

Non-Interference Compliance W285DI, Binghamton, NY FAC# 2869

Description of Exhibit 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 adjacent channel study created with ComStudy 2.2 which shows all co-channel, 1st adjacent, 2nd adjacent and 3rd adjacent to the proposal.

Page 4 of this exhibit is a Google Earth aerial photo of the vicinity surrounding the proposed translator's tower site with the plotted zone of predicted interference.

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.

File Number	Call Sign	Contour at Tower
BLH-20040330AAY	WHWK	113.5 dBμ
BMLH-20100506ADT	WYXL	56.2 dBμ

Minimum F(50,50) Contour of Adjacent Station Worst Case Scenario	56.2 dBμ
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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 **56.2 dBμ**, this makes the proposed translator's worst-case interfering contour **96.2 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **339.7 m** from the transmit antenna.

Note: The only structures within the zone of predicted interference are unoccupied communications buildings, 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:	BEXT
Antenna Model:	TFC2K @ 330°
CORAGL:	99 m
Maximum ERP:	0.010 kW
Interfering Contour:	96.2 dBμ
Max Int. Contour Distance:	339.7 m

Adjacent Channel Study
W285DI, Binghamton, NY FAC# 2869
3/5/2024

Callsign	State	City	Channel	ERP (W)	Class	Status	Distance (km)	Clr
WHWK	NY	BINGHAMTON	251	6700	B	LIC	0.57	-81.18 dB
WYXL	NY	ITHACA	247	26000	B	LIC	57.58	-3.00 dB
W249DW	NY	ITHACA	249	175	D	LIC	57.55	11.61 dB
W248BP	PA	SCRANTON	248	250	D	LIC	71.8	11.20 dB
WBSX	PA	HAZLETON	250	6300	B	LIC	97.24	12.48 dB
W249AS	NY	NORWICH	249	10	D	LIC	62.61	12.17 dB
WCIG	NY	BIG FLATS	249	610	A	LIC	94.27	15.55 dB
WTBD-FM	NY	DELHI	248	6000	A	LIC	84.31	18.40 dB
WYXL	NY	ITHACA	247	700	B	LIC	57.57	18.11 dB
WTBD-FM	NY	DELHI	248	6000	A	APP	84.31	18.40 dB
W249BC	NY	MATTYDALE	249	120	D	LIC	112.53	23.22 dB
W249CF	NY	FULTON	249	200	D	LIC	143.98	26.86 dB
WBHT	PA	MOUNTAIN TOP	246	500	A	LIC	97.22	28.44 dB
WPXY-FM	NY	ROCHESTER	250	50000	B	LIC	180.27	29.55 dB
W250BI	PA	MANSFIELD	250	250	D	CP MOD	97.7	30.97 dB
WBHT	PA	MOUNTAIN TOP	246	225	A	LIC	97.24	31.49 dB
W250BE	NY	ONEONTA	250	130	D	LIC	81.75	32.97 dB
W248DK	PA	BLOOMSBURG	248	250	D	LIC	130.53	32.42 dB
WVRT	PA	MILL HALL	249	6000	A	LIC	144.76	34.80 dB
W250BI	PA	MANSFIELD	250	68	D	LIC	92.94	34.64 dB
W249AA	PA	LEBANON, ETC.	249	145	D	LIC	205.18	35.30 dB
WPXY-FM	NY	ROCHESTER	250	15500	B	LIC	180.23	35.67 dB
W249CA	NJ	BANGOR	249	46	D	LIC	145.35	35.70 dB
WSKS	NY	WHITESBORO	250	1500	A	LIC	116.46	36.79 dB
WSUL	NY	MONTICELLO	252	2200	A	LIC	113.24	36.65 dB
W249CA	NJ	WASHINGTON	249	10	D	CP MOD	160.79	36.45 dB
WEXT	NY	AMSTERDAM	249	1600	A	LIC	177.91	36.23 dB
WVIN-FM	NY	BATH	252	4500	A	LIC	120.34	36.52 dB
WPXY-FM	NY	ROCHESTER	250	6300	B	LIC	180.27	38.54 dB
WSKQ-FM	NY	NEW YORK	250	12500	B	LIC	218.26	39.84 dB
W250CX	NY	SAINT JOHNSVILLE	250	250	D	LIC	146.9	39.89 dB
WCZX	NY	HYDE PARK	249	300	A	LIC	165.97	39.85 dB

Aerial Photo Zone of Predicted Interference
W285DI, Binghamton, NY FAC# 2869
March 5, 2024

