

[Exhibit 12]

Non-Interference Compliance

Regarding FCC File Number: BNPFT-20030317LCL

Channel: 286

Description of Exhibit 12 Contents

This exhibit demonstrates that the proposed facility complies with contour overlap and interference protection provisions in all the applicable rule sections and that this application for a construction permit is in full compliance with 47 CFR 74.1204.

Page 2 of this exhibit is an explanation of the tabulated data, which is included as evidence on page 4 of this exhibit.

Page 3 of this exhibit is an explanation of the method used to demonstrate compliance with contour overlap and interference protection provisions based on 47 CFR 74.1204(d), which states:

"an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable."

In addition, page 3 includes a tabulation of the second and third adjacent stations which this application is required to protect and the field strengths of those stations in the vicinity of the proposed translator. The field strengths given were based on contours predicted using FCC contour algorithms and 3 arc second terrain data.

Let it be noted that should any actual real world interference occur, the applicant certifies that it will promptly suspend operation of this translator in accordance with 47 CFR 74.1203.

Page 4 of this exhibit is the tabulated data from the interference analysis, which shows all stations that this application had to consider for contour protection. These tabulated values were generated using high resolution 3 arc second terrain data for the best possible accuracy.

Page 5 of this exhibit is a portion of a USGS 1:24,000 scale 7.5 min quadrangle at full scale with the calculated area of interference overlayed. The sheet includes the quadrangle name and measurement scale at the bottom-left corner (note: "Mt" refers to meters). The area of interference was calculated using a free-space calculation (see FCC 98-117, Appendix A, pg. 41 for reference to the equation used).

Explanation of Frequency Finder Results

The interference analysis for this application was performed using the "Frequency Finder" module in RadioSoft's Comstudy, version 2.2.

Frequency Finder analyzes data taken directly from the FCC's FM database and looks for prohibited overlap with contours of adjacent stations and prohibited proximity to stations 53 or 54 channels from the proposed station (IF) using 3 arc second terrain data and the FCC's contour algorithms. The results tabulated are the stations returned from that analysis. (Note: Because Comstudy was looking at the FCC's FM database, it took into account the proposed translator when doing the analysis and returned it in the tabulated results. For the sake of simplicity, that record has been deleted from all tabulated results.)

The first several columns of the table are self-explanatory. They give various data on the stations in question. The column labeled "Clr" gives the proposed translator's "clearance" with respect to the tabulated station, either in dB or km. The values listed with no units are given in km and are for stations located on an IF to the proposed site's channel.

A negative value in the "Clr" column does NOT necessarily represent prohibited contour overlap, as explained below.

A negative value listed in the "Clr" column would indicate either overlap of interference and protected contours or prohibited proximity to an IF station except in the following situations:

- Since the proposed station's Effective Radiated Power (ERP) is 27 watts, a negative value in km (no units listed in the table) does not represent a violation of the CFR, according to 47 CFR 1204(g), which states that "FM translator stations and booster stations operating with less than 100 watts ERP will be treated as class D stations and will not be subject to intermediate frequency separation requirements."

- A second or third adjacent LP100 station cannot represent a violation of the CFR, as 47 CFR 74.1204(a)(4) requires protection of only co-channel and first adjacent LP100 stations.

- 47 CFR 74.1204(a) requires only the protection of "AUTHORIZED commercial or noncommercial educational FM broadcast stations, FM translators, ..." Any entry with a status listed as "RSV," "USE" or "APP" does not represent an authorized station and therefore is not protected under 47 CFR 74.1204. The one exception is the case of LP100 applications. The note to 47 CFR 74.1204(a)(4) states that "LPFM applications and permits that have not yet been licensed must be considered as operating with the maximum permitted facilities." Therefore, any first adjacent or co-channel LP100 station, no matter the status, is protected.

- Entries highlighted in red are those stations where there is overlap of predicted contours and lack of population has been demonstrated within the area of interference.

