

Minor Change Expanded Technical Facility Application

This application is filed in response to the Media Bureau temporarily lifting the freeze imposed on April 5, 2013 on the filing and processing of minor modification applications that would increase a full power television station's noise-limited contour or a Class A station's protected contour in one or more directions beyond the station's authorized facilities.¹ The instant proposal, a minor change under the Commission's rules, expands the present technical facility of a television station that was not assigned a new channel in connection with the incentive auction repack process.

Post-Transition DTV Allocation Considerations

A study was performed using the FCC's software program, *tvstudy*, v.2.2.4, to ensure that the technical facility proposed herein protects the facilities proposed in the first and second priority filing window, whether those stations' applications have been granted or remain pending while protecting the construction permit facilities of reassigned stations and band changing stations filed in the initial 90-day filing window, whether those stations' applications have been granted or remain pending. Further, the instant proposal protects the facilities specified in applications filed before the April 2013 freeze with "cut-off" protection.

As demonstrated in the attached study results, the instant proposal is predicted to cause no new interference exceeding 0.5% to the populations served by any of the

¹ See *Media Bureau Temporarily Lifts the Freeze On The Filing Of Minor Modification Applications That Expand The Contour Of Full Power And Class A Television Stations*, Public Notice, DA 17-1086, Released November 6, 2017.

relevant protections discussed above. Accordingly, the instant proposal satisfies all applicable DTV interference criteria.

International DTV Considerations

As shown in the attached study, the transmitter site specified herein is within 320 kilometers of the common border between the United States of America and Canada. As demonstrated in the attached study, the maximized technical facility proposed herein satisfies DTV interference criteria with respect to all relevant Canadian allotments, applications and assignments. International notification and coordination of the instant proposal is respectfully requested.



tvstudy v2.2.4 (Z2Qqz3)
Database: localhost, Study: WGTQ-8 LicDA 85KW 171125, Model: Longley-Rice
Start: 2017.11.25 11:27:28

Study created: 2017.11.25 11:27:28

Study build station data: LMS TV 2017-11-22 (39)

Proposal: WGTQ D8 DT APP SAULT STE. MARIE, MI
File number: WGTQ-8 LicDA 85KW 171125
Facility ID: 59279
Station data: User record
Record ID: 2489
Country: U.S.
Zone: II

Search options:
Non-U.S. records included
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WWTM	D8	DT	LIC	KALAMAZOO, MI	BLCDT20090616AAV	396.7 km
Yes	WNUM	D8	DT	CP	MARQUETTE, MI	BLANK0000026951	289.9
No	WMVS	D8	DT	LIC	MILWAUKEE, WI	BLEDT20120802AAO	445.1
No	WMVS	D8	DT	APP	MILWAUKEE, WI	BMPEDT20100730ABN	445.1
No	WWTV	D9	DT	LIC	CADILLAC, MI	BLCDT20091217ACZ	233.8
Yes	CICI-TV	D8	DT	LIC	SUDBURY, ON	BLANKCANADA223	242.6
No	CFTO-DT	D8	DT	LIC	TORONTO, ON	BLANKCANADA232	458.4
No	CIVA-DT-1	D8	DT	LIC	ROUYNORANDA, QC	BLANKCANADA298	454.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D8
Latitude: 46 3 8.00 N (NAD83)
Longitude: 84 6 38.00 W
Height AMSL: 483.0 m
HAAT: 288.0 m
Peak ERP: 85.0 kW
Antenna: DIE-THB-C2-6H/12HD-1 (ID 87544) 0.0 deg
Elev Pattn: Generic
Elec Tilt: 0.50

36.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	55.9 kW	300.7 m	106.3 km
45.0	7.70	296.9	90.2
90.0	0.884	299.7	73.8
135.0	7.70	285.9	89.7
180.0	55.9	296.8	106.1
225.0	75.2	287.8	108.1
270.0	83.6	261.1	107.5
315.0	75.2	278.6	107.6

**Proposal is within coordination distance of Canadian border
Distance to Canadian border: 10.9 km

Distance to Mexican border: 2350.2 km

Conditions at FCC monitoring station: Allegan MI
Bearing: 201.6 degrees Distance: 410.2 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 256.6 degrees Distance: 1827.9 km

