

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of KSQA-DT LLC, permittee of digital television station KSQA-DT, Channel 12 in Topeka, Kansas, in support of its application for modification of Construction Permit BMPCDT-20090810ADA to operate from a new transmitter site..

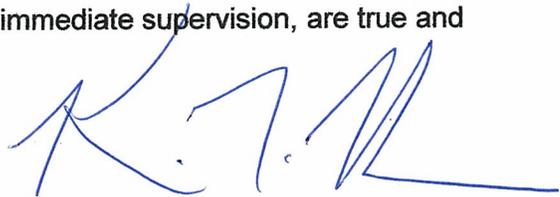
It is proposed to mount a standard PSI omnidirectional antenna at the 59-meter level of an existing 60-meter building in downtown Topeka. Since the antenna can be considered to be omnidirectional and has no beam tilt, no elevation or azimuth patterns accompany this application. Exhibit B is a map upon which the predicted service contours are plotted. As shown, the newly proposed 43 dBu contour completely encompasses the community of Topeka, the city of license. Operating parameters for the proposed facility are tabulated in Exhibit C. A Longley-Rice interference study is included as Exhibit D, and it is important to note that the study utilized a cell size of 1.0 kilometers and an increment spacing of 0.1 kilometer. A power density calculation follows as Exhibit E.

It is not expected that the proposed facility would cause objectionable interference to any other broadcast or non-broadcast station authorized to operate at or near the proposed KSQA-DT site. However, if such should occur, the owner of this station recognizes its obligation to take whatever corrective actions are necessary.

Because no change in the overall height or location of the existing building is proposed herein, the FAA has not been notified of this application, and, correspondingly, FCC antenna structure registration is not required.

EXHIBIT A

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.

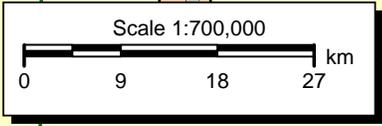
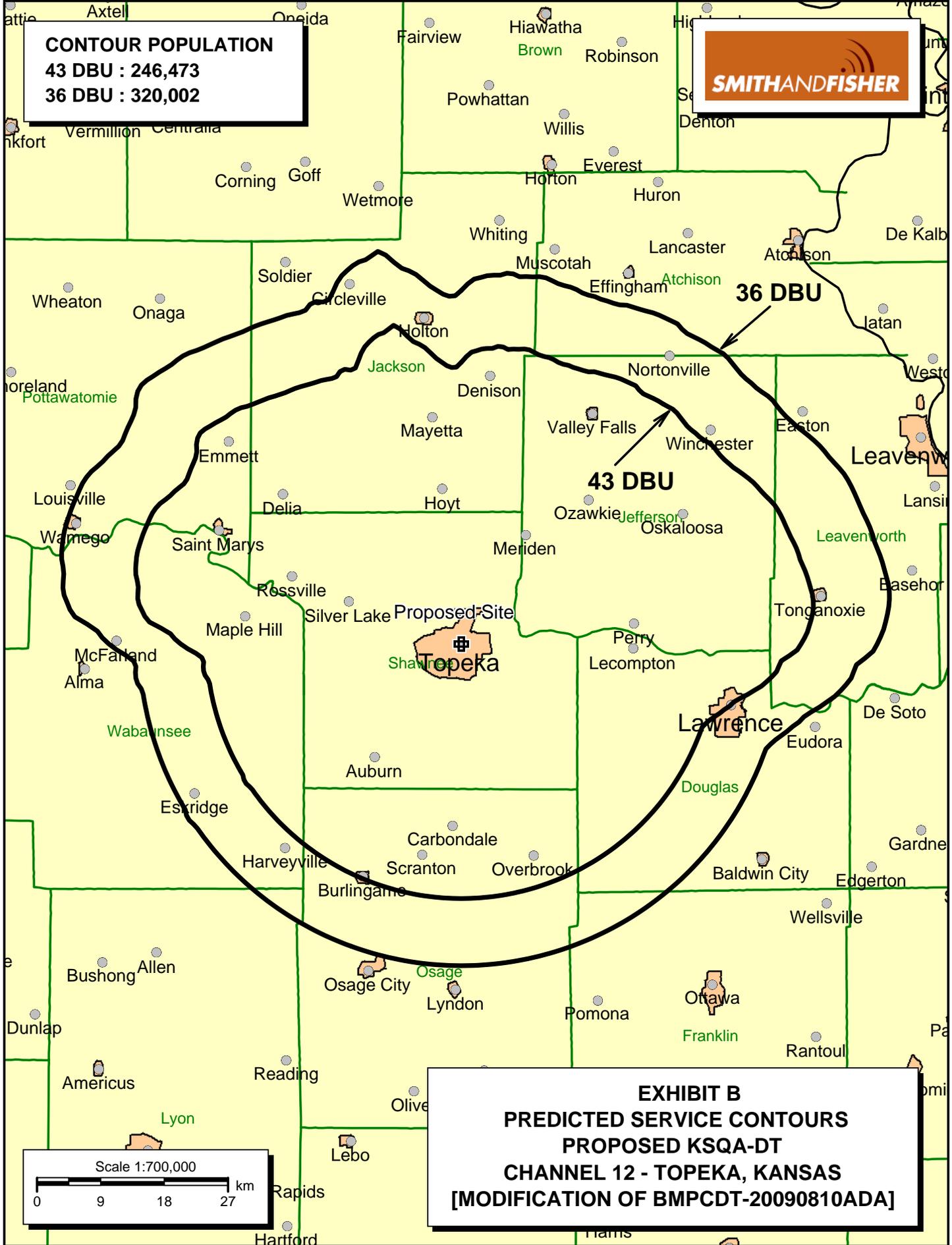


