

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of LOCUSPOINT WDVb LICENSEE, LLC, licensee of Class A digital television station WDVb-CD, Channel 23 in Edison, New Jersey, in support of its application for modification of Construction Permit 0000025114, which authorizes operation on its post-repack channel, Channel 22. The purpose of this application is to specify a different directional antenna pattern and an increase in effective radiated power to 15.0 kW. No change in site location or antenna height is proposed herein.

It is proposed to install an Alive panel directional antenna at the 300.5-meter level of the existing 443-meter Empire State Building, on which the present WDVb-CD antenna is presently located. Exhibit B is a map upon which the predicted 51 dBu service contour of this new proposal is plotted.

Azimuth and elevation pattern data for the proposed directional antenna are included in Exhibit C.

Exhibit D contains the summary results from a TVStudy interference study, which was conducted using a cell size of 0.5 kilometers and an increment spacing of 0.1 kilometer. It concludes that the proposed WDVb-CD facility meets the Commission's de minimis interference criteria to all co-channel and adjacent-channel post-repack full-power and Class A and LPTV/translator facilities, except in three instances.

W22EW-D, Channel 22 in Port Jervis, New York, and WXNY-LD, Channel 22 in New York, New York, cause impermissible interference to the repack allotment facility of WDVb-CD

EXHIBIT A

on Channel 22 in Edison, New Jersey. W22EW-D results in interference to 12.3% of the WDVb-CD allotment service population and WXNY-LD causes 39.9% interference to this station. As a result, both W22EW-D and WXNY-LD can be considered displaced and interference from the instant facility to them can be ignored. In addition, a Channel 22 digital replacement translator (BLCDT-20120905AAO) for WCBS-DT exists on Long Island and causes more than 0.5% interference to the allotment facility of WEDW-DT on Channel 21 in Bridgeport, Connecticut. This translator is likewise displaced and interference to it from the proposed WDVb-DT facility can be ignored.

A detailed power density calculation is provided in Exhibit E.

Since no change in the overall height or location of the Empire State Building is proposed herein, the Federal Aviation Administration has not been notified of this application. In addition, the Federal Communications Commission issued Antenna Structure Registration Number 1007048 to this structure.

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

A handwritten signature in blue ink, appearing to read "K. T. Fisher", with a stylized flourish at the end.

November 1, 2017

KEVIN T. FISHER

**CONTOUR POPULATION
2015 U.S. CENSUS DATA
16,251,623 (6,294,113 HH)**

SMITHANDFISHER

**FCC 51 DBU
SERVICE CONTOUR**

**EXHIBIT B
PREDICTED SERVICE CONTOUR
PROPOSED WDVb-CD
CH. 22 - EDISON, NEW JERSEY**

Scale 1:600,000

0 5 10 15 mi

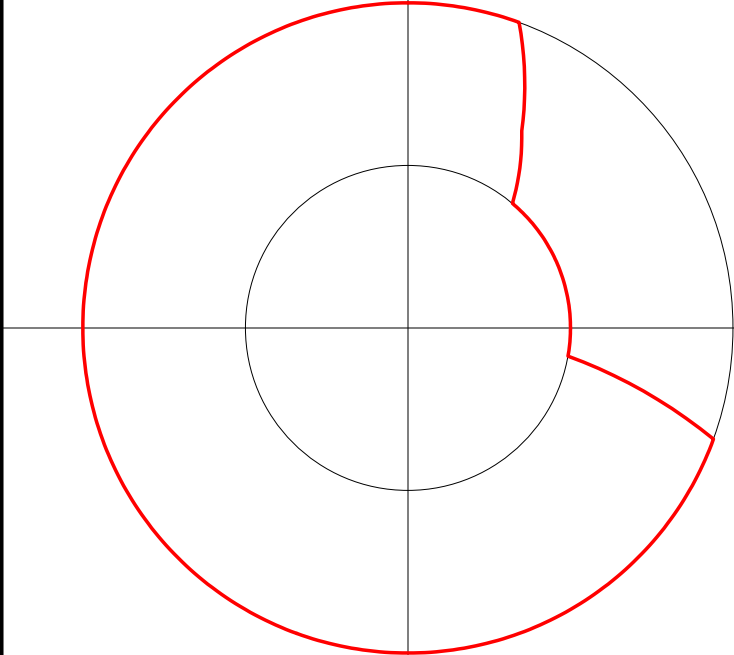
Antenna Pattern

Pre-Rotation Antenna Pattern....

Azimuth (deg)	Relative Field
0.0	1.0
10.0	1.0
20.0	1.0
30.0	0.7
40.0	0.5
50.0	0.5
60.0	0.5
70.0	0.5
80.0	0.5
90.0	0.5
100.0	0.5
110.0	1.0
120.0	1.0
130.0	1.0
140.0	1.0
150.0	1.0
160.0	1.0
170.0	1.0
180.0	1.0
190.0	1.0
200.0	1.0
210.0	1.0
220.0	1.0
230.0	1.0
240.0	1.0
250.0	1.0
260.0	1.0
270.0	1.0
280.0	1.0
290.0	1.0
300.0	1.0
310.0	1.0
320.0	1.0
330.0	1.0
340.0	1.0
350.0	1.0

Rotation Angle = 0

EXHIBIT C





ANTENNA SPECIFICATIONS



ALIVETELE.COM
SPEC GENERATOR

model no.: ATC-BP2-U

call sign: WDVb

city of license:

state: NY

Elevation pattern -5 to 90

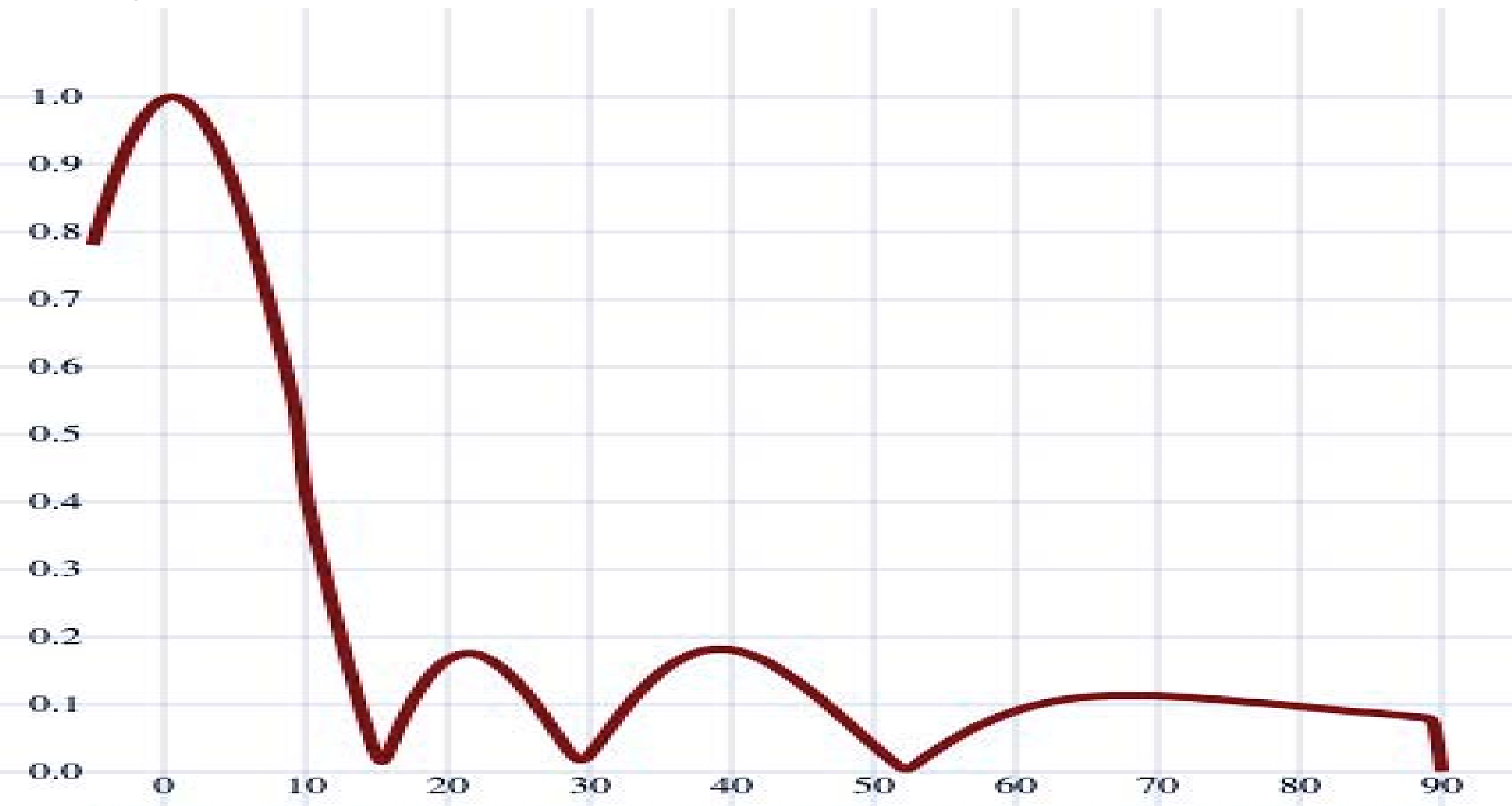


EXHIBIT D

TVSTUDY INTERFERENCE ANALYSIS RESULTS
 PROPOSED WDVb-CD
 CHANNEL 22 – EDISON, NEW JERSEY

Study created: 2017.11.01 08:01:12

Study build station data: LMS TV 2017-10-24 (1)

Proposal: WDVb-CD D22 DC CP EDISON, NJ

File number: BLANK0000025114

Facility ID: 168834

Station data: User record

Record ID: 97

Country: U.S.

Build options:

Protect LPTV records from Class A

Stations affected by proposal:

Call	Chan	Svc	Status	City, State	File Number	Distance
WEDW	D21	DT	CP	BRIDGEPORT, CT	BLANK0000025204	89.4 km
WEDW	D21	DT	BL	BRIDGEPORT, CT	DTVBL13594	89.4
WUTH-CD	D22	DC	CP	HARTFORD, CT	BLANK0000028398	165.3
WUTH-CD	D22	DC	BL	HARTFORD, CT	DTVBL74214	165.3
WMPB	D22	DT	CP	BALTIMORE, MD	BLANK0000025181	278.1
WMPB	D22	DT	APP	BALTIMORE, MD	BLANK0000029875	278.1
WMPB	D22	DT	BL	BALTIMORE, MD	DTVBL65944	278.1
WPHY-CD	D22	DC	CP	TRENTON, NJ	BLANK0000028171	126.6
WPHY-CD	D22	DC	BL	TRENTON, NJ	DTVBL74464	126.6
WXNY-LD	D22	LD	CP	NEW YORK, NY	BDISDTL20100421AAT	3.6
WCBS-TV	D22	LD	LIC	NEW YORK, NY	BLCDT20120905AAO	91.6
W22EW-D	D22+	LD	LIC	PORT JERVIS, NY	BLANK0000018995	58.8
W22EW-D	D22+	LD	APP	PORT JERVIS, NY	BLANK0000033500	23.1
WCWN	D22	DT	CP	SCHENECTADY, NY	BLANK0000025129	208.6
WCWN	D22	DT	APP	SCHENECTADY, NY	BLANK0000033782	208.6
WCWN	D22	DT	BL	SCHENECTADY, NY	DTVBL73264	208.6
WOLF-TV	D22	DT	CP	HAZLETON, PA	BLANK0000027934	165.3
WOLF-TV	D22	DT	BL	HAZLETON, PA	DTVBL73375	165.3
WNJS	D23	DT	CP	CAMDEN, NJ	BLANK0000026717	134.8
WNJS	D23	DT	BL	CAMDEN, NJ	DTVBL48481	134.7
WFTY-DT	D23	DT	LIC	SMITHTOWN, NY	BLCDT20120427ABO	88.3

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D22

Mask: Full Service

Latitude: 40 44 54.00 N (NAD83)

Longitude: 73 59 9.00 W

Height AMSL: 313.5 m

HAAT: 0.0 m

Peak ERP: 15.0 kW

Antenna: Alive ESB 0.0 deg

Elev Pattn: Generic

Elec Tilt: 0.50

49.6 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	277.9 m	55.9 km
45.0	3.75	303.6	49.9
90.0	3.75	301.5	49.8
135.0	15.0	303.6	57.4
180.0	15.0	297.2	57.0
225.0	15.0	312.9	57.9
270.0	15.0	304.1	57.4
315.0	15.0	302.7	57.3

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 300 m

**Proposal service area extends beyond baseline plus 1.0%

Proposal service area population is more than 95.0% of baseline

Distance to Canadian border: 395.2 km

Distance to Mexican border: 2674.8 km

Conditions at FCC monitoring station: Laurel MD

Bearing: 234.8 degrees Distance: 298.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 278.9 degrees Distance: 2629.1 km

Study cell size: 0.50 km

Profile point spacing: 0.10 km

Maximum new IX to full-service and Class A: 0.50%

Maximum new IX to LPTV: 2.00%

**IX check failure, 89.54% interference to BDISDTL20100421AAT CP, scenario 1

**IX check failure, 89.54% interference to BDISDTL20100421AAT CP, scenario 2

**IX check failure, 89.64% interference to BDISDTL20100421AAT CP, scenario 3

**IX check failure, 89.64% interference to BDISDTL20100421AAT CP, scenario 4

**IX check failure, 11.40% interference to BLCDT20120905AAO LIC, scenario 1

**IX check failure, 11.40% interference to BLCDT20120905AAO LIC, scenario 2

**IX check failure, 11.41% interference to BLCDT20120905AAO LIC, scenario 3

**IX check failure, 11.40% interference to BLCDT20120905AAO LIC, scenario 4

**IX check failure, 2.62% interference to BLANK0000018995 LIC, scenario 1

**IX check failure, 2.62% interference to BLANK0000018995 LIC, scenario 2

**MX with BLANK0000033500 APP, 2.19% interference, scenario 1

**MX with BLANK0000033500 APP, 2.19% interference, scenario 2

POWER DENSITY CALCULATION

PROPOSED WDVb-CD
CHANNEL 22 – EDISON, NEW JERSEY

[MODIFICATION OF CONSTRUCTION PERMIT 0000025114]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Edison facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 15 kW, an antenna radiation center 300 meters above ground, and assuming a vertical relative field value of 40 percent at the steeper elevation angles for the proposed antenna, maximum power density two meters above ground of 0.0018 mW/cm^2 is calculated to occur near the base of the building tower. Since this is only 0.5 percent of the 0.35 mW/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 22 (518-524 MHz), a grant of this proposal may be considered a minor environmental action with respect to public exposure to non-ionizing electromagnetic radiation.

In addition, once the new WDVb-CD antenna is installed, a power density survey of the 81st Floor parapet of the Empire State Building will be conducted in order to ensure compliance with the Commission's RF human exposure standards.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive non-ionizing radiation.