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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of:
WWAZ LICENSE, LLC
To Amend the Post-Transition
Digital Television Table of Allotment
for Station WWAZ-DT, Fond du Lac, WI

} MB Docket No.: 08-130
}
} RM - 11462
}

To: The Secretary
Attn: Chief, Video Division
Media Bureau

FILED/ACCEPTED

JUN 16 2009

Federal Communications Commission
Office of the Secretary

**FURTHER SUPPLEMENT TO
PETITION FOR RULEMAKING**

WWAZ License, LLC ("Petitioner"), by and through its attorneys, and pursuant to Section 73.623 of the Commission's rules, 47 C.F.R. § 73.623 (2007), hereby submits this Further Supplement to the Petition for Rulemaking filed on June 19, 2008, and amended on August 22, 2008, to change the post-transition digital television ("DTV") channel allotment of Station WWAZ-DT, Fond du Lac, Wisconsin (the "Station") to Channel 5, and to make related technical changes to the Station's technical parameters. Petitioner supplemented its Petition on February 23, 2009, to incorporate the utilization of digital fill-in television translators to provide service to the loss area created by the proposed modification to the Station.

Attached hereto as Exhibit A is an Engineering Statement of Smith and Fisher, which discusses modifications to the pending applications for the digital fill-in television translators to reduce the service area of the station beyond the previously-authorized analog service area. While the translators will continue to slightly expand the coverage area of the Station, the instant Supplement (and concurrently-filed amendments to the pending applications), will reduce the

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expansion of the service area to 1,917 persons, which is just 0.1% of the previously-authorized analog service area.

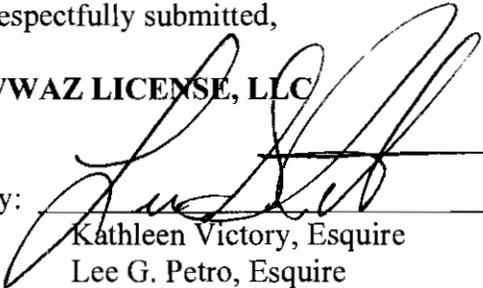
As detailed in the Engineering Statement, although the translators will not provide service to 2,086 persons that received service from the previously-authorized analog service, the area losing service will be served by at least seven other television stations. As such, no white or grey areas will be created by the grant of the instant proposal.

Therefore, Petitioner respectfully requests that the Commission expeditiously process and grant the pending request to amend the post-transition DTV Table of Allotments for WWAZ-DT. There is an urgent need for the processing and grant of the Petition, as the construction of the modified facility must take place as soon as possible to avoid the harsh winter conditions in Wisconsin.

As shown herein, the requested changes comply with all applicable legal and technical requirements, and the Petitioner has taken steps to ameliorate any loss of service created by the proposed technical changes. As such, the grant of the instant Petition for Rulemaking would serve the public interest.

Respectfully submitted,

WWAZ LICENSE, LLC

By: 

Kathleen Victory, Esquire

Lee G. Petro, Esquire

FLETCHER, HEALD & HILDRETH, PLC

1300 North 17th Street, 11th Floor

Arlington, Virginia 22209

703-812-0400 – Telephone

Its Attorneys

June 16, 2009

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of WWAZ LICENSE, LLC, licensee of WWAZ-DT in Fond du Lac, Wisconsin, in support of this additional supplement to its pending Petition for Rulemaking (BPRM-20080619ALY) to substitute Channel 5 for Channel 44 as its post-transition digital television allotment. In the referenced Rulemaking, it was also proposed to move the transmitter site from the Iron Ridge tower site to a tower located in the Milwaukee antenna farm. As a result of this change in transmitter site, a "loss" area is created along the western and northwestern edge of the Grade B service contour of WWAZ-TV on Channel 68. Accordingly, the licensee has filed applications to construct two fill-in translators which will serve almost all of this loss area. One (BDRTCT-20090223ABX) will operate on Channel 15 in Ripon, Wisconsin, and serve the northern portion of the loss area. The other (BDRTCT-20090223ABW) will operate on Channel 30 in Columbus, Wisconsin, and cover the southern part of the loss area. The amended engineering proposals for the fill-in translators in Ripon and Columbus are provided in Appendix A and Appendix B, respectively.

Attached hereto as Figure 1 is a map on which we have plotted the service contours of the analog WWAZ-TV facility on Channel 68 and the proposed digital facility on Channel 5. We have highlighted in green the loss area created by the change in transmitter sites proposed in the Channel 5 petition. To this map we have added the 41 dBu service contours of the proposed fill-in translators. While the population within the entire loss area is 20,613 (based on the 2000 U.S. Census), the combination of the two fill-in translators will serve all but 2,086 people in this area. Thus, the fill-in translators will cover 89.9 percent of the total loss area population. The remaining loss area represents only 0.1 percent of the WWAZ-TV Grade B service population.

We have analyzed this remaining loss area with respect to other post-transition digital services that will be available to viewers in the area of concern. Figure 2 is a tabulation of post-transition digital television allotments that place a service contour over a portion of the loss area. Figure 3 is a "spaghetti" map upon which the proposed WWAZ-DT Channel 5 28 dBu, analog WWAZ-TV Grade B and fill-in translators' 41 dBu contours are plotted in relation to the service contours of the stations listed in Figure 2. Larger pockets created by overlapping contours are defined on the map by the number of other services received therein. The three very small areas of the loss area that will not be covered by the fill-in translators are highlighted on this map and are labeled as areas "A", "B" and "C."

The Commission considers an area to be "underserved" if it lies within the service contours of fewer than five television stations. Area "A" is served by eight other off-air post-transition digital television contours. Areas "B" and "C" lie within the contours of seven such contours. Therefore, these areas can be considered to be adequately served by other digital television signals.

It is important to note that the extension of the translators' service contours beyond the WWAZ-TV Grade B contour is extremely small. The population residing within the extension area is only 1,917. This represents a value of only 0.05% of the proposed Channel 5 DTV service population and only 0.1 percent of the analog Channel 68 Grade B service population. As a result, the extension beyond the Grade B contour can be considered *de minimis*.