Compliance with 47 CFR 74.1204(d)

The proposed translator's Maximum Effective Radiated Power (ERP) is 0.027kW at 54 meters above ground level. According to 47 CFR, 74.1204(a), the desired to undesired ratio between 2nd/3rd adjacent stations is 40dB, making the proposed translator's interfering contour 118.0dBu F(50,10).

Using a free-space calculation (equation referenced in FCC 98-117, Appendix A, pg. 41), this proposed translator's F(50,10) interference contour was calculated and the maximum horizontal plane was plotted on the pertinent portion of a USGS quadrangle (page 5 of this exhibit). However, the proposed translator's area of interference extends a maximum of 45.9 meters from the transmit antenna. Since the translator's center of radiation is 54 meters above ground level, the area of interference will be at least 8.1 meters above tower ground level (TGL) at the lowest point. The applicant has taken into account USGS quadrangles and relevant aerial photography in stating that no structures, except possibly tower support structures, puncture the proposed area of interference. Hence, in accordance with 47 CFR 74.1204(d) and the clarification provided by the FCC in the decision Re: Living Way Ministries (FCC 02-244), there is a lack of population within the proposed area of interference and therefore this application is in full compliance with 47 CFR 74.1204.

CORAGL: 54m

Maximum ERP: 0.027kW

F(50,10) Interfering Contour: 118.0dBu

F(50,10) Max Distance: 45.9m

Antenna Manufacturer: SWR

Antenna Model: 2FM1-0.5

F(50,10) Clearance above TGL: 8.1m

The F(50,50) signal strength of all relevant second and third adjacent stations have been examined, and are tabulated below. Column three shows the station's signal level at the proposed translator's tower site, and column four gives the minimum value within the entire proposed translator's standard F(50,10) contour (100 dBu for most classes, 94 dBu for class B's, 97 dBu for class B1's). For signal levels too great to determine, 999 was entered. The minimum F(50,50) contour within the proposed translator's standard F(50,10) contour was used to calculate the proposed translator's interference contour, thereby assuring a minimum undesired-to-desired ratio of 40dB for all relevant adjacent stations, as required in 47 CFR, 74.1204(a).

FCC File Number	Call Sign	F(50,50) Contour at Tower	Min. F(50,50) Contour
BLH20011012AAX	WCOO	78.5dBu	78dBu
BLH19870205KB	WRFQ	79dBu	78.4dBu
Minimum F(50,50) Protected Contour of Adjacent Station Within Proposed Translator's standard F(50,10) Contour:			78dBu

