

Non-Interference Compliance

Regarding Facility id 77051

Channel 216

Description of Exhibit 13 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.

Note: The adjacent channel study shows prohibited contour overlap with 1st adjacent K215EH, Kailua, HI FAC# 89650 which is also licensed to CSN International. A CP Mod application will be simultaneously filed with this application to move K215EH to the same antenna system as K216FI and the channel will be changed to 214. As a 2nd adjacent on the same tower, these two translators will qualify for a 1204(d) population waiver.

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.

Page 5 of this exhibit is an aerial photo of the vicinity surrounding the proposed translator's tower site.

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
1731386	BLED20160610AAG	KLHT-FM	88.7	88.7
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				88.7

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 **88.7 dBμ**, this makes the proposed translator's worst-case interfering contour **128.7 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **8.1 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.

Note: The only structure within the zone of predicted interference is an unoccupied communications building, so 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: NIC
Antenna Model: BKG77ck
CORAGL: 33 m
Maximum ERP: 0.01 kW
Interfering Contour: 128.7 dBμ
Max Int. Contour Distance: 8.1 m

Adjacent Channel Study
For Station K216FI, Facility_id: 77051

Co-channel through third adjacent:

App_id	Fac_id	File_Number	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Char	Adj	Dist	Overlap
1783929	89650	BLFT-20180502ACA	K215EH	CALVARY CHAPEL OF TWIN FALI	D	KAILUA	HI	LIC	0.075	175	215	1	11.6	73.2282
1731386	81538	BLED-20160610AAG	KLHT-FM	CALVARY CHAPEL OF HONOLULU	C	HONOLULU	HI	LIC	100	734	218	2	29.9	0.0434
1532289	6905	BLFT-20121203AKM	K216GH	UNIVERSITY OF HAWAII	D	WAIALUA	HI	LIC	0.095	1170	216	0	39.5	0
1640273	174896	BLED-20140605AAB	KMNO	MAUI MEDIA INITIATIVE, INC.	C1	WAILUKU	HI	LIC	1.2	2114	219	3	174.5	0
1764897	26437	BLED-20170817AAY	KKUA	HAWAII PUBLIC RADIO, INC.	C	WAILUKU	HI	LIC	14.5	2986	214	2	175.7	0