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

June 15, 2009

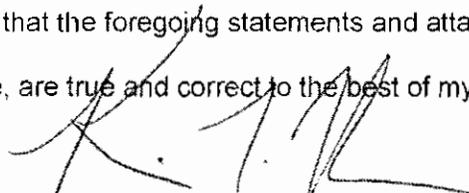
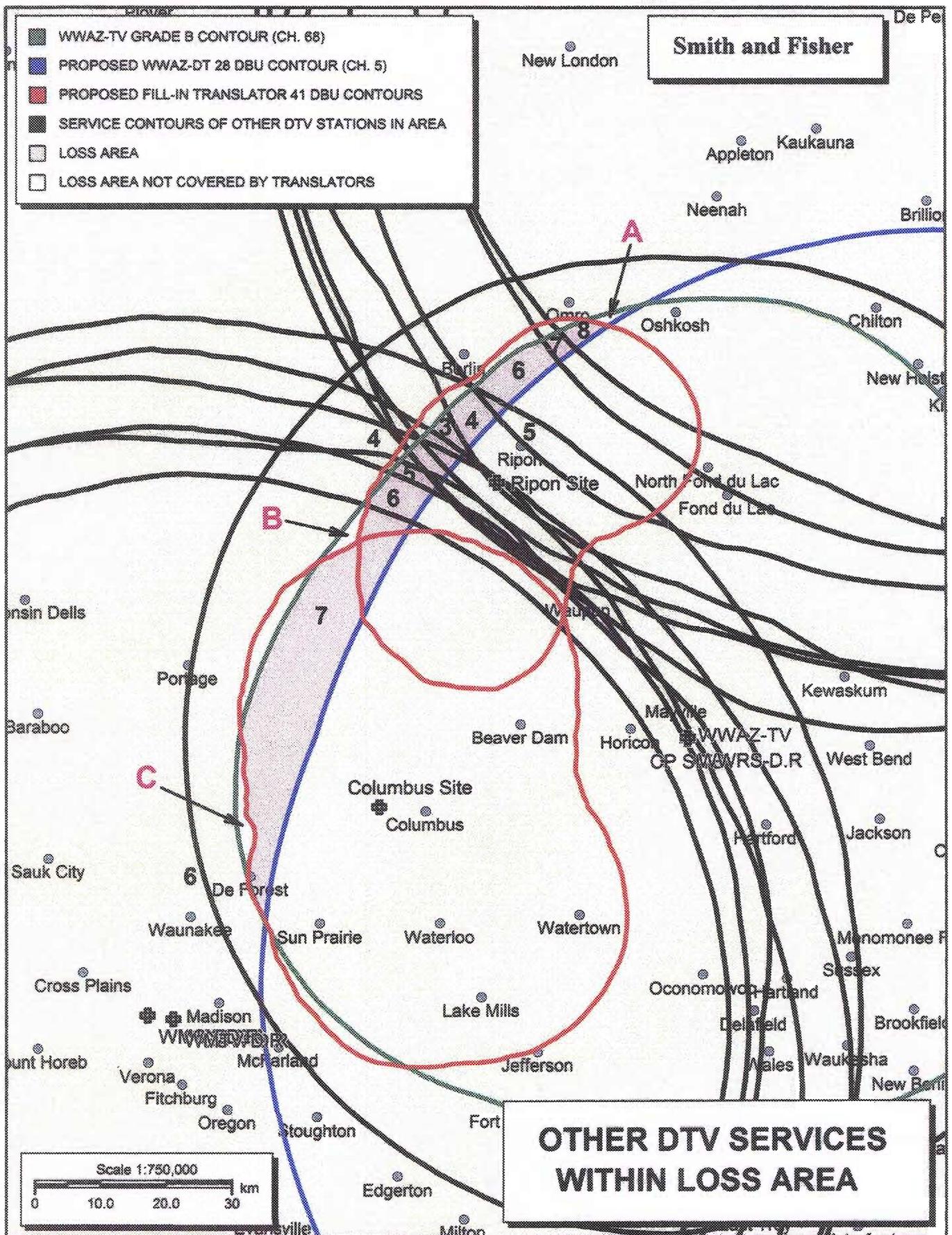

KEVIN T. FISHER

FIGURE 2

OTHER POST-TRANSITION DIGITAL SERVICES
IN WWAZ-DT LOSS AREAPROPOSED WWAZ-DT
CHANNEL 5 – FOND DU LAC, WISCONSIN

<u>CALL SIGN</u>	<u>CITY, STATE</u>	<u>CHANNEL</u>
WACY-DT	Appleton, WI	27
WBAY-DT	Green Bay, WI	23
WBUW-DT	Janesville, WI	32
WFRV-DT	Green Bay, WI	39
WGBA-DT	Green Bay, WI	41
WHA-DT	Madison, WI	20
WISC-DT	Madison, WI	50
WIWB-DT	Suring, WI	21
WKOW-DT	Madison, WI	26
WLUK-DT	Green Bay, WI	11
WMSN-DT	Madison, WI	11
WMTV-DT	Madison, WI	19
WPNE-DT	Green Bay, WI	42
WWRS-DT	Maryville, WI	43

FIGURE 3



APPENDIX A

Section III - Engineering (Digital)

TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

TECH BOX

1 Channel: 15

2 Translator Input Channel No 5

3 Station proposed to be rebroadcast

Call Sign WWAZ-DT	City Fond du Lac	State Wisconsin	Channel 5
----------------------	---------------------	--------------------	--------------

4 Antenna Location Coordinates. (NAD 27)

<u>43</u>	<u>47</u>	<u>31</u>	<input checked="" type="checkbox"/> N	<input type="checkbox"/> S Latitude
<u>88</u>	<u>52</u>	<u>54</u>	<input type="checkbox"/> E	<input checked="" type="checkbox"/> W Longitude

5 Antenna Structure Registration Number: 1035940

Not applicable See Explanation in Exhibit No. FAA Notification Filed with FAA

6 Antenna Location Site Elevation Above Mean Sea Level: 329.2 meters

7 Overall Tower Height Above Ground Level: 128.6 meters

8 Height of Radiation Center Above Ground Level: 100 meters

9 Maximum Effective Radiated Power (ERP): 0.1 kW

10 Transmitter Output Power: 0.006 kW

11. a. Transmitting Antenna: Nondirectional Directional Directional composite

Manufacturer Andrew	Model ALP8L1-HSBR
------------------------	----------------------

b. Electrical Beam Tilt: 0.25 degrees Not applicable

c. Directional Antenna Relative Field Values:

Rotation: 130 ° No rotation N/A (Nondirectional)

Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value
0		60		120		180		240		300	
10		70		130		190		250		310	
20		80		140		200		260		320	
30		90		150		210		270		330	
40		100		160		220		280		340	
50		110		170		230		290		350	
Additional Azimuths											

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

12. Out-of-Channel Emission Mask: Simple Stringent

CERTIFICATION

13. **Interference.** The proposed facility complies with all of the following applicable rule sections. 47 C.F.R. Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b) and 73.1030. Yes No See Explanation in Exhibit No. E

14. **Environmental Protection Act.** The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine RF compliance. An Exhibit is required. Yes No See Explanation in Exhibit No. F

Exhibit No.
F

By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.

