

Exhibit 12
BeaconNet
Franklin, WV

This application is being re-submitted at a lower output power. Franklin is an isolated city in the mountains of West Virginia, it lies between two mountain ridges running northeast-southwest. Except for an approximate 25 degree arc, the antenna site for the proposed translator is below average terrain, or only slightly above. However, on the approximate 30 degree (true) radial, the antenna height above average terrain is almost 100 meters. The originally proposed output power, then, exceed the limits on ERP in that direction. This resubmitted proposal lowers the ERP to 8 watts from 34 watts.

A directional antenna, a Scala FMV, was originally proposed and is still proposed in this application. The FMV produces a mild cardioid pattern, the antenna will be aimed with the main lobe at 90 degrees, over the city of Franklin.

The site lies within the Green Bank "Quiet Zone." Approval at the higher proposed power has previously been granted by the National Radio Astronomy Observatory at Green Bank, WV.. Since the proposal involves no other change other than lower power, it will not be resubmitted to NRAO.

Table 1 demonstrates that the distances to co-channel and adjacent channel stations. Table II lists the projected field strength contours for several contours. The 60 dbu calculations are based on the 50/50 propagation charts, the remainder of the contours are based on the 50/10 chart.

Also attached to this exhibit as separate PDF files are three maps, the first shows the 60 dbu and 34 dbu contour of the proposed translator, the second, protection to co-channel station, the second, protection to first adjacent channel stations.

Table 1

Station	Ch.	Freq./Class	City/State	Distance	Bearing
WKOV-FM	244	96.7 MHZ/B-1	WELLSTON, OH	55.9 km	232°
WCMJ	244	96.7 MHZ/A	CAMBRIDGE, OH	86.5 km	26°
WVVV	245	96.9 MHZ/A	WILLIAMSTOWN, WV	50.5 km	90°
WBNS-FM	246	97.1 MHZ/B	COLUMBUS, OH	107 km	311°
WBVB	246	97.1 MHZ/A	COAL GROVE, OH	108.7 km	201°
NEW	246	97.1 MHZ/FX	MIDDLEPORT, OH	31.4 km	173°
WKWK-FM	247	97.3 MHZ/B	WHEELING, WV	145.56 km	55°
WVNU	248	97.5 MHZ/A	GREENFIELD, OH	109.37 km	274°
WQBE-FM	248	97.5 MHZ/B	CHARLESTON, WV	108.2 km	163°
WILE-FM	249	97.7 MHZ/A	BYESVILLE, OH	86.5 km	26°
WCJO	249	97.7 MHZ/A	JACKSON, OH	55.9 km	232°
NEW	249	97.7 MHZ/LI	PARKERSBURG, WV	48.4 km	99°
NEW	249	97.7 MHZ/LI	VIENNA, WV	50.5 km	90°
NEW	249	97.7 MHZ/LI	WILLIAMSTOWN, WV	57.1 km	84°
WNCI	250	97.9 MHZ/B	COLUMBUS, OH	105.3 km	312°
VACANT	250	97.9 MHZ/A	KENOVA, WV	114.9 km	202°

The bearing is from the proposed translator site to the pertinent station

The IF beat frequencies are outside the broadcast band at 86.6 mhz and 108.1; the nearest broadcast station to this IF beat frequency is WSEO (FM) Nelsonville, on 107.7, 17 KM to the northwest; Channel 6 in Columbus (WSYX-TV) is viewed on cable in this area.

Table II

Predicted Signal Contours

Proposed NEW Franklin, WV

38-38-58 N; 79-20-29 W

ERP = .008 kw

Predicted Contours based on 30 sec NGDC database

50/50 (60 DBU); 50/10 (All Other Contours)

Radial	HAAT	Field	60 Dbu	54 Dbu	48 Dbu	40 Dbu	34 Dbu
0 Degs.	4.1 m	.792	3 km	4.2 km	6.0	9.6	13.4
30 Degs.	99.6 m	.929	5.5 km	7.7 km	10.9	18	25.9
60 Degs.	-57.1 m	.987	3 km	4.2 km	6.0	9.6	13.4
90 Degs.	-1.1 m	1.0	3 km	4.2 km	6.0	9.6	13.4
120 Degs.	-19.3 m	.,987	3 km	4.2 km	6.0	9.6	13.4
150 Degs.	-9.1 m	.929	3 km	4.2 km	6.0	9.6	13.4
180 Degs.	-71.8 m	.792	3 km	4.2 km	6.0	9.6	13.4
210 Degs.	-100.2 m	.630	3 km	4.2 km	6.0	9.6	13.4
240 Degs.	-229.6 m	.549	3 km	4.2 km	6.0	9.6	13.4
270 Degs.	-217.6 m	.534	3 km	4.2 km	6.0	9.6	13.4
300 Degs.	-198.0 m	.549	3 km	4.2 km	6.0	9.6	13.4
330 Degs.	-103.9 m	.630	3 km	4.2 km	6.0	9.6	13.4

Average HAAT= -75.4 meters, Antenna COR = 676 M. AMSL: