

ENGINEERING NARRATIVE
IN SUPPORT OF APPLICATION FOR CONSTRUCTION PERMIT
FOR INCENTIVE AUCTION REASSIGNMENT CHANNEL

Prepared for

VIDEO VOICE, INC.

WVH-CD CH 18 Facility ID 70158 7.79 kW DA RC 15.7 M AMSL

SOUTHAMPTON, NEW YORK

Summary

Video Voice, Inc. (“VVI”) specifies herein its post-auction CH 18 transmission facilities. The proposed facility is based on continued operation from the licensed site and antenna RC on an VVI owned structure. The licensed Aldena custom yagi antenna system is cut to frequency and cannot be moved from CH 50 to CH 18. The antenna will be replaced with a set of Aldena yagis cut for CH 18 with new power divider and harness to achieve the replication pattern. The CH 18 antenna will be an array of Aldena AST.06.07.336 yagi antennas, horizontally polarized. The community boundary for Southampton, New York is located inside the 49.1 dBu F(50,90) noise limited contour and within the Grade B contour.

Attached herein is the TVStudy version 2.2.2 output which demonstrates that the proposed facility complies with the requirements for expedited processing in that there is no new interference to any station, the proposed population is 100 percent of the baseline population and the proposed coverage contour does not exceed the baseline contour.

Environmental

The proposed site is an existing site.

The proposed antenna system, as stated above, consists of an array of Aldena yagi antennas, type AST0607336 horizontally polarized, type mounted on the top of an existing tower in an area inaccessible to the public. The H.Pol. maximum ERP at any azimuth is 7.79 kilowatts. The antenna radiation center is 15.7 meters above ground. Utilizing formula 10 OF OET Bulletin No. 65, Edition 97-01, a value F of 0.2 has been used to calculate the power density 2 meters above ground. The maximum power density is 55.5 uw/cm squared calculated for an ERP of 7,790 watts H. polarization. This value is 16.9% of the General Population exposure per section 1.1310. Based on this analysis it is believed that the proposed facility is in compliance with OET-65 Guidelines.

The applicant will reduce power or cease transmission as required to meet FCC OET-65 Worker Safety Guidelines.

LM Station Protection

It is acknowledged that predicted interference to LM stations located in Nassau County over one hundred kilometers distant is shown in the TVStudy software output. This has been coordinated with the Video Division staff and agreed that normal techniques to protect adjacent channel wireless licenses will be used to protect the CH 19 wireless licenses.

OET-69 Bulletin, TVStudy Output

Study created: 2017.07.06 14:50:08

Study build station data: LMS TV 2017-06-21 (6)

 Proposal: WVH-CD D18 DC BL SOUTHAMPTON, NY
 File number: DTVBL70158
 Facility ID: 70158
Station data: User record
 Record ID: 59
 Country: U.S.

Stations potentially affected:

Call	Chan	Svc	Status	City, State	File Number	Distance
WPXQ-TV	D17	DT	LIC	BLOCK ISLAND, RI	BLCDT20050811AAT	71.6 km
WEKW-TV	D18	DT	BL	KEENE, NH	DTVBL69271	231.1
WMBC-TV	D18	DD	LIC	NEWTON, NJ	BLCDT20101130AAX	163.8
WTVH	D18	DT	BL	SYRACUSE, NY	DTVBL74151	388.5
WUNI	D19	DT	BL	WORCESTER, MA	DTVBL30577	159.8

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D18
Mask: Full Service
Latitude: 40 57 20.36 N (NAD83)
Longitude: 72 15 14.29 W
Height AMSL: 31.7 m
HAAT: 0.0 m
Peak ERP: 7.79 kW
Antenna: ALD-8 YAGIS TYPE AST0607330 (ID 88622) 0.0 deg

49.1 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.347 kW	31.3 m	14.4 km
45.0	0.771	20.3	17.5
90.0	0.943	28.6	18.5
135.0	0.176	31.7	12.2
180.0	0.081	31.5	10.1
225.0	3.18	29.5	24.2
270.0	5.44	8.9	26.6
315.0	1.00	29.5	18.8

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 26 m

Proposal service area is within baseline plus 1.0%

Proposal service area population is more than 95.0% of baseline

Distance to Canadian border: 430.4 km

Distance to Mexican border: 2812.7 km

Conditions at FCC monitoring station: Laurel MD
Bearing: 244.4 degrees Distance: 436.5 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 279.1 degrees Distance: 2769.3 km

**Proposal fails distance check to land mobile station: NASSAU NY WPVS875 ch. 19, 125.4 km
**Proposal fails distance check to land mobile station: NASSAU NY WPVS875 ch. 19, 112.3 km
**Proposal fails distance check to land mobile station: NASSAU NY WPVS875 ch. 19, 117.0 km
**Proposal fails distance check to land mobile station: NASSAU NY WPVS875 ch. 19, 104.0 km
**Proposal fails distance check to land mobile station: NASSAU NY WPYR980 ch. 19, 118.6 km
**Proposal fails distance check to land mobile station: NASSAU NY WQEH796 ch. 19, 103.0 km
**Proposal fails distance check to land mobile station: NASSAU NY WQEH959 ch. 19, 103.0 km
**Proposal fails distance check to land mobile station: NASSAU NY WQKU273 ch. 19, 119.2 km

Proposal is not within the Offshore Radio Service protected area

Study cell size: 2.00 km
Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

No IX check failures found.