15. **Channels 52-59.** If the proposed channel is within channels 52-59, the applicant certifies compliance with the following requirements, as applicable:

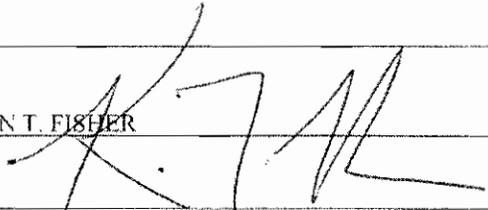
- The applicant is applying for a digital companion channel for which no suitable channel from channel 2-51 is available.
- Pursuant to Section 74.786(d), the applicant has notified, within 30 days of filing this application, all commercial wireless licensees of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of

PREPARER'S CERTIFICATION ON PAGE 8 MUST BE COMPLETED AND SIGNED.

16 **Channels 60-69.** If the proposed channel is within channels 60-69, the applicant certifies compliance with the following requirements, as applicable

- Pursuant to Section 74.786(e), the applicant has notified, within 30 days of filing this application, all commercial wireless licensees of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.
- Pursuant to Section 74.786(e), the applicant proposing operation on channel 63, 64, 68 and 69 ("public safety channels") has secured a coordinated spectrum use agreement(s) with 700 MHz public safety regional planning committee(s) and state frequency administrator(s) of the region(s) and state(s) within which the antenna site of the digital LPTV or TV translator station is proposed to locate, and those adjoining regions and states with boundaries within 75 miles of the proposed station location
- Pursuant to Section 74.786(e), an applicant for a channel adjacent to channel 63, 64, 68 or 69 has notified, within 30 days of filing this application, the 700 MHz public safety regional planning committee(s) and state administrator(s) of the region and state containing the proposed digital LPTV or TV translator antenna site and regions and states whose geographic boundaries lie within 50 miles of the proposed LPTV or TV translator antenna site

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief

Name KEVIN T. FISHER		Relationship to Applicant (e.g., Consulting Engineer) ENGINEERING CONSULTANT	
Signature 		Date June 12, 2009	
Mailing Address SMITH AND FISHER, 2237 Tackett's Mill Drive, Suite A			
City Lake Ridge		State or Country (if foreign address) Virginia	ZIP Code 22192
Telephone Number (include area code) (703) 494-2101		E-Mail Address (if available) Kevin@smithandfisher.com	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 307)

EXHIBIT A

ENGINEERING STATEMENT

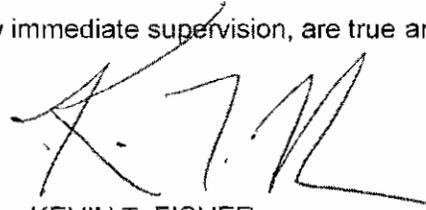
The engineering data contained herein have been prepared on behalf of WWAZ LICENSE, LLC, licensee of Television Station WWAZ-DT in Fond du Lac, Wisconsin, in support of this amendment to its Application for Construction Permit BDRTCT-20090223ABX, which specifies operation of a digital fill-in translator on Channel 15 in Ripon, Wisconsin. WWAZ-DT is allotted on Channel 44 at a site near Iron Ridge, Wisconsin. The station owner has filed a Petition for Rulemaking (BPRM-20080619ALY) to move the facility to the Milwaukee antenna farm and operate on Channel 5. As a result of this move, a loss area would be created along the western and northwestern edge of the analog WWAZ-TV Grade B service contour. A grant of the instant proposal would allow the station to place a predicted service contour over the northern half of the loss area. The purpose of this amendment is to reduce the proposed effective radiated power in order to minimize the extension of the translator's 41 dBu contour beyond the Grade B contour of analog WWAZ-TV. No change in the site location, antenna model, or antenna height is proposed herein.

It is proposed to mount a standard ERI (Andrew) directional antenna at the 100-meter level of an existing 129-meter communications tower. Exhibit B is a map upon which the predicted service contours are plotted. It is important to note that the proposed 41 dBu contour encompasses the station's city of license. Exhibit C depicts the coverage of the proposed translator with respect to the WWAZ-DT loss area. Operating parameters for the proposed facility are tabulated in Exhibit D. An interference study is provided in Exhibit E, and a power density calculation follows as Exhibit F.

EXHIBIT A

Because no change in the overall height or location of the existing tower is proposed, the FAA has not been notified of this application. The FCC issued Antenna Structure Registration Number 1035940 to this tower.

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.



KEVIN T. FISHER

June 12, 2009

CONTOUR POPULATION
51 DBU : 18,571
41 DBU : 40,059

Smith and Fisher

41 DBU

51 DBU

Princeton

Berlin

Omro

Oshkosh

Green Lake

Ripon

Rosendale

North Fo

Green Lake

Proposed Site

Marquette

Fairwater

Brandon

Kingston

Markesan

Oakfield

Waupun

Brown

Friesland

Fox Lake

Cambria

Randolph

Kekoskee

Beaver Dam

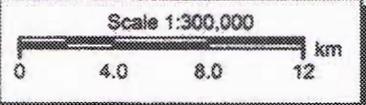
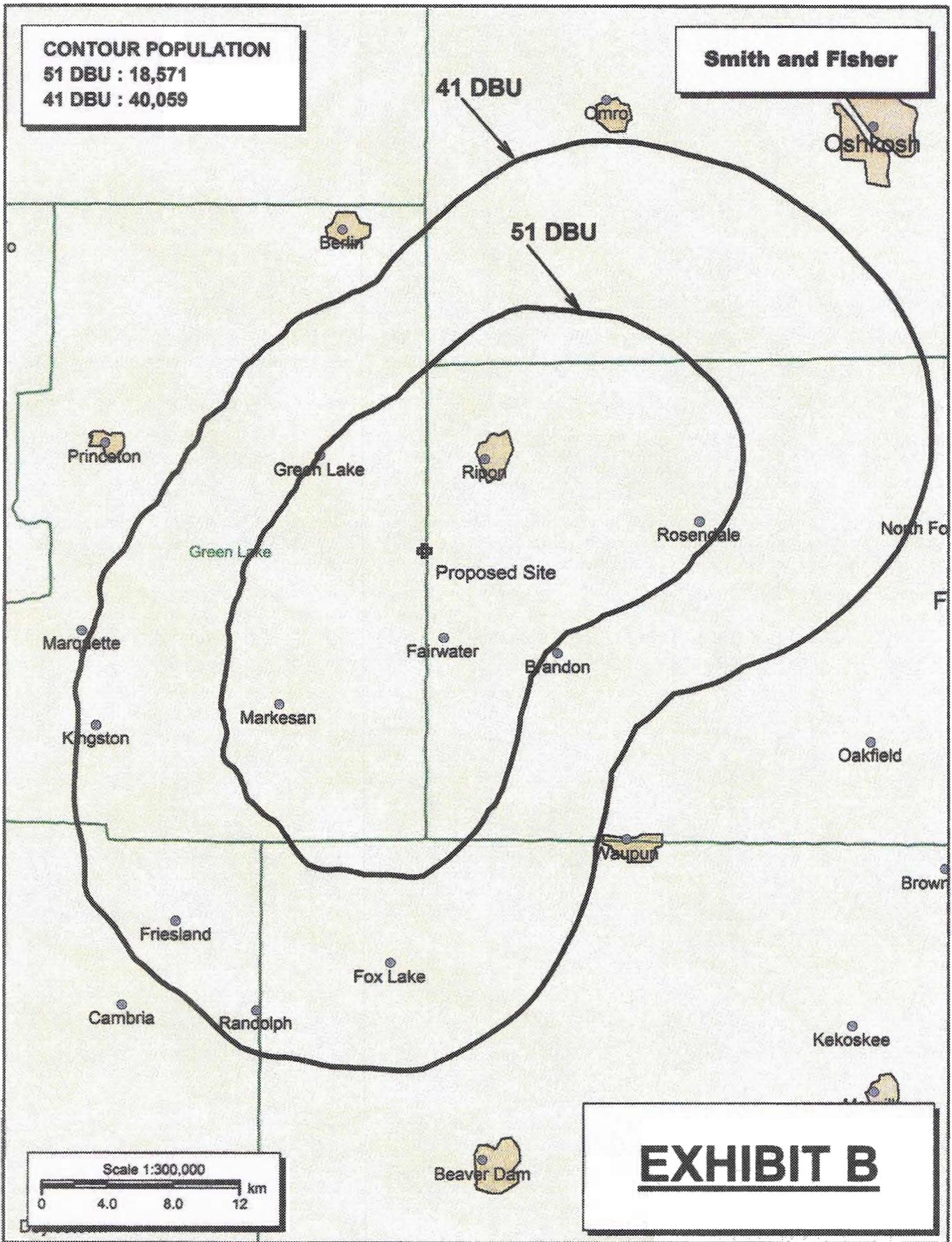
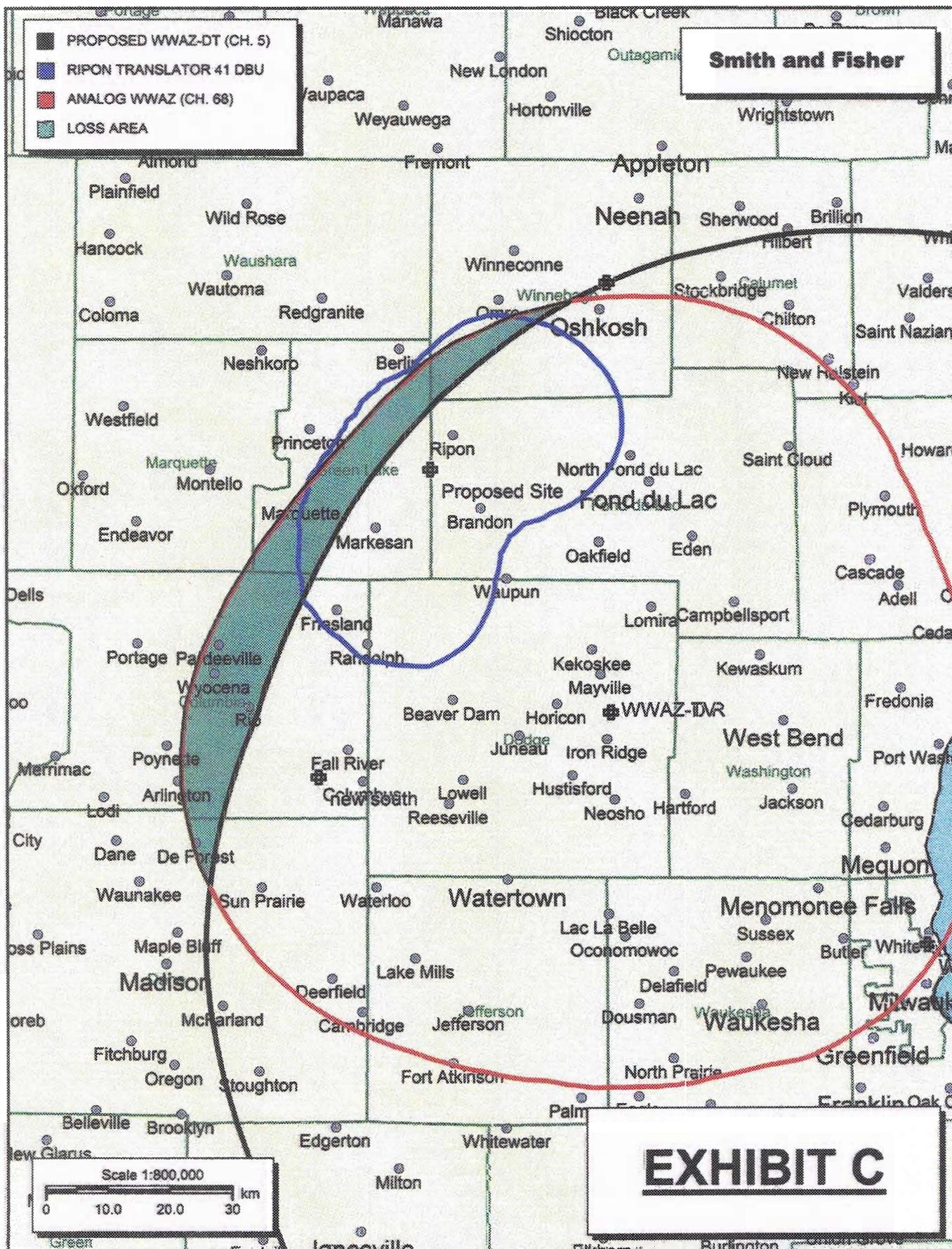


EXHIBIT B





PROPOSED OPERATING PARAMETERS

PROPOSED FILL-IN TRANSLATOR
CHANNEL 15 - RIPON, WISCONSIN

[AMENDMENT TO BDRTCT-20090223ABX]