KEVIN T. FISHER

December 28, 2010



**CONTOUR POPULATION**  
**43 DBU : 246,473**  
**36 DBU : 320,002**



**EXHIBIT B**  
**PREDICTED SERVICE CONTOURS**  
**PROPOSED KSQA-DT**  
**CHANNEL 12 - TOPEKA, KANSAS**  
**[MODIFICATION OF BMPCDT-20090810ADA]**

PROPOSED OPERATING PARAMETERS

PROPOSED KSQA-DT  
CHANNEL 12 – TOPEKA, KANSAS  
[MODIFICATION OF BMPCDT- 20090810ADA]

Transmitter Power Output:	1.0 kW
Transmission Line Efficiency:	93.2%
Antenna Power Gain – Toward Horizon:	3.74
Antenna Power Gain – Main Lobe:	3.74
Effective Radiated Power – Toward Horizon:	3.5 kW
Effective Radiated Power – Main Lobe:	3.5 kW
Transmitter Make and Model:	Type-accepted
Transmission Line Size and Type:	1-5/8" foam heliax
Length:	100 feet*
Antenna Make and Model:	PSI PSIVLP20I
Orientation	Omnidirectional
Beam Tilt	none
Radiation Center Above Ground:	59.4 meters
Radiation Center Above Mean Sea Level:	336.5 meters

\*estimated

LONGLEY-RICE INTERFERENCE STUDY  
PROPOSED KSQA-DT  
CHANNEL 12 – TOPEKA, KANSAS  
[MODIFICATION OF BMPCDT- 20090810ADA]

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. It is important to note that the software utilized a 1-square kilometer cell size, calculated signal strength at 0.1 kilometer increments along each radial studied, and employed 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 the proposed KSQA-DT facility) already is predicted to exist (also known as "masking"). The results of this study are provided in Exhibit D-2. It concludes that the facility proposed herein causes no significant new interference to any of the potentially affected stations.

The Longley-Rice-based interference study also concludes that the proposed KSQA-DT facility proposed herein does not cause significant interference (0.5 percent) within the protected service contour of any potentially affected Class A low power television station.

Therefore, this proposal meets the FCC's *de minimis* interference standards for full-power DTV operations.

EXHIBIT D-2

LONGLEY-RICE INTERFERENCE STUDY RESULTS

PROPOSED KSQA-DT  
CHANNEL 12 – TOPEKA, KANSAS

Summary Study

Percent allowed new interference: 0.500  
Percent allowed new interference to non Class A LPTV: 2.000  
Census data selected 2000  
Data Base Selected  
./data\_files/pt\_tvdb.sff  
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 12-28-2010 Time: 07:39:07

Record Selected for Analysis

KSQA-D.C USERRECORD-01 TOPEKA KS US  
Channel 12 ERP 3.5 kW HAAT 43. m RCAMSL 00338 m  
Latitude 039-03-01 Longitude 0095-40-30  
Status APP Zone 2 Border Site number: 01  
Dir Antenna Make usr Model USRPAT01 Beam tilt N Ref Azimuth 0.  
Last update Cutoff date Docket  
Comments  
Applicant

