.09	1.01	7.27	694.2
KVOL		2290.5	241.0	.0	.8	16.13	4.03	9.07	2222.4
WRCA		9.4	320.5	86.2	87.7	9.98	2.49	461.43	27.0
WRCA		.1	20.0	90.0	90.0	9.71	2.55	462.33	27.6
WJSS		512.9	235.5	14.5	23.8	10.26	2.57	103.63	123.8
WTRX		1021.2	278.5	5.7	10.9	8.00	1.96	31.28	313.1
WMNN		1801.3	286.4	.5	3.5	6.01	1.50	9.04	831.1
WNIX		1994.0	246.9	.0	2.3	18.21	4.55	11.09	2053.6
WWRV		281.4	238.0	26.5	39.7	4.95	1.62	211.61	38.2
WSPQ		615.8	274.7	11.8	19.8	13.33	3.33	75.14	221.7
WASN		794.1	262.6	8.5	15.0	14.22	3.56	51.37	346.1
WFNN		729.2	270.4	9.5	16.5	11.02	2.71	57.91	234.4
WENA		2727.5	170.1	.0	.0	12.07	3.02	8.14	1853.1
WPJS		1163.4	218.8	4.4	9.0	46.51	11.63	30.70	1893.5
WYRD		1277.3	233.4	3.5	7.7	4.96	1.21	25.43	237.5
KINE		2903.0	244.4	.0	.0	15.90	3.98	5.87	3383.7
KLBO		3041.1	257.6	.0	.0	14.13	3.53	4.65	3797.7
WBTM		947.4	230.9	6.5	12.0	11.25	2.81	41.65	337.6
WHBL		1352.3	282.4	3.0	7.0	5.83	1.46	17.62	413.8

* - indicates an adjacent channel station.

WRCA Licensed

Point: CKLD Frequency: 1330 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mlt. (uV/m)	IF Level (mV/m)	RSS (mV/m)
WRCA-L	412.7	358.7	24.0	850.6	140.604	23.9202	23.9202
WFNN	825.2	53.8	11.2	773.2	83.681	12.9401	27.1960
WSPQ	702.9	53.2	13.7	539.2	98.897	10.6658	
WVRV	611.3	19.5	16.0	253.2	110.021	5.5721	
WASN	931.9	49.5	9.5	356.1	71.416	5.0861	

Point: WJSS Frequency: 1330 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mlt. (uV/m)	IF Level (mV/m)	RSS (mV/m)
WVRV	232.1	230.5	31.3	101.0	258.499	5.2196	5.2196
WFNN	425.6	128.1	17.7	188.8	134.287	5.0705	7.2770
WASN	410.1	111.0	18.4	160.8	142.346	4.5769	8.5966
WSPQ	390.7	145.7	19.3	137.5	148.640	4.0882	9.5192
WYRD	765.0	45.0	8.9	302.5	63.264	3.8279	10.2600
WRCA-L	512.1	234.4	14.5	90.3	103.740	1.8729	
WTRX	734.2	118.5	9.4	147.0	59.781	1.7576	
KWLO	1390.1	98.0	2.8	429.1	19.353	1.6610	

WRCA Proposed

Point: CKLD Frequency: 1330 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mlt. (uV/m)	IF Level (mV/m)	RSS (mV/m)
WRCA-A	420.2	357.9	23.6	841.2	138.994	23.3848	23.3848
WFNN	825.2	53.8	11.2	773.2	83.681	12.9401	26.7263
WSPQ	702.9	53.2	13.7	539.2	98.897	10.6658	
WVRV	611.3	19.5	16.0	253.2	110.021	5.5721	
WASN	931.9	49.5	9.5	356.1	71.416	5.0861	

Point: WWRV Frequency: 1330 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mW/m)	SW Mlt. (uV/m)	IF Level (mW/m)	RSS (mW/m)
WWRV	997.1	45.1	6.0	314.6	40.450	2.5452	2.5452
WRCA-L	280.3	236.0	39.8	42.3	212.274	1.7976	3.1160
WJSS	232.1	49.2	45.3	34.7	258.499	1.7924	3.5947
WSPQ	424.9	113.0	17.8	54.3	131.204	1.4249	3.8669
WFNN	514.2	101.5	14.5	65.9	101.905	1.3426	4.0933
WJNX	1604.4	19.6	1.5	326.9	19.725	1.2898	4.2917
WHAT *	142.1	44.3	45.0	180.0	354.163	1.2753	4.4772
WASN	550.8	88.6	13.4	66.1	93.749	1.2390	4.6454
WVCK *	155.3	103.5	42.5	181.8	336.433	1.2230	4.8037
WBRK *	184.0	201.8	37.6	200.3	301.294	1.2069	4.9530
WVBC *	99.7	245.2	55.1	149.1	401.119	1.1960	
CKLD	611.3	201.3	11.9	80.4	72.544	1.1670	
WVPA *	252.6	97.1	29.1	237.1	237.157	1.1246	

* - indicates an adjacent channel station.

Point: WSPQ Frequency: 1330 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mW/m)	SW Mlt. (uV/m)	IF Level (mW/m)	RSS (mW/m)
WASN	231.4	42.3	31.4	177.6	253.926	9.0206	9.0206
WFNN	124.0	62.6	49.0	84.0	368.620	6.1940	10.9424
WWRV	909.3	19.7	12.7	495.6	46.243	4.5838	11.8637
WJSS	390.7	327.4	19.3	147.8	148.640	4.3937	12.6512
WWRV	424.9	296.1	17.8	159.9	131.204	4.1962	13.3289
CKLD	702.9	238.3	10.0	214.1	55.407	2.3721	
WJAS *	252.6	23.4	29.1	494.4	236.198	2.3353	
WRCA-L	609.3	274.0	20.0	135.7	76.300	2.0712	

* - indicates an adjacent channel station.

Point: WWRV Frequency: 1330 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mW/m)	SW Mlt. (uV/m)	IF Level (mW/m)	RSS (mW/m)
WWRV	997.1	45.1	6.0	314.6	40.450	2.5452	2.5452
WJSS	232.1	49.2	45.3	34.7	258.499	1.7924	3.1130
WRCA-A	281.4	238.0	26.5	37.4	211.605	1.5848	3.4932
WSPQ	424.9	113.0	17.8	54.3	131.204	1.4249	3.7726
WFNN	514.2	101.5	14.5	65.9	101.905	1.3426	4.0044
WJNX	1604.4	19.6	1.5	326.9	19.725	1.2898	4.2070
WHAT *	142.1	44.3	45.0	180.0	354.163	1.2753	4.3960
WASN	550.8	88.6	13.4	66.1	93.749	1.2390	4.5673
WVCK *	155.3	103.5	42.5	181.8	336.433	1.2230	4.7282
WBRK *	184.0	201.8	37.6	200.3	301.294	1.2069	4.8798
WVBC *	99.7	245.2	55.1	149.1	401.119	1.1960	
CKLD	611.3	201.3	11.9	80.4	72.544	1.1670	
WVPA *	252.6	97.1	29.1	237.1	237.157	1.1246	

* - indicates an adjacent channel station.

Point: WSPQ Frequency: 1330 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mW/m)	SW Mlt. (uV/m)	IF Level (mW/m)	RSS (mW/m)
WASN	231.4	42.3	31.4	177.6	253.926	9.0206	9.0206
WFNN	124.0	62.6	49.0	84.0	368.620	6.1940	10.9424
WWRV	909.3	19.7	12.7	495.6	46.243	4.5838	11.8637
WJSS	390.7	327.4	19.3	147.8	148.640	4.3937	12.6512
WWRV	424.9	296.1	17.8	159.9	131.204	4.1962	13.3289
WRCA-A	615.8	274.7	11.8	166.3	75.136	2.4986	
CKLD	702.9	238.3	10.0	214.1	55.407	2.3721	
WJAS *	252.6	23.4	29.1	494.4	236.198	2.3353	

* - indicates an adjacent channel station.

Point: WFNN

Frequency: 1330 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mlt. (uV/m)	IF Level (mV/m)	RSS (mV/m)
WSPQ	124.0	243.5	49.0	83.1	368.620	6.1234	6.1234
WYRD	820.4	14.0	14.4	523.5	55.160	5.7751	8.4171
WSSS	425.6	310.6	17.7	137.4	134.287	3.6898	9.1903
WASN	122.3	22.2	49.4	45.1	374.416	3.3756	9.7907
WJAS *	175.1	356.8	39.0	515.0	314.047	3.2346	10.3111
WWRV	514.2	285.5	23.8	137.4	101.905	2.8001	10.6846
WTRX	316.3	108.9	23.8	73.5	184.790	2.7148	11.0241
WVCA-A	729.2	270.4	9.5	169.9	57.909	1.9677	
CKLD	825.2	239.8	8.0	218.2	42.516	1.8552	
WBL	656.5	104.4	10.9	131.0	67.743	1.7754	

* - indicates an adjacent channel station.

Exhibit 15-3
RSS Calculations for Proposed Operation

Point: WRCA Frequency: 1330 kHz

Station Call	Distance (km)	Bearing (degs.)	Theta (degs.)	Radiation (mV/m)	SW Mult. (uV/m)	IF Level (mV/m)	RSS (mV/m)
WWRV	281.4	56.1	26.5	140.6	211.605	5.9498	5.9498
CKLD	420.2	177.8	18.0	242.6	122.379	5.9383	8.4061 †
WSPQ	615.8	89.6	11.8	275.2	75.136	4.1361	9.3686
WRCA	9.4	140.5	86.2	27.1	461.432	2.5030	9.6972
WNBH *	77.4	343.3	61.6	214.9	420.864	1.8086	
WYRD	1277.3	46.4	3.5	330.7	25.426	1.6816	
WYBC *	183.3	52.2	37.7	221.4	301.333	1.3343	

† - indicates nighttime interference-free threshold

* - indicates an adjacent channel station.