Transmitter Power Output:	6 watts
Transmission Line Efficiency:	68.7%
Antenna Power Gain – Toward Horizon:	24.89
Antenna Power Gain – Main Lobe:	24.89
Effective Radiated Power – Toward Horizon:	0.1 kw
Effective Radiated Power – Main Lobe:	0.1 kw
Transmitter Make and Model:	Type-accepted
Transmission Line Make and Model:	Andrew HJ7-50A
Size and Type:	1-5/8" air heliax
Length:	350 feet*
Antenna Make and Model:	ERI ALP8LI-HSBR
Orientation	130° T
Beam Tilt	0.5 degrees
Radiation Center Above Ground:	100 meters
Radiation Center Above Mean Sea Level:	429 meters

*estimated

LONGLEY-RICE INTERFERENCE STUDY
PROPOSED FILL-IN TRANSLATOR
CHANNEL 15 – RIPON, WISCONSIN
[AMENDMENT TO BDRCT-20090223ABX]

For the original Ripon translator application, we conducted a detailed interference study using the Longley-Rice methodology contained in the Commission's *OET Bulletin No. 69*, with respect to all facilities of concern. The software utilized a 1-square kilometer cell size, calculated signal strength at 1.0 kilometer increments along each radial studied, and employed the 1990 U.S. Census to count population within cells. In addition, the program did not attribute interference to the proposed facility in cells within the protected contour of the station under study where interference from another source (other than that proposed herein) already is predicted to exist (also known as "masking"). A summary of those results is provided in Exhibit E-2. That study was conducted with a proposed effective radiated power of 7.0 kw. The instant facility specifies an ERP of only 100 watts. Therefore, it can be concluded that the facility proposed herein causes no significant new interference to any of the potentially affected full-power or low-power analog or digital television stations.

As a result, it is believed that the proposed facility complies with the requirements of Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b) and 73.1030 of the Commission's Rules.

Summary Study

1990 Census data selected
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 02-11-2009 Time: 08:54:45

Record Selected for Analysis

RIPON SI USERRECORD-01 OSHKOSH WI US
Channel 15 ERP 7. kW HAAT 147. m RCAMSL 00429 m SIMPLE MASK
Latitude 043-47-31 Longitude 0088-52-54
Status APP Zone 1 Border
Dir Antenna Make usr Model USRPAT01 Beam tilt N Ref Azimuth
130.
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 1.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Not full service station

Facility meets maximum power limit

Azimuth (Deg)	ERP (kW)	HAAT (m)	51.0 dBu F(50,90) (km)
0.0	0.557	145.1	29.5
45.0	5.384	140.3	40.8
90.0	4.097	129.2	38.7
135.0	0.464	127.8	27.4
180.0	5.964	144.5	41.6
225.0	3.844	140.1	39.1
270.0	0.312	166.9	27.9
315.0	0.140	180.8	24.7

Contour Overlap to Proposed Station

Contour Overlap Evaluation to Proposed Station Complete

LANDMOBILE SPACING VIOLATIONS FOUND

To CHICAGO IL Channel 15 from Channel 15
Required separation 250.0 km Actual 236.0 km Short 14.0 km
Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station	ARN
15	Call City/State RIPON WI OSHKOSH WI	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
14	WXOW-TV	LA CROSSE WI	199.4	CP MOD	BMPCDT	-
20080619	AEF					
14	WIWB	SURING WI	115.8	LIC	BLCT	-
19980622	KF					
15	KYOU-TV	OTTUMWA IA	383.0	CP MOD	BMPCDT	-
20080620	AI					
15	KYOU-TV	OTTUMWA IA	383.0	LIC	BLCT	-
19960528	KO					
15	WXSP-CA	GRAND RAPIDS MI	267.9	LIC	BLTT	-
19910507	JJ					
15	WXSP-CA	GRAND RAPIDS MI	267.9	CP	BDFCDTA	-
20060330	AG					
15	WXSP-CA	GRAND RAPIDS MI	267.9	APP	BMPDTA	-
20080804	AD					
15	W15BP	PINCONNING MI	384.1	LIC	BLTTL	-
20030609	AA					
15	W15BM	TRAVERSE CITY MI	276.4	APP	BPTTL	-
20040407	AB					
15	W15BM	TRAVERSE CITY MI	275.9	LIC	BLTTL	-
20001212	AA					
15	KSMQ-TV	AUSTIN MN	331.2	LIC	BMLET	-
20041214	AD					
15	WQOW-TV	EAU CLAIRE WI	234.1	CP MOD	BMPCDT	-
20041001	AO					
16	WTVO	ROCKFORD IL	168.9	LIC	BLCDT	-
20021024	AA					
16	W29DJ	SHEBOYGAN WI	91.2	CP	BDFCDTT	-
20060329	AE					
16	W16AY	WHITING WI	104.5	LIC	BLTTL	-
20001213	AB					
17	W17CF	OSHKOSH WI	41.4	LIC	BLTT	-
19990608	JA					
18	WVTV	MILWAUKEE WI	110.4	LIC	BLCT	-
19870804	KE					
22	960920YL	GREEN BAY WI	71.0	APP	BPCT	-
19960920	YL					
23	W23BW	MADISON WI	95.3	LIC	BLTTA	-
20031125	AA					
23	W23BW	MADISON WI	95.3	APP	BPTTA	-
20030326	AH					

Study of this proposal found the following interference problem(s):

NONE.

EXHIBIT F

POWER DENSITY CALCULATION
PROPOSED FILL-IN TRANSLATOR
CHANNEL 15 - RIPON, WISCONSIN
[AMENDMENT TO BDRTCT-20090223ABX]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Ripon facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 0.1 kw, an antenna radiation center 100 meters above ground, and the vertical pattern of the Andrew antenna, maximum power density two meters above ground of 0.000020 mw/cm^2 is calculated to occur 40 meters northeast and southwest of the base of the tower. Since this is less than 0.1 percent of the 0.32 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 15 (476-482 MHz), this proposal may be excluded from consideration with respect to public exposure to nonionizing electromagnetic radiation.

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 nonionizing radiation.

APPENDIX B

Section III - Engineering (Digital)

TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

TECH BOX

1 Channel 30

2 Transfator Input Channel No 5

3 Station proposed to be rebroadcast:

Call Sign WWAZ-DI	City Fond du Lac	State Wisconsin	Channel 5
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4 Antenna Location Coordinates (NAD 27)

<u>43</u>	<u>20</u>	<u>40</u>	<input checked="" type="checkbox"/> N	<input type="checkbox"/> S	Latitude
<u>89</u>	<u>06</u>	<u>10</u>	<input type="checkbox"/> E	<input checked="" type="checkbox"/> W	Longitude

5 Antenna Structure Registration Number: 1224263

Not applicable See Explanation in Exhibit No. FAA Notification Filed with FAA

6 Antenna Location Site Elevation Above Mean Sea Level 275 meters

7 Overall Tower Height Above Ground Level: 113 meters

8 Height of Radiation Center Above Ground Level: 99 meters

9 Maximum Effective Radiated Power (ERP): 2.0 kW

10 Transmitter Output Power 0.12 kW

11. a Transmitting Antenna: Nondirectional Directional Directional composite

Manufacturer Andrew	Model ALP8L1-HSBR
------------------------	----------------------

b Electrical Beam Tilt: 0.25 degrees Not applicable

Directional Antenna Relative Field Values.