Cell Size for Service Analysis 1.0 km/side

Distance Increments for Longley-Rice Analysis 0.10 km

Facility (site # 01) meets maximum height/power limits

Site number	1			
Azimuth	ERP	HAAT	36.0 dBu F(50,90)	
(Deg)	(kW)	(m)	(km)	
0.0	3.500	40.9	50.4	
45.0	3.500	52.9	55.0	
90.0	3.500	65.0	58.4	
135.0	3.500	33.0	46.9	
180.0	3.500	33.0	46.9	
225.0	3.500	33.0	46.9	
270.0	3.500	37.6	49.0	
315.0	3.500	58.9	56.9	

Evaluation toward Class A Stations from site # 01

No Spacing violations or contour overlap  
to Class A stations from site # 01

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

KSQA-D.C 12 TOPEKA

KS USERRECORD01

Site # 01

and station

SHORT TO: KSQA 12 TOPEKA KS DTVPLN DTVP0364  
39 -03-50 95 -45-49  
Req. separation 273.6 Actual separation 7.8 Short 265.8 km

SHORT TO: KSCW-DT 12 WICHITA KS BMPCDT 20090930AOP  
038-03-37 0097-45-48  
Req. separation 273.6 Actual separation 212.6 Short 61.0 km

SHORT TO: KSCW-DR 12 WICHITA KS BPRM 20090624AET  
038-03-38 0097-45-49  
Req. separation 273.6 Actual separation 212.6 Short 61.0 km

SHORT TO: KSCW-DT 12 WICHITA KS BPCDT 20090910ABE  
038-03-37 0097-45-48  
Req. separation 273.6 Actual separation 212.6 Short 61.0 km

SHORT TO: KUON-TV 12 LINCOLN NE BLEDT 20090406AIP  
041-08-18 0096-27-20  
Req. separation 273.6 Actual separation 241.2 Short 32.4 km

SHORT TO: WIBW-TV 13 TOPEKA KS BPCDT 20090629ADA  
039-00-22 0096-02-57  
Req. separation => 23.0 <= 110.0 Actual separation 32.8 Short 77.2(  
9.8) km

SHORT TO: WIBW-TV 13 TOPEKA KS BPCDT 20101028AAU  
039-00-22 0096-02-57  
Req. separation => 23.0 <= 110.0 Actual separation 32.8 Short 77.2(  
9.8) km

Checks to Site Number 01

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

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Start of Interference Analysis

	Proposed Station		
Channel	Call	City/State	ARN
12	KSQA-D.C	TOPEKA KS	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan No.	Call	City/State	Dist(km)	Status	Application Ref.
11	KTWU	TOPEKA KS	7.8	LIC	BLEDT
20090917	AAW				
12	KSCW-DT	WICHITA KS	212.3	APP	BMPCDT
20090930	AOP				
12	KSCW-DR	WICHITA KS	212.3	APP	BPRM
20090624	AET				
12	KSCW-DT	WICHITA KS	212.3	CP	BPCDT
20090910	ABE				
12	KRCG	JEFFERSON MO	312.3	LIC	BLCDT
20030709	ABP				
12	KUON-TV	LINCOLN NE	241.4	LIC	BLEDT
20090406	AIP				
13	KFJX	PITTSBURG KS	220.2	CP	BPCDT
20090721	ABS				
13	WIBW-TV	TOPEKA KS	32.7	CP	BPCDT
20090629	ADA				
13	WIBW-TV	TOPEKA KS	32.7	APP	BPCDT
20101028	AAU				

%%%

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

NONE.

POWER DENSITY CALCULATION

PROPOSED KSQA-DT  
CHANNEL 12 – TOPEKA, KANSAS  
[MODIFICATION OF BMPCDT- 20090810ADA]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Topeka facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 3.5 kW, an antenna radiation center 59 meters above ground, and assuming a vertical relative field value of 25 percent at the steeper elevation angles for the proposed PSI antenna, maximum power density at a height of two meters above ground of  $0.0023 \text{ mw/cm}^2$  is calculated to occur near the base of the building. Since this value is only 1.1 percent of the  $0.2 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 12 (204-210 MHz), this proposal may be excluded from consideration with respect to public exposure to nonionizing electromagnetic radiation.

Further, the station owner will conduct a power density survey of the building's roof, and based on the results of the measurements 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.