

Non-Interference Compliance

Regarding Facility id 146282

Channel 233

Description of Exhibit 12 Contents

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

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

Page 2 of this exhibit is an explanation of the method used to demonstrate compliance with contour overlap and interference provisions based on 47 C.F.R. § 74.1204(d), which states:

[A]n 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.

Page 3 of this exhibit contains the tabulated data from the interference analysis, which shows all stations whose protected contours come within 50 km of the 34 dBμ F(50,10) contour of the proposed translator. These tabulated values were calculated using data from the FCC's CDBS files and 30 arc second terrain data. The column labeled "Adj" shows the number of channels difference between the entry and the proposed translator. The column labeled "Dist" shows the distance in km. The column labeled "Overlap" shows the area of contour overlap in square kilometers.

Page 4 of this exhibit is a portion of a USGS 1:24,000 scale 7.5 minute quadrangle at full scale with the calculated area of interference overlaid. 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 the free space equation and 120 radials.

Compliance with 47 C.F.R. § 74.1204(d)

All authorized second and third adjacent stations with which the proposed translator has contour overlap are tabulated below. Column four show the station's signal level at the proposed translator's tower site, and column five gives the minimum value within the entire standard interfering contour of the proposed translator (100 dBμ for most classes, 94 for class B, 97 for class B1). The minimum second or third adjacent F(50,50) contour within the proposed translator's standard interfering contour was used to calculate the proposed translator's actual "worst-case" interfering contour.

Application_id	File Number	Callsign	Contour at Tower	Min. Contour
113815	BLH19880609KA	KRKR	69.7	69.3
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				69.3

FCC 02-244 at Section II.A.5 states that "when demonstrating that 'no actual interference will occur due to . . . other factors,' pursuant to Section 74.1204(d), an applicant may use the undesired-to-desired signal ratio method." The undesired-to-desired ratio for second and third adjacent stations required by § 74.1204(a) is 40 dB. Since the minimum protected contour strength within the proposed translator's standard interference contour is **69.3 dBμ**, this makes the proposed translator's worst-case interfering contour **109.3 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **239.2 m** from the transmit antenna.

The interfering contour of the proposed translator was calculated for 120 radials and plotted on the pertinent portion of a USGS quadrangle (page 4 of this exhibit). As demonstrated on the quadrangle, there are no populated structures or highways within the area of interference (Note: FCC 02-244 at Section II.A.6 states that USGS quadrangles "have been recognized as acceptable to demonstrate lack of population"). Hence, in accordance with 47 C.F.R. § 74.1204(d) and the clarification provided by the FCC in the decision *Re: Living Way Ministries* (FCC 02-244), a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.

Antenna Manufacturer: ERI
Antenna Model: 100-1
CORAGL: 76 m
Maximum ERP: 0.099 kW
Interfering Contour: 109.3 dBμ
Max Int. Contour Distance: 239.2 m

Adjacent Channel Study
For Station K233AN, Facility_id: 146282

Co-channel through third adjacent:

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
113815	54707	BLH	19880609KA	KRKR	THREE EAGLES OF LINCOLN, INC.	C2	LINCOLN	NE	LIC	50	469	236	3	28.9	0.5908
646309	153098	BNPFT	20030317HAI	NEW	VSS CATHOLIC COMMUNICATIONS, INC.	D	NEBRASKA CITY	NE	APP	0.14	435	235	2	56.7	0
675766	140348	BNPFT	20030829AUQ	K234BF	COMMUNITY BROADCASTING, INC.	D	UTICA	NE	CP	0.25	567	234	1	60.7	0
631661	140354	BNPFT	20030312AXR	NEW	COMMUNITY BROADCASTING, INC.	D	NEBRASKA CITY	NE	APP	0.25	382	235	2	66.1	0
629182	138619	BNPFT	20030312AQF	NEW	CALVARY CHAPEL OF OMAHA	D	OMAHA	NE	APP	0.092	668	235	2	80.3	0
1068431	50314	BXPH	20050620ADC	KQCH	JOURNAL BROADCAST CORPORATION	C	OMAHA	NE	CP	98	569.9	231	2	80.8	0
1066391	50314	BMLH	20050620ACZ	KQCH	JOURNAL BROADCAST CORPORATION	C	OMAHA	NE	LIC	97	702	231	2	80.8	0
642237	149395	BNPFT	20030317HSU	NEW	EDGEWATER BROADCASTING, INC.	D	OMAHA	NE	APP	0.25	376.2	233	0	92.6	0
638863	146285	BNPFT	20030317HSX	NEW	EDGEWATER BROADCASTING, INC.	D	OMAHA	NE	APP	0.25	376.2	233	0	92.6	0
1065532	143150	BMPFT	20050527AXE	K231AX	RADIO ASSIST MINISTRY INC.	D	MARYSVILLE	KS	CP MOD	0.25	456	231	2	101.3	0
1126698	9954	BLH	20060420ABO	KNEN	CENTRAL RADIO, INC.	C1	NORFOLK	NE	LIC	100	682.6	234	1	156.8	0
491872	35209	BLH	20000208ABN	KCKS	KNCK INC.	C1	CONCORDIA	KS	LIC	100	619	235	2	158.7	0

