

Displacement Application Narrative

Applicant respectfully submits the attached displacement application pursuant to the terms set forth in the *Special Displacement Window Public Notice*.¹ The applicant has used the *TVStudy* software to identify an available channel and verify the proposed will not cause harmful interference.

The station is eligible to participate in the Special Displacement Window by qualifying as both “operating” and “displaced” under the FCC’s eligibility criteria² and does not move the stations facility more than 30 miles.

The interference analysis completed utilizing the *TVStudy* software indicates the proposed will cause less than 0.5% interference to Full Power and Class A stations, and less than 2% interference to other Low Power TV (LPTV) stations, therefore, it is grantable.

WRTN is displaced on it’s licensed channel 7 by WNPT, Nashville TN moving to channel 7. (See Below) WRTN has a CP to move to channel 17, but it too is displaced by WHTN, Channel 16, Murfreesboro and WAAY, Channel 17, Huntsville, AL, and will receive 6.29% interference from WKSO, Somerset KY. (See Below).

The only fix was to do a major overhaul of the Ch 17 as a displacement to ch 7. The current channel 17 CP will be dismissed so the displacement application can be granted.

Study created: 2018.05.27 10:37:00

Study build station data: LMS TV 2018-05-24 (70)

Proposal: WRTN-LD D7 LD LIC ALEXANDRIA, TN
File number: BLDVL20091005AAQ
Facility ID: 168141
Station data: User record
Record ID: 1770
Country: U.S.

Build options:

Protect pre-transition records not on baseline channel
Protect baseline records from LPTV

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WVTM-TV	D7	DT	CP	BIRMINGHAM, AL	BLANK0000034568	308.7 km
No	WVTM-TV	D7	DT	BL	BIRMINGHAM, AL	DTVBL74173	308.7
No	WCIQ	D7	DT	LIC	MOUNT CHEAHA, AL	BLEDT20120828AAV	322.1

¹See Incentive Auction Task Force and Media Bureau Announce Post-Incentive Auction Special Displacement Window April 10, 2018, through May 15, 2018, and Make Location and Channel Data Available, Public Notice, DA 18-124 (IATF & MB Feb. 9, 2018) (“Special Displacement Window Public Notice”).

²See *id.* ¶ 5.

No	WGTV	D7	DT	CP	ATHENS, GA	BLANK0000034195	364.9
No	WGTV	D7	DT	BL	ATHENS, GA	DTVBL23948	364.9
Yes	WEHT	D7	DT	LIC	EVANSVILLE, IN	BLCDT20090928AKE	190.3
No	WHMB-TV	D7	DT	CP	INDIANAPOLIS, IN	BLANK0000029690	406.3
No	WHMB-TV	D7	DT	BL	INDIANAPOLIS, IN	DTVBL37102	406.4
No	WLJC-TV	D7	DT	LIC	BEATTYVILLE, KY	BLCDT20120217AAO	315.2
No	W07BN-D	D7	LD	LIC	BRUCE, MS	BLDVL20100205ACR	341.2
No	WSPA-TV	D7	DT	LIC	SPARTANBURG, SC	BLANK0000053056	424.4
Yes	WKNX-TV	D7	DT	LIC	KNOXVILLE, TN	BLCDT20040810ABE	258.6
Yes	WNPT	D7	DT	CP	NASHVILLE, TN	BLANK0000028116	24.7
Yes	WNPT	D7	DT	BL	NASHVILLE, TN	DTVBL41398	24.8
No	WBNA	D8	DT	APP	LOUISVILLE, KY	BLANK0000035747	216.8
No	WBNA	D8	DT	LIC	LOUISVILLE, KY	BLCDT20021024AAB	216.8
No	WDEF-TV	D8	DT	CP	CHATTANOOGA, TN	BLANK0000026651	183.1
No	WDEF-TV	D8	DT	BL	CHATTANOOGA, TN	DTVBL54385	183.1
Yes	WNPT	D8	DT	LIC	NASHVILLE, TN	BLEDT20090622AEX	24.7
No	WJFB-LP	N11z	TX	LIC	LEBANON, TN	BLTVL19870219IA	45.8