Frequency Finder

Callsign	State	City	Channel	ERP_w	Licensee	ARN	Class	Status	Distance_km	Clr	Facility_id
WRFQ	SC	MOUNT PLEASANT	283	100000	CITICASTERS LICENSES, L.P.	BPH20030210AAE	C1	APP	17.02 -28.13 dB		38901
WRFQ	SC	MOUNT PLEASANT	283	28000	CITICASTERS LICENSES, L.P.	BLH19870205KB	C2	LIC	16.58 -19.68 dB		38901
WCOO	SC	KIAWAH ISLAND	288	50000	L.M. COMMUNICATIONS II OF SOUTH CAROLINA, INC.	BLH20011012AAX	C2	LIC	19.67 -19.10 dB		50729
NEW	SC	MOUNT PLEASANT	285	80	EDGEWATER BROADCASTING INC.	BNPFT20030317GCI	D	APP	18.74 2.55 dB		153420
WSSP	SC	GOOSE CREEK	232	25000	CONCORD MEDIA GROUP, INC.	BLH20020118AAA	C3	LIC	17.04	5	31939
WSSP	SC	GOOSE CREEK	232	0	CONCORD MEDIA GROUP, INC.		C3	USE	22.81	10.8	31939
WRFQ	SC	MOUNT PLEASANT	283	0	CITICASTERS LICENSES, L.P.		C2	USE	16.58	16.99 dB	38901
WGFG	SC	BRANCHVILLE	286	6000	MILLER COMMUNICATIONS, INC.	BLH19931222KE	A	LIC	90.49	17.09 dB	6485
WRFQ	SC	MOUNT PLEASANT	283	0	CITICASTERS LICENSES, L.P.		C1	RSV	17.02	18.03 dB	38901
WWVV	SC	RIDGELAND	285	16000	MONTEREY LICENSES, LLC	BPH19920424ID	C3	CP	96.23	21.17 dB	40705
WCOO	SC	KIAWAH ISLAND	288	0	L.M. COMMUNICATIONS II OF SOUTH CAROLINA, INC.	RM8474	C2	USE	21.29	21.69 dB	50729
WGFG	SC	BRANCHVILLE	286	0	MILLER COMMUNICATIONS, INC.		A	USE	87.63	24.31 dB	6485
WPDT	SC	JOHNSONVILLE	286	4400	GLORY COMMUNICATIONS, INC.	BLH19950620KA	A	LIC	115.74	24.57 dB	66643
WPDT	SC	JOHNSONVILLE	286	2950	GLORY COMMUNICATIONS, INC.	BPH20021121AAP	A	APP	122.93	26.27 dB	66643
WPDT	SC	JOHNSONVILLE	286	2950	GLORY COMMUNICATIONS, INC.	BPH20021121AAP	A	APP	122.93	26.27 dB	66643
WNOK	SC	COLUMBIA	284	96000	CAPSTAR TX LIMITED PARTNERSHIP	BLH19970813KC	C	LIC	167.43	30.75 dB	19472
WWVV	SC	RIDGELAND	285	3000	MONTEREY LICENSES, LLC	BLH19870707KB	A	LIC	96.23	30.54 dB	40705
	SC	JOHNSONVILLE	286	0		RM10001	A	APP	115.74	30.65 dB	0
	SC	OLANTA	286	0		RM10001	A	APP	121.22	31.61 dB	0
WPDT	SC	JOHNSONVILLE	286	0	GLORY COMMUNICATIONS, INC.		A	USE	120.71	31.50 dB	66643
WZNY	GA	AUGUSTA	289	100000	CAPSTAR TX LIMITED PARTNERSHIP	BLH19981209KA	C	LIC	181.89	31.27 dB	59250
WNOK	SC	COLUMBIA	284	90000	CAPSTAR TX LIMITED PARTNERSHIP	BPH20030124AFW	C1	APP	167.43	31.03 dB	19472
WRHQ	GA	RICHMOND HILL	287	11000	THOROUGHbred COMMUNICATIONS, INC.	BLH19930325KA	C3	LIC	136.33	34.78 dB	66974
WYNA	NC	CALABASH	285	50000	COASTLINE COMMUNICATIONS OF CAROLINA	BPH20030220AAL	C2	APP	173.34	35.68 dB	24932
NEW	SC	COLUMBIA	286	10	EDGEWATER BROADCASTING INC.	BNPFT20030317LDD	D	APP	161.99	37.38 dB	150417
WYNA	NC	CALABASH	285	23500	COASTLINE COMMUNICATIONS OF CAROLINA	BMLH19990826KZ	C3	LIC	158.95	37.50 dB	24932
NEW	SC	OLYMPIA	286	10	CALVARY CHAPEL OF TWIN FALLS, INC.	BNPFT20030310AWB	D	APP	161.99	37.57 dB	141245
NEW	SC	CAMDEN	286	19	EDGEWATER BROADCASTING INC.	BNPFT20030317LCC	D	APP	165.6	38.42 dB	150413
WYNA	NC	CALABASH	285	50000	COASTLINE COMMUNICATIONS OF CAROLINA	BPH20030220AAL	C2	APP	173.34	38.04 dB	24932
NEW	SC	LEXINGTON	286	10	EDGEWATER BROADCASTING INC.	BNPFT20030317LGC	D	APP	172.16	39.53 dB	150421