Rotation 80 No rotation N/A (Nondirectional)

Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value
0		60		120		180		240		300	
10		70		130		190		250		310	
20		80		140		200		260		320	
30		90		150		210		270		330	
40		100		160		220		280		340	
50		110		170		230		290		350	
Additional Azimuths											

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

12 Out-of-Channel Emission Mask: Simple Stringent

CERTIFICATION

13 **Interference.** The proposed facility complies with all of the following applicable rule sections. 47 C.F.R. Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b) and 73.1030 Yes No See Explanation in Exhibit No. E

14 **Environmental Protection Act.** The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine RF compliance, an exhibit is required. Yes No See Explanation in Exhibit No. F

Exhibit No. F

By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.

15 **Channels 52-59.** If the proposed channel is within channels 52-59, the applicant certifies compliance with the following requirements, as applicable

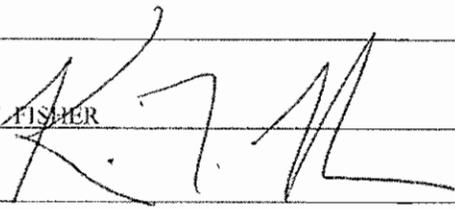
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PREPARER'S CERTIFICATION ON PAGE 8 MUST BE COMPLETED AND SIGNED.

16 **Channels 60-69.** If the proposed channel is within channels **60-69**, the applicant certifies compliance with the following requirements, as applicable

- Pursuant to Section 74.786(e), the applicant has notified, within 30 days of filing this application, all commercial wireless licensees of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.
- Pursuant to Section 74.786(e), the applicant proposing operation on channel 63, 64, 68 and 69 ("public safety channels") has secured a coordinated spectrum use agreement(s) with 700 MHz public safety regional planning committee(s) and state frequency administrator(s) of the region(s) and state(s) within which the antenna site of the digital LPTV or TV translator station is proposed to locate, and those adjoining regions and states with boundaries within 75 miles of the proposed station location
- Pursuant to Section 74.786(e), an applicant for a channel adjacent to channel 63, 64, 68 or 69 has notified, within 30 days of filing this application, the 700 MHz public safety regional planning committee(s) and state administrator(s) of the region and state containing the proposed digital LPTV or TV translator antenna site and regions and states whose geographic boundaries lie within 50 miles of the proposed LPTV or TV translator antenna site.

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name KEVIN T. FISHER		Relationship to Applicant (e.g., Consulting Engineer) ENGINEERING CONSULTANT	
Signature 		Date June 12, 2009	
Mailing Address SMITH AND FISHER, 2237 Tackett's Mill Drive, Suite A			
City Lake Ridge		State or Country (if foreign address) Virginia	ZIP Code 22192
Telephone Number (include area code) (703) 494-2101		E-Mail Address (if available) Kevin@smithandfisher.com	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 512(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 563)

EXHIBIT A

ENGINEERING STATEMENT

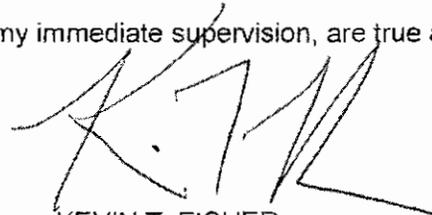
The engineering data contained herein have been prepared on behalf of WWAZ LICENSE, LLC, licensee of Television Station WWAZ-DT in Fond du Lac, Wisconsin, in support of this amendment to its Application for Construction Permit BDRTCT-20090223ABW, which specifies operation of a digital fill-in translator on Channel 30 in Columbus, Wisconsin. WWAZ-DT is allotted on Channel 44 at a site near Iron Ridge, Wisconsin. The station owners have filed a Petition for Rulemaking (BPRM-20080619ALY) to move the facility to the Milwaukee antenna farm and operate on Channel 5. As a result of this move, a loss area would be created along the western and northwestern edge of the analog WWAZ-TV Grade B service contour. A grant of the instant proposal would allow the station to place a predicted service contour over the southern half of the loss area. The purpose of this amendment is to reduce the proposed effective radiated power and specify a different antenna make and model so as to minimize the extension of the translator's service contour beyond the WWAZ-TV Grade B contour. No change in site location or antenna height is proposed herein.

It is proposed to mount a standard ERI (Andrew) directional antenna at the 99-meter level of an existing 113-meter communications tower. Exhibit B is a map upon which the predicted service contours are plotted. It is important to note that the proposed 41 dBu contour encompasses the station's city of license. Exhibit C depicts the coverage of the proposed translator with respect to the WWAZ-DT loss area. Operating parameters for the proposed facility are tabulated in Exhibit D. An interference study is provided in Exhibit E, and a power density calculation follows as Exhibit F.

EXHIBIT A

Because no change in the overall height or location of the existing tower is proposed, the FAA has not been notified of this application. The FCC issued Antenna Structure Registration Number 1224263 to this tower.

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.



KEVIN T. FISHER

June 12, 2009

CONTOUR POPULATION
51 DBU : 37,270
41 DBU : 157,118

Smith and Fisher

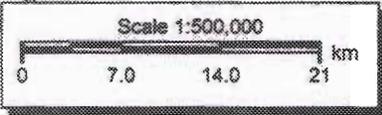
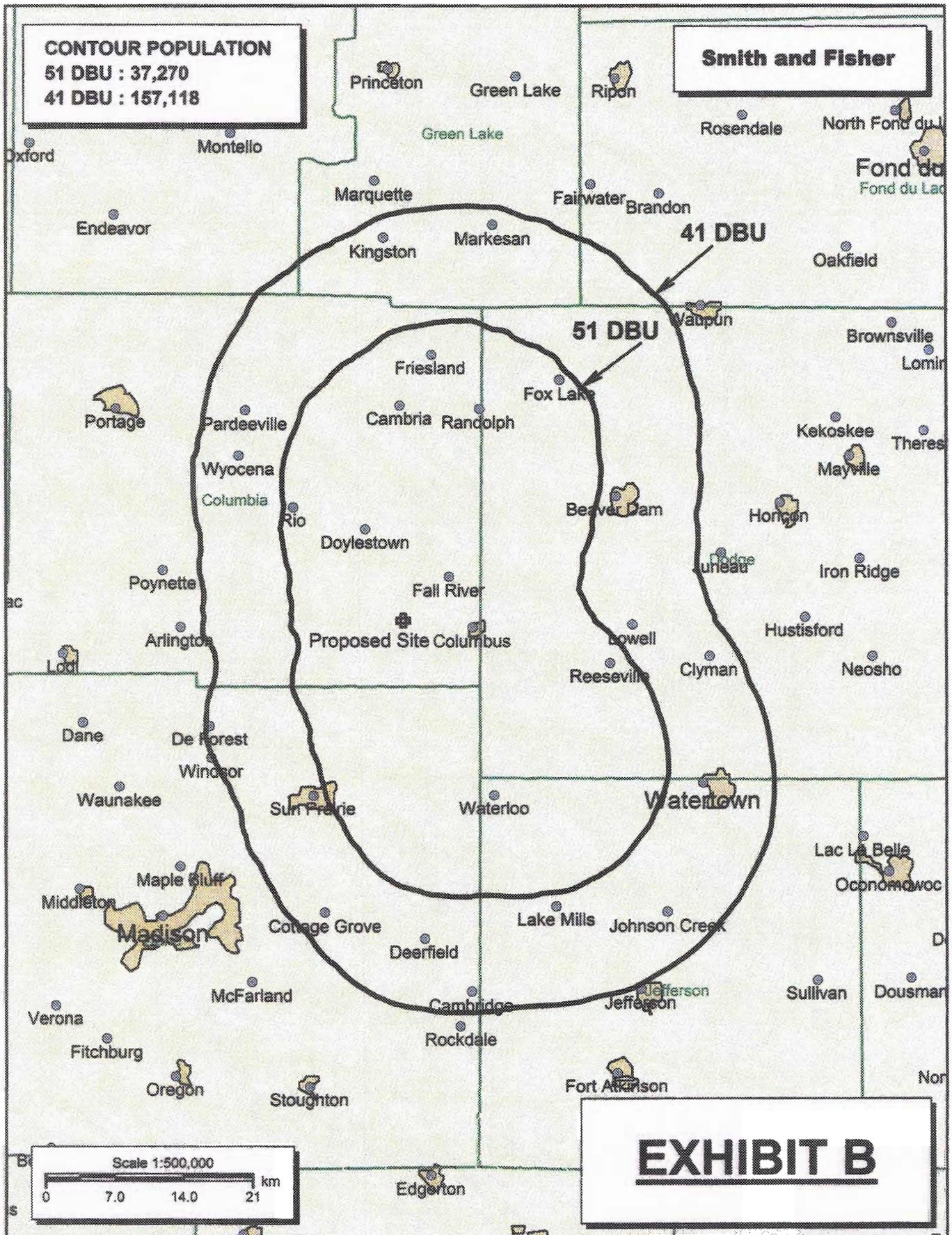
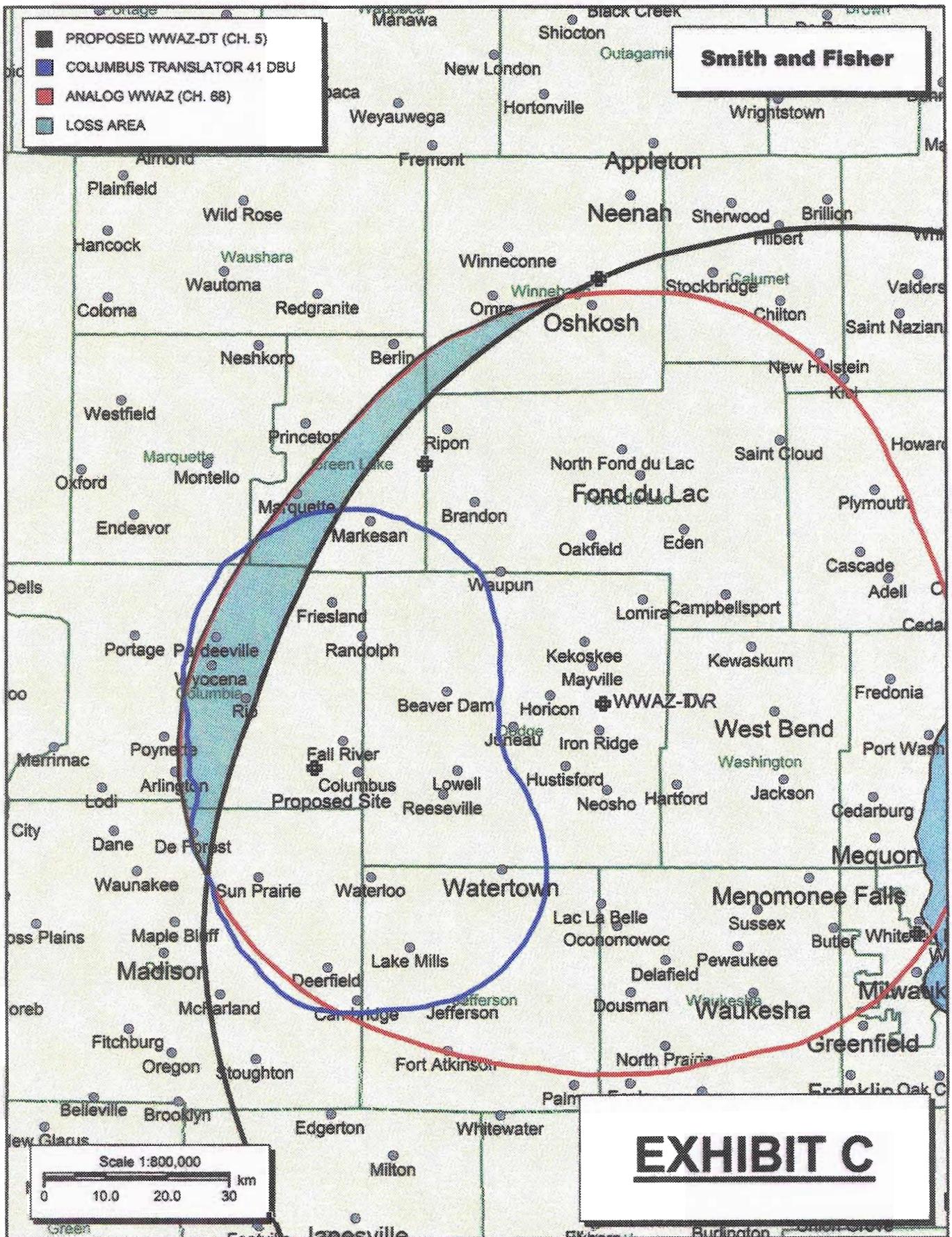