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D7
Mask: Stringent
Latitude: 36 16 4.90 N (NAD83)
Longitude: 86 47 44.70 W
Height AMSL: 567.4 m
HAAT: 0.0 m
Peak ERP: 0.300 kW
Antenna: Omnidirectional
Elev Pattn: Generic

48.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.300 kW	326.9 m	47.3 km
45.0	0.300	380.5	50.3
90.0	0.300	407.7	51.6
135.0	0.300	405.5	51.5

180.0	0.300	413.3	51.9
225.0	0.300	416.8	52.0
270.0	0.300	363.6	49.4
315.0	0.300	341.2	48.1

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 382 m

Distance to Canadian border: 698.3 km

Distance to Mexican border: 1493.9 km

Conditions at FCC monitoring station: Powder Springs GA

Bearing: 144.2 degrees Distance: 327.1 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 290.5 degrees Distance: 1662.4 km

Study cell size: 1.00 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%

**IX check failure to BLANK0000028116 CP scenario 1, 22.02% interference caused
**IX check failure to BLANK0000028116 CP scenario 2, 22.02% interference caused
**IX check failure to BLANK0000028116 CP scenario 3, 22.21% interference caused
**IX check failure to BLANK0000028116 CP scenario 4, 22.23% interference caused
**IX check failure to DTVBL41398 BL scenario 1, 22.16% interference caused
**IX check failure to DTVBL41398 BL scenario 2, 22.16% interference caused
**IX check failure to DTVBL41398 BL scenario 3, 22.32% interference caused
**IX check failure to DTVBL41398 BL scenario 4, 22.34% interference caused

---- Below is IX received by proposal BLDVL20091005AAQ ----

Proposal receives 89.32% interference from scenario 1

Study created: 2018.05.27 10:39:17

Study build station data: LMS TV 2018-05-24 (70)

Proposal: WRTN-LD D17 LD CP ALEXANDRIA, TN
File number: BDISDTL20091001ABU
Facility ID: 168141
Station data: User record
Record ID: 1771
Country: U.S.

Build options:

Protect pre-transition records not on baseline channel
Protect baseline records from LPTV

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WIIW-LP	N14z	TX	LIC	NASHVILLE, TN	BLANK0000010767	9.1 km
No	WELF-TV	D16	DT	LIC	DALTON, GA	BLCDT20130610ACF	202.8
No	WBKI	D16	DT	CP	SALEM, IN	BLANK0000029887	246.5
No	WBKI	D16	DT	BL	SALEM, IN	DTVBL34167	246.5
Yes	WNKY	D16	DT	LIC	BOWLING GREEN, KY	BLANK0000007775	101.8
No	WNBj-LD	D16	LD	LIC	JACKSON, TN	BLDTL20141216ABU	194.7
Yes	WHTN	D16	DT	CP	MURFREESBORO, TN	BLANK0000034213	38.3
Yes	WHTN	D16	DT	BL	MURFREESBORO, TN	DTVBL11117	38.3
No	WUOA-LD	D17	LD	LIC	BIRMINGHAM, AL	BLANK0000011374	308.9
No	WJMY-CD	D17	DC	APP	DEMOPOLIS, AL	BLANK0000034277	344.9
No	WJMY-CD	D17	DC	CP	DEMOPOLIS, AL	BLANK0000028184	363.4
No	WJMY-CD	D17	DC	BL	DEMOPOLIS, AL	DTVBL30283	363.4
Yes	W17DJ-D	D17	DC	LIC	HUNTSVILLE, AL	BLANK0000001532	171.4
Yes	WAAY-TV	D17	DT	CP	HUNTSVILLE, AL	BLANK0000027632	171.4
Yes	WAAY-TV	D17	DT	BL	HUNTSVILLE, AL	DTVBL57292	171.4
No	WLGA	D17	DD	CP	OPELIKA, AL	BLANK0000030376	456.3
No	K17LV-D	D17	LD	CP	PARAGOULD, AR	BNPDTL20101019AAN	324.0
No	WUVG-DT	D17	LD	LIC	ATHENS, GA	BLCDT20091210ABP	357.1
No	WAND	D17	DT	LIC	DECATUR, IL	BLCDT20130709ABN	447.0
Yes	WTCT	D17	DT	LIC	MARION, IL	BLCDT20060629ACN	244.8
No	WISH-TV	D17	LD	LIC	INDIANAPOLIS, IN	BLCDT20110207ACU	406.4
Yes	WKPC-TV	D17	DT	LIC	LOUISVILLE, KY	BMLED20120625ABZ	248.8