OET-69 Bulletin, tvix Study

tvstudy v2.2.2

Database: 127.0.0.1, Study: DTVBL70158 (256), Model: Longley-Rice

Start: 2017.07.06 14:50:45

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WTVH	D18	DT	BL	SYRACUSE, NY	DTVBL74151	388.5
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Maximum new IX to full-service and Class A: 0.50%
 Maximum new IX to LPTV: 2.00%

 Interference to BLCDT20050811AAT LIC, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WPXQ-TV	D17	DT	LIC	BLOCK ISLAND, RI	BLCDT20050811AAT	
Undesireds:	WVH-CD	D18	DC	BL	SOUTHAMPTON, NY	DTVBL70158	71.6 km
	WVH-CD	D18	DC	BL	SOUTHAMPTON, NY	DTVBL70158	71.6
	WPFO	D17	DT	BL	WATERVILLE, ME	DTVBL84088	329.1
	WUVP-DT	D17	DT	APP	VINELAND, NJ	BLANK0000024815	332.6
	WYCI	D17	DT	BL	SARANAC LAKE, NY	DTVBL77515	369.4
	WPHL-TV	D17	DT	LIC	PHILADELPHIA, PA	BLCDT20090918ABV	332.6
	WEKW-TV	D18	DT	BL	KEENE, NH	DTVBL69271	177.6

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
22743.5 3,283,775	22302.5 3,155,102	22130.5 3,106,565	22170.3 3,109,728	-0.18 -0.10

Undesired	Total IX	Unique IX, before	Unique IX, after
WVH-CD D18 DC BL 67.6	4,687	67.6 4,687	
WVH-CD D18 DC BL 27.8	1,524	27.8 1,524	
WPFO D17 DT BL 51.9	18,070	51.9 18,070	
WUVP-DT D17 DT APP 52.4	25,780	0.0 0	0.0 0
WPHL-TV D17 DT LIC 52.4	25,780	0.0 0	0.0 0

 Interference to DTVBL69271 BL, scenario 1
 Proposal causes no interference.

 Interference to BLCDT20101130AAX LIC, scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance
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Desired: WMBC-TV D18 DD LIC NEWTON, NJ BLCDT20101130AAX

Undesireds: WVVH-CD D18 DC BL SOUTHAMPTON, NY DTVBL70158 163.8 km
WVVH-CD D18 DC BL SOUTHAMPTON, NY DTVBL70158 163.8
WUVP-DT D17 DT APP VINELAND, NJ BLANK0000024815 126.8
WPHL-TV D17 DT LIC PHILADELPHIA, PA BLCDT20090918ABV 126.8
WEKW-TV D18 DT BL KEENE, NH DTVBL69271 284.7
WTVH D18 DT BL SYRACUSE, NY DTVBL74151 280.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
23255.8 18,706,132	22094.0 18,458,331	21921.0 18,434,645	21921.0 18,434,645	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WVVH-CD D18 DC BL 4.0	322	4.0	322
WVVH-CD D18 DC BL 4.0	322		4.0 322
WUVP-DT D17 DT APP 92.2	12,708	0.0	0
WPHL-TV D17 DT LIC 92.2	12,708	0.0	0
WEKW-TV D18 DT BL 24.2	5,867	16.2	3,928
WTVH D18 DT BL 60.6	6,728	52.5	4,789

Interference to DTVBL74151 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL30577 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL30577 BL, scenario 2
Proposal causes no interference.

Interference to DTVBL30577 BL, scenario 3
Proposal causes no interference.

Interference to DTVBL30577 BL, scenario 4
Proposal causes no interference.

Conclusion

Based on the information supplied herein, and accompanying application for construction permit, it is believed that the proposed facilities meet all applicable FCC requirements for construction permit.

The foregoing was prepared on behalf of Video Voice, Inc. by Clarence M. Beverage of *Communications Technologies, Inc.*, Marlton, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The undersigned certifies, under penalty of perjury, that the statements herein are true and correct of his own knowledge, except such statements made on information and belief, and as to these statements he believes them to be true and correct.



By _____

Clarence M. Beverage

for Communications Technologies, Inc.

Marlton, New Jersey

July 6, 2017