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%

 Interference to BLANK0000026951 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	WNMU	D8	DT	CP	MARQUETTE, MI	BLANK0000026951			
Undesireds:	WGTQ	D8	DT	BL	SAULT STE. MARIE, MI	DTVBL59279	289.9 km		
	WGTQ	D8	DT	APP	SAULT STE. MARIE, MI	WGTQ-8 LicDA 85KW 1711	289.9		
	WDSE	D8	DT	LIC	DULUTH, MN	BLEDT20090618ABE	329.7		
	WKBT-DT	D8	DT	LIC	LA CROSSE, WI	BLCDT20090507ACT	370.9		
	WMVS	D8	DT	LIC	MILWAUKEE, WI	BLEDT20120802AAO	362.0		
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX		
29834.8	181,736	29245.8	179,662	29113.6	177,986	28934.0	177,233	0.62	0.42
Undesired			Total IX		Unique IX, before	Unique IX, after			
WGTQ D8 DT BL		12.0	37		12.0	37			
WGTQ D8 DT APP		191.6	790			191.6	790		
WDSE D8 DT LIC		96.2	1,627		96.2	1,627	96.2	1,627	
WKBT-DT D8 DT LIC		4.0	0		4.0	0	4.0	0	
WMVS D8 DT LIC		20.0	12		20.0	12	20.0	12	

 Interference to BLANK0000026951 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	WNMU	D8	DT	CP	MARQUETTE, MI	BLANK0000026951			
Undesireds:	WGTQ	D8	DT	BL	SAULT STE. MARIE, MI	DTVBL59279	289.9 km		
	WGTQ	D8	DT	APP	SAULT STE. MARIE, MI	WGTQ-8 LicDA 85KW 1711	289.9		
	WDSE	D8	DT	LIC	DULUTH, MN	BLEDT20090618ABE	329.7		
	WKBT-DT	D8	DT	LIC	LA CROSSE, WI	BLCDT20090507ACT	370.9		
	WMVS	D8	DT	APP	MILWAUKEE, WI	BMPEDT20100730ABN	362.0		
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX		
29834.8	181,736	29245.8	179,662	29057.7	177,706	28878.0	176,953	0.62	0.42
Undesired			Total IX		Unique IX, before	Unique IX, after			
WGTQ D8 DT BL		12.0	37		12.0	37			
WGTQ D8 DT APP		191.6	790			191.6	790		
WDSE D8 DT LIC		96.2	1,627		96.2	1,627	96.2	1,627	
WKBT-DT D8 DT LIC		4.0	0		4.0	0	4.0	0	
WMVS D8 DT APP		75.9	292		75.9	292	75.9	292	

 Interference to BLANKCANADA223 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	CICI-TV	D8	DT	LIC	SUDBURY, ON	BLANKCANADA223			
Undesireds:	WGTQ	D8	DT	BL	SAULT STE. MARIE, MI	DTVBL59279	242.6 km		
	WGTQ	D8	DT	APP	SAULT STE. MARIE, MI	WGTQ-8 LicDA 85KW 1711	242.6		
	CIVA-DT-1	D8	DT	LIC	ROUYNORANDA, QC	BLANKCANADA298	246.0		
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX		
27292.3	196,106	25776.8	195,002	25664.6	195,002	25592.7	195,002	0.28	0.00
Undesired			Total IX		Unique IX, before	Unique IX, after			
WGTQ D8 DT BL		0.0	0		0.0	0			
WGTQ D8 DT APP		71.9	0			71.9	0		
CIVA-DT-1 D8 DT LIC		112.2	0		112.2	0	112.2	0	

 Interference to proposal scenario 1
 0.69% interference received

Desired:	Call WGTQ	Chan D8	Svc DT	Status APP	City, State SAULT STE. MARIE, MI	File Number WGTQ-8 LicDA 85KW 1711	Distance 1711
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Undesireds:	WNMU	D8	DT	CP	MARQUETTE, MI	BLANK0000026951	289.9 km
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	Service area		Terrain-limited		IX-free	Percent IX	
21158.3	120,597	20645.6	116,237	20249.7	115,435	1.92	0.69
10219.9	92,323	9398.1	91,814	9322.4	91,814	0.81	0.00 (in Canada)

Undesired			Total IX		Unique IX	Prcnt Unique IX	
WNMU D8 DT CP		395.9	802	395.9	802	1.92	0.69
WNMU D8 DT CP		75.7	0	75.7	0	0.81	0.00 (in Canada)