Yes	WKMU	D17	DT	CP	MURRAY, KY	BLANK0000034644	162.8
Yes	WKMU	D17	DT	BL	MURRAY, KY	DTVBL34174	162.8
Yes	WKOI	D17	DT	CP	OWENSBORO, KY	BLANK0000034642	182.8
Yes	WKOI	D17	DT	BL	OWENSBORO, KY	DTVBL34205	182.8
Yes	WKSO-TV	D17	DT	CP	SOMERSET, KY	BLANK0000025331	202.2
Yes	WKSO-TV	D17	DT	APP	SOMERSET, KY	BLANK0000034631	202.2
Yes	WKSO-TV	D17	DT	BL	SOMERSET, KY	DTVBL34222	202.2
No	KUMO-LD	D17	LD	CP	ST LOUIS, MO	BDISDTL20110825AAL	403.8
No	KETC	D17	DT	BL	ST. LOUIS, MO	DTVBL62182	402.6
No	W17DV-D	D17	LD	CP	STARKVILLE, MS	BNPDTL20100512AIG	361.1
No	WEPH	D17	DT	CP	TUPELO, MS	BLANK0000034211	344.8
No	WEPH	D17	DT	BL	TUPELO, MS	DTVBL83946	344.8
No	WUNE-TV	D17	DT	LIC	LINVILLE, NC	BLEDT20091118ADR	444.9
No	W17DS-D	D17	LD	CP	SYLVA, ETC, NC	BDCCDTT20120615ADA	343.9
No	WCET	D17	DT	CP	CINCINNATI, OH	BLANK0000026835	375.5
No	WCET	D17	DT	BL	CINCINNATI, OH	DTVBL65666	375.5
No	WHNS	D17	DT	CP	GREENVILLE, SC	BLANK0000024830	390.0
No	WHNS	D17	DT	BL	GREENVILLE, SC	DTVBL72300	390.0
Yes	WKOP-TV	D17	DT	LIC	KNOXVILLE, TN	BLEDT20040405ACC	256.5
No	WPGF-LD	D17	LD	LIC	MEMPHIS, TN	BLDTL20100111AFJ	296.8
Yes	WZDX	D18	DT	CP	HUNTSVILLE, AL	BLANK0000034779	171.4
Yes	WZDX	D18	DT	BL	HUNTSVILLE, AL	DTVBL28119	171.4
Yes	WKYU-TV	D18	DT	LIC	BOWLING GREEN, KY	BLEDT20040803AAG	94.5
No	W18BL-D	D18	DC	LIC	ADAMSVILLE, TN	BLDTA20110429ABP	182.9
No	W18DS-D	D18	LD	LIC	CHATTANOOGA, TN	BLDTL20120320ABS	180.4
No	WPXK-TV	D18	DT	CP	JELICO, TN	BLANK0000026977	257.6
No	WPXK-TV	D18	DT	BL	JELICO, TN	DTVBL52628	257.6
Yes	WJFB-LP	D18z	LD	CP	LEBANON, TN	BLANK0000005264	0.5
No	WNPX-LP	N20-	TX	LIC	NASHVILLE, TN	BLTTL20021119ABM	0.5
No	WQTV-LP	N24+	TX	LIC	MURRAY, KY	BLTTL20010425AAF	141.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D17
Mask: Stringent
Latitude: 36 15 49.80 N (NAD83)
Longitude: 86 47 38.90 W
Height AMSL: 548.0 m
HAAT: 0.0 m

Peak ERP: 15.0 kW
Antenna: SWR-SWMP160I SPECIAL (ID 96092) 200.0 deg
Elev Pattn: Generic
Elec Tilt: 0.50

49.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	4.70 kW	307.7 m	52.0 km
45.0	4.62	365.0	54.8
90.0	4.70	393.4	56.1
135.0	8.89	385.9	59.3
180.0	14.4	394.3	62.5
225.0	13.8	397.1	62.4
270.0	8.21	342.9	56.9
315.0	4.54	325.0	52.8

