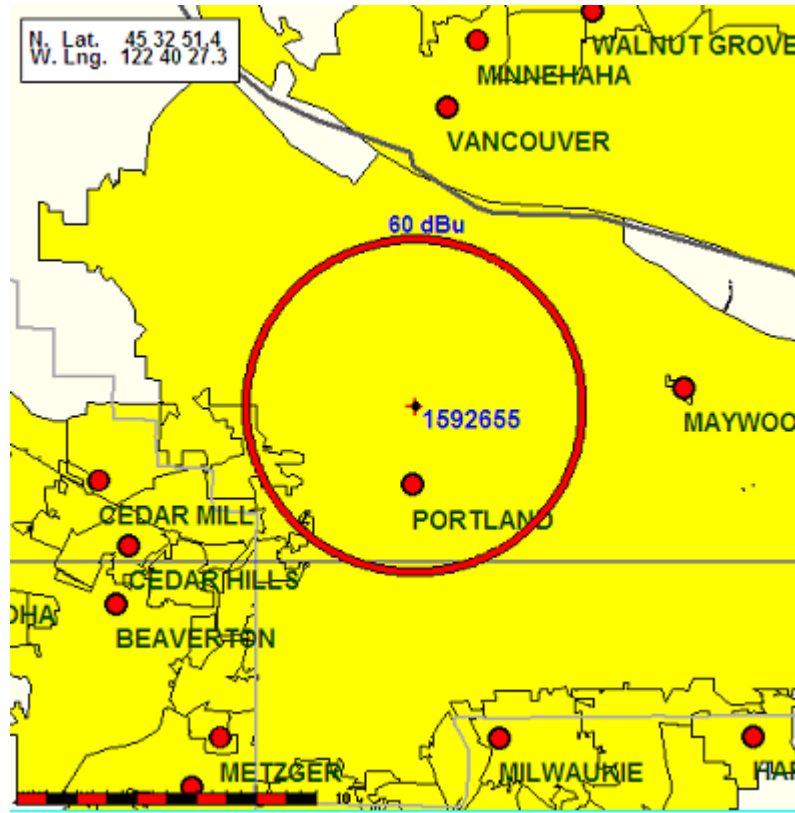


PROPOSED MINOR AMENDMENT TO PENDING LPFM FACILITY PORTLAND, OREGON FOR CASCADE COMMUNITY RADIO

File No. BNPL-20131114BUM - Fac. ID No. 196380

NAD 83	45-32-52.0 N 122-40-23.0 W
NAD 27	45-32-51.4 N 122-40-27.3 W
GROUND	55.2
AGL	20.0
AMSL	75.2 m
HAAT	-8.7
WATTS	100
CHANNEL	268

PROPOSED FCC 60 DBU



PROPOSED SPACING

REFERENCE		Cascade Community Radio	DISPLAY DATES			
45 32 51.4 N.	CLASS = L1 Int = L1		DATA	12-22-13		
122 40 27.3 W.	Current Spacings to 3rd Adj.		SEARCH	01-13-14		
----- Channel 268 - 101.5 MHz -----						
Call	Channel	Location	Azi	Dist	FCC	Margin

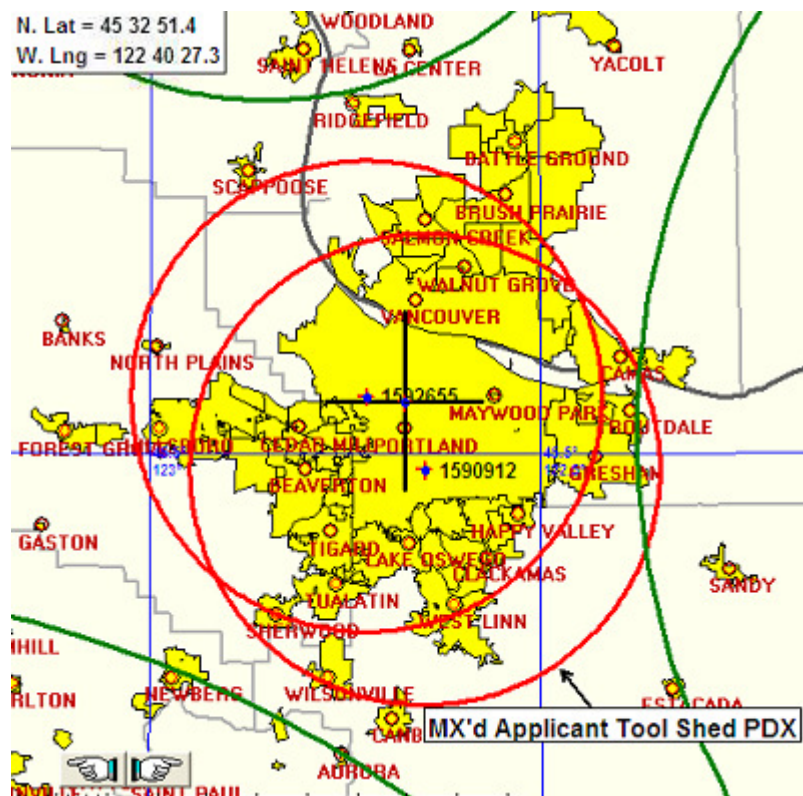
*KINK	LIC-N	270C	Portland	OR	232.7	5.76	92.5	-86.7
*KXL-FM	LIC	266C	Portland	OR	232.6	5.77	92.5	-86.7
1592655	APP	268L1	Portland	OR	277.6	3.84	23.5	-19.7
**1590912	APP	268L1	Portland	OR	163.5	7.08	23.5	-16.4
KDOA	CP -Z	268C3	The Dalles	OR	91.7	100.72	77.5	23.2
K268BN	LIC-D	268D	Eufaula/longview	WA	348.6	69.92	38.5	31.4
KFLY	LIC	268C0	Corvallis	OR	206.3	155.41	121.5	33.9
AL0548	USE	268C3	The Dalles	OR	90.7	121.21	77.5	43.7