EXHIBIT B



PROPOSED OPERATING PARAMETERS

PROPOSED FILL-IN TRANSLATOR
CHANNEL 30 – COLUMBUS, WISCONSIN
[AMENDMENT TO BDRTCT-20090223ABW]

Transmitter Power Output:	0.12 kw
Transmission Line Efficiency:	66.2%
Antenna Power Gain -- Toward Horizon:	24.89
Antenna Power Gain -- Main Lobe:	24.89
Effective Radiated Power -- Toward Horizon:	2.0 kw
Effective Radiated Power -- Main Lobe:	2.0 kw
Transmitter Make and Model:	Type-accepted
Transmission Line Make and Model:	Andrew HJ7-50A
Size and Type:	1-5/8" air heliax
Length:	350 feet*
Antenna Make and Model:	ERI ALP8L1-HSBR
Orientation	80° T
Beam Tilt	0.25°
Radiation Center Above Ground:	99 meters
Radiation Center Above Mean Sea Level:	374meters

*estimated

LONGLEY-RICE INTERFERENCE STUDY
PROPOSED FILL-IN TRANSLATOR
CHANNEL 30 – COLUMBUS, WISCONSIN
[AMENDMENT TO BDRTCT-20090223ABW]

We conducted a detailed interference study using the Longley-Rice methodology contained in the Commission's *OET Bulletin No. 69*, with respect to all facilities of concern. The software utilizes a 1-square kilometer cell size, calculates signal strength at 1.0 kilometer increments along each radial studied, and employs the 2000 U.S. Census to count population within cells. In addition, the program does not attribute interference to the proposed facility in cells within the protected contour of the station under study where interference from another source (other than that proposed herein) already is predicted to exist (also known as "masking"). A summary of the results of this study is provided in Exhibit E-2. It concludes that the facility proposed herein causes no significant new interference to any of the potentially affected analog or digital full-power or low-power television stations.

As a result, it is believed that the proposed facility complies with the requirements of Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b) and 73.1030 of the Commission's Rules.

Summary Study

Census data selected: 2000

Post DTV Transition Database Selected

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 06-12-2009 Time: 09:05:57

Record Selected for Analysis

PROPOSED USERRECORD-01 COLUMBUS WI US
Channel 30 ERP 2. kW HAAT 87. m RCAMSL 00374 m STRINGENT MASK
Latitude 043-20-40 Longitude 0089-06-10
Status APP Zone 2 Border
Dir Antenna Make usr Model USRPAT01 Beam tilt N Ref Azimuth
80.
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 1.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Not full service station

Facility meets maximum power limit

Azimuth (Deg)	ERP (kW)	HAAT (m)	51.0 dBu F(50,90) (km)
0.0	1.752	83.9	30.0
45.0	0.863	97.2	28.0
90.0	0.145	106.3	19.4
135.0	1.834	105.7	32.8
180.0	0.882	91.6	27.4
225.0	0.075	77.5	13.6
270.0	0.043	66.4	11.2
315.0	0.223	67.5	17.1

Contour Overlap to Proposed Station

Station
W48BY 31 BEAVER DAM WI BPTTL20011119AAV

Station inside contour of Digital LPTV station
PROPOSED 30 COLUMBUS WI USERRECORD01

Contour Overlap Evaluation to Proposed Station Complete

LANDMOBILE SPACING VIOLATIONS FOUND

NONE

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station	ARN
30	Call City/State PROPOSED COLUMBUS WI	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
29	WMAQ-TV	CHICAGO IL	202.3	LIC	BLCDDT	-
20010531	ACY					
29	W65EE	JANESVILLE WI	73.3	CP	BPTT	-
20031218	AAS					
29	W29DJ	SHEBOYGAN WI	100.9	CP	BPTTL	-
20080311	ABX					
29	W29DJ	SHEBOYGAN WI	100.9	CP	BDFCDTL	-
20080408	ABL					
29	W29DJ	SHEBOYGAN WI	96.2	LIC	BLTTL	-
20080221	AAP					
30	WCRD-LP	CARTHAGE IL	116.6	CP	BDCCDTL	-
20061030	AMS					
30	W57DN	ELGIN IL	165.3	CP	BDISDTT	-
20060213	ACF					
30	WMBD-TV	PEORIA IL	303.3	CP MOD	BMPCDT	-
20060314	ABP					
30	WSPY-LP	PLANO IL	191.6	LIC	BLTTL	-
19900514	IR					
30	WTMS-LD	MINNEAPOLIS, ETC. MN	378.6	CP	BDCCDTL	-
20061010	ANC					
30	W30BU	GREEN BAY WI	144.0	LIC	BLTTL	-
20030923	AAD					
30	WHLA-TV	LA CROSSE WI	189.5	LIC	BMLEDT	-
20041013	AAL					
31	WFLD	CHICAGO IL	202.3	LIC	BLCDDT	-
20050606	ABF					
31	WFLD	CHICAGO IL	202.3	CP	BPCDT	-
20080616	AAN					
31	W48BY	BEAVER DAM WI	16.8	APP	BPTTL	-
20011119	AAV					
31	WBWT-LP	MILWAUKEE WI	100.9	CP	BDCCDTL	-
20061025	ADF					
31	WFXS-DR	WITTENBERG WI	192.4	APP	BPRM	-

20080612ADX						
31	WFXS	WITTENBERG WI	192.4	CP MOD	BMPCDT	-
20081117ACB						
33	WFBN-LP	ROCKFORD IL	119.8	LIC	BLTTL	-
19890616II						
34	WEDE-CA	ARLINGTON HEIGHTS IL	202.3	STA	BSTA	-
20040603ACT						
34	W58CO	MADISON WI	42.8	APP	BPTTL	-
20020307ABS						
38	W38CT	MADISON WI	44.5	LIC	BLTT	-
20021203ACA						
38	WBWT-LP	MILWAUKEE WI	100.9	LIC	BLTTL	-
20070223AGI						

Study of this proposal found the following interference problem(s):

NONE.

EXHIBIT F

POWER DENSITY CALCULATION
PROPOSED FILL-IN TRANSLATOR
CHANNEL 30 – COLUMBUS, WISCONSIN
[AMENDMENT TO BDRTCT-20090223ABW]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Columbus facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 2.0 kw, an antenna radiation center 99 meters above ground, and the vertical pattern of the ERI antenna, maximum power density two meters above ground of 0.00042 mw/cm^2 is calculated to occur 39 meters north-northeast and south-southeast of the base of the tower. Since this is only 0.1 percent of the 0.38 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 30 (566-572 MHz), this proposal may be excluded from consideration with respect to public exposure to nonionizing electromagnetic radiation.

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 nonionizing radiation.