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 364 m

Distance to Canadian border: 698.6 km

Distance to Mexican border: 1493.7 km

Conditions at FCC monitoring station: Powder Springs GA

Bearing: 144.2 degrees Distance: 326.7 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 290.5 degrees Distance: 1662.7 km

No land mobile station failures found

Proposal is not within the Offshore Radio Service protected area

Study cell size: 1.00 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%

**IX check failure to BLANK0000034213 CP scenario 1, 4.58% interference caused
**IX check failure to BLANK0000034213 CP scenario 2, 4.58% interference caused
**IX check failure to BLANK0000034213 CP scenario 3, 4.78% interference caused
**IX check failure to BLANK0000034213 CP scenario 4, 4.78% interference caused
**IX check failure to BLANK0000034213 CP scenario 5, 4.58% interference caused
**IX check failure to BLANK0000034213 CP scenario 6, 4.58% interference caused
**IX check failure to BLANK0000034213 CP scenario 7, 4.78% interference caused
**IX check failure to BLANK0000034213 CP scenario 8, 4.78% interference caused
**IX check failure to BLANK0000034213 CP scenario 9, 4.58% interference caused

**IX check failure to BLANK0000027632 CP scenario 1, 3.07% interference caused
**IX check failure to BLANK0000027632 CP scenario 2, 3.05% interference caused
**IX check failure to BLANK0000027632 CP scenario 3, 3.07% interference caused
**IX check failure to BLANK0000027632 CP scenario 4, 3.05% interference caused
**IX check failure to BLANK0000027632 CP scenario 5, 3.07% interference caused
**IX check failure to BLANK0000027632 CP scenario 6, 3.05% interference caused
**IX check failure to BLANK0000027632 CP scenario 7, 3.07% interference caused
**IX check failure to BLANK0000027632 CP scenario 8, 3.05% interference caused
**IX check failure to BLANK0000027632 CP scenario 9, 3.07% interference caused
**IX check failure to BLANK0000027632 CP scenario 10, 3.05% interference caused
**IX check failure to DTVBL57292 BL scenario 1, 3.27% interference caused
**IX check failure to DTVBL57292 BL scenario 2, 3.24% interference caused
**IX check failure to DTVBL57292 BL scenario 3, 3.19% interference caused
**IX check failure to DTVBL57292 BL scenario 4, 3.16% interference caused
**IX check failure to DTVBL57292 BL scenario 5, 3.26% interference caused
**IX check failure to DTVBL57292 BL scenario 6, 3.23% interference caused
**IX check failure to DTVBL57292 BL scenario 7, 3.18% interference caused
**IX check failure to DTVBL57292 BL scenario 8, 3.15% interference caused
**IX check failure to DTVBL57292 BL scenario 9, 3.27% interference caused
**IX check failure to DTVBL57292 BL scenario 10, 3.24% interference caused
**IX check failure to BLEDT20040803AAG LIC scenario 1, 0.58% interference caused
**IX check failure to BLEDT20040803AAG LIC scenario 2, 0.58% interference caused
**IX check failure to BLEDT20040803AAG LIC scenario 3, 0.58% interference caused
**IX check failure to BLEDT20040803AAG LIC scenario 4, 0.58% interference caused
**IX check failure to BLEDT20040803AAG LIC scenario 5, 0.58% interference caused
**IX check failure to BLEDT20040803AAG LIC scenario 6, 0.58% interference caused
**IX check failure to BLEDT20040803AAG LIC scenario 7, 0.58% interference caused
**IX check failure to BLEDT20040803AAG LIC scenario 8, 0.58% interference caused
**IX check failure to BLEDT20040803AAG LIC scenario 9, 0.58% interference caused
**IX check failure to BLEDT20040803AAG LIC scenario 10, 0.58% interference caused
**IX check failure to BLANK0000005264 CP scenario 1, 8.10% interference caused

---- Below is IX received by proposal BDISDTL20091001ABU ----

Proposal receives 6.28% interference from scenario 1

**MX with BLANK0000034631 APP scenario 2, 6.29% interference received