Reference station has protected zone issue:
All separation margins include rounding

NOTES:

* SEE SECOND ADJACENT WAIVER REQUEST BELOW

** MX'D APPLICATION



SECOND ADJACENT WAIVER REQUEST

Using U/D methodology, the proposed relocation will provide zero-population interference overlap areas with both second-adjacent channels:

Call	COL	Chan
KINK	PORTLAND OR	270
KXL	PORTLAND OR	268

KINK: At the proposed location signal strength of KINK is 110 dBu (see Map, next page). Interference will occur when the interfering signal exceeds the desired signal by 40 dbu. So the area of predicted interference would then be bounded by the 150 dBu contour. The distance to this contour, using free space method, is:

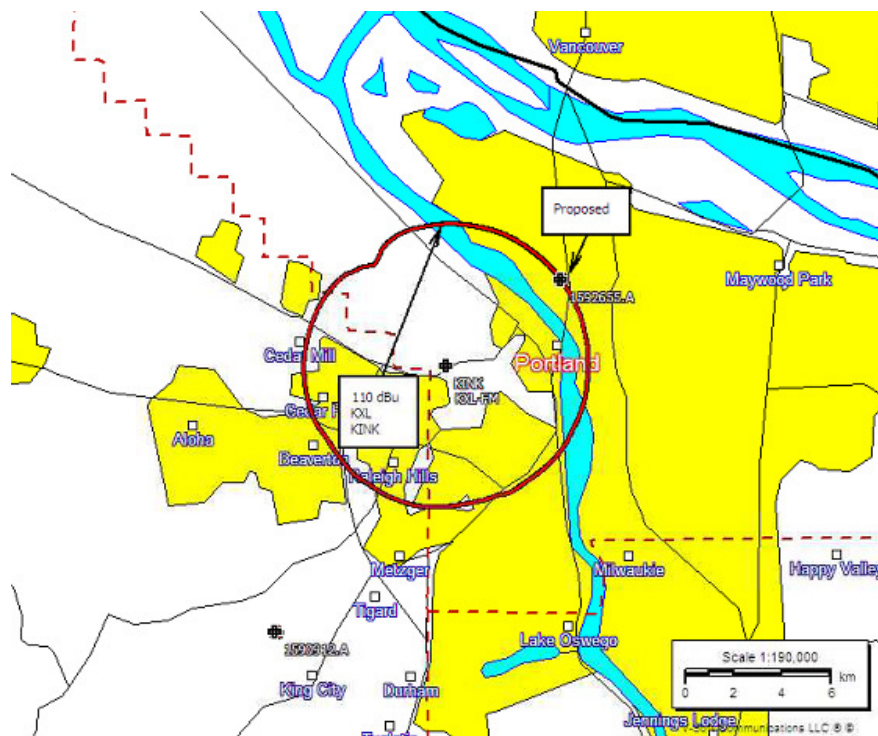
$D = (7.01 * P^{1/2}) / E$, where P is power (watts), E is field strength (v/m), and D is distance to contour (meters):

D = 2.2 meters.

KXL: At the proposed location signal strength of KRTL is 110 dBu (see Map, next page). Interference will occur when the interfering signal exceeds the desired signal by 40 dbu. So the area of predicted interference would then be bounded by the 150 dBu contour. The distance to this contour, using free space method, is:

D = 2.2 meters

The antenna is proposed to be 20 meters above ground. The antenna's interference radius is 2.2 meters. That means the interference area resides 17.8 meters above ground, far from any populated area.



KXL/KINK Field Strength at proposed transmitter site.

NON-IONIZING ELECTROMAGNETIC RADIATION (NEIR) ANALYSIS

The Effective Radiated Power for proposed will be 100 watts, mounted on a tower at 20 m AGL. The OET program *FM Model* for Windows, Version 2.10 Beta was used to determine the maximum predicted RF exposure. The settings used were:

Antenna: Phelps-Dodge "Ring Stub"
Vertical ERP (W): 100
Horizontal ERP (W): 100
Antenna Height (m): 20
Number of Elements: 1

Phelps-Dodge "Ring Stub" antenna was selected as a "worst case" emitter. Using these settings, the maximum predicted RF exposure for a human standing on the ground would be less than 12.4 $\mu\text{W}/\text{cm}^2$ at 4.8 m. This represents less than 7% of the FCC Maximum Permissible Exposure (MPE) of 200 $\mu\text{W}/\text{cm}^2$ for uncontrolled environments.

Antenna is mounted on commercial pole. Facility is on private property. If work on tower is required facility will be temporarily powered down.