

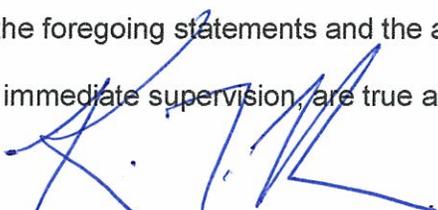
ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of CHRISTIAN BROADCASTING OF YAKIMA, licensee of Class A Low Power Television Station KDHW-LP, Channel 45 in Yakima, Washington, in support of this Application for Construction Permit to operate a digital facility on Channel 35 under the Commission's displacement Rules. This proposal is being submitted in response to the Commission's assignment of Channel 45 to KNMT-DT in Portland, Oregon. The site of KDHW-LP is located 209 kilometers from that of KNMT-DT, thereby placing this station in a displacement situation pursuant to Section 73.3572(a)(4)(iv)(A)(1) of the FCC's Rules. No change in site location or effective antenna height is proposed.

It is proposed to mount a standard ERI omnidirectional antenna at the 10-meter level of an existing 18-meter communications tower. Exhibit B is a map upon which the new service contours are plotted. It is important to note that the proposed 51 dBu contour to encompasses the station's city of license. Operating parameters for the revised facility are tabulated in Exhibit C. An interference study is provided in Exhibit D, and a power density calculation follows as Exhibit E.

Since no change in the overall height or location of the existing tower is proposed herein, the FAA has not been notified of this application. In addition, due to its diminutive height (18 meters), the tower has not been registered with the FCC.

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

July 31, 2009

CONTOUR POPULATION
51 DBU : 212,871
41 DBU : 255,225

Smith and Fisher

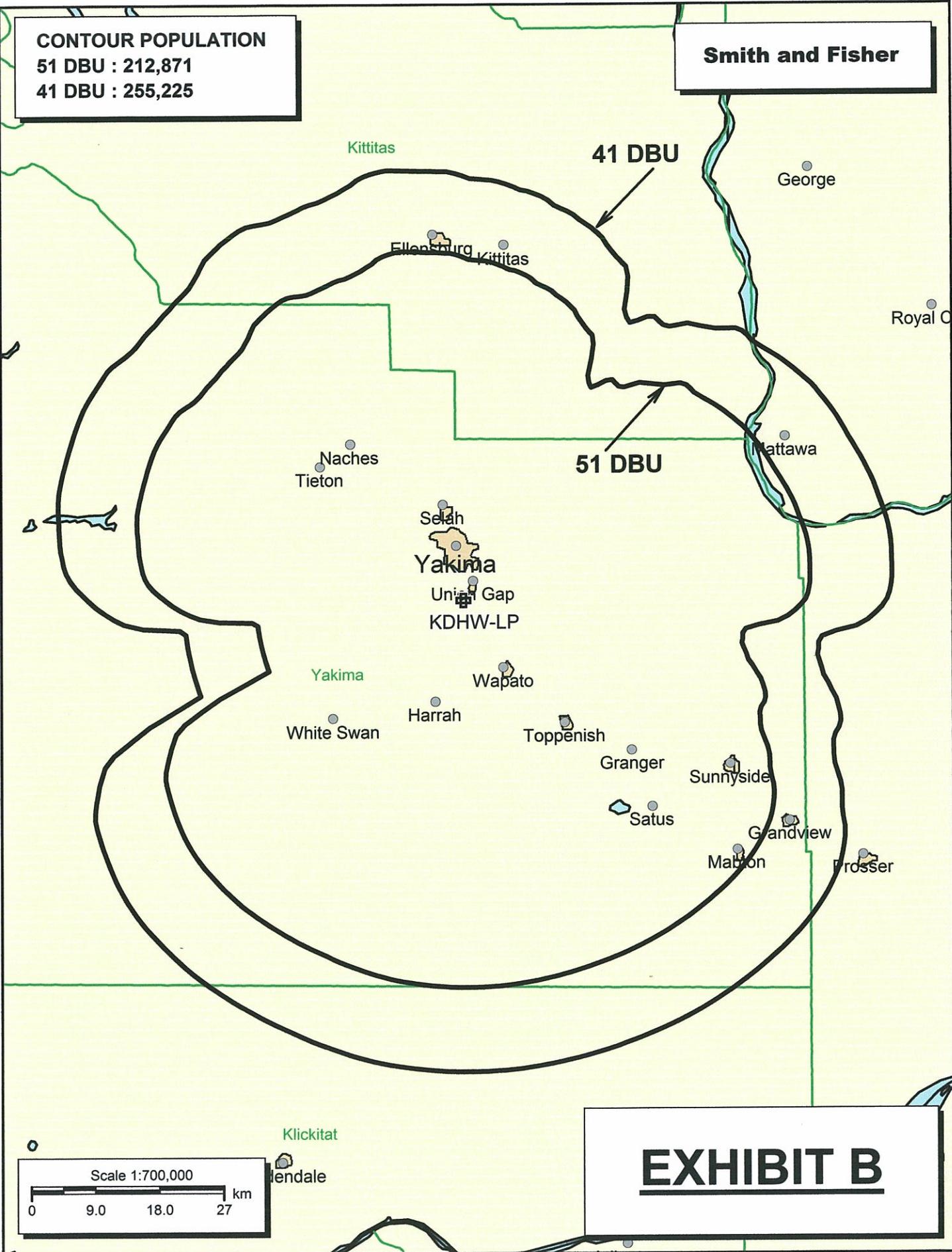


EXHIBIT B

PROPOSED OPERATING PARAMETERS

PROPOSED KDHW-CD
CHANNEL 35 – YAKIMA, WASHINGTON

Transmitter Power Output:	0.75 kw
Transmission Line Efficiency:	93.0%
Antenna Power Gain – Toward Horizon:	21.49
Antenna Power Gain – Main Lobe:	21.49
Effective Radiated Power – Toward Horizon:	15.0 kw
Effective Radiated Power – Main Lobe:	15.0 kw
Transmitter Make and Model:	Type-accepted
Transmission Line Make and Model:	Andrew HJ7-50A
Size and Type:	1-5/8" air heliax
Length:	60 feet*
Antenna Make and Model:	ERI ALP12L2-HSOC
Orientation	Omnidirectional
Beam Tilt	0.5 degrees
Radiation Center Above Ground:	10 meters
Radiation Center Above Mean Sea Level:	549 meters

*estimated

LONGLEY-RICE INTERFERENCE STUDIES
PROPOSED KDHW-CD
CHANNEL 35 – YAKIMA, WASHINGTON

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 proposed KDHW-CD) 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.

As a result, it is believed that the proposed KDHW-CD 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: 07-31-2009 Time: 08:23:01

Record Selected for Analysis

KDHW-LD USERRECORD-01 YAKIMA WA US
 Channel 35 ERP 15. kW HAAT 185. m RCAMSL 00549 m STRINGENT MASK
 Latitude 046-31-59 Longitude 0120-29-31
 Status APP Zone 2 Border
 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 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	15.000	177.3	48.5
45.0	15.000	102.4	43.0
90.0	15.000	161.6	47.5
135.0	15.000	277.9	54.2
180.0	15.000	282.1	54.4
225.0	15.000	243.2	52.2
270.0	15.000	84.2	40.7
315.0	15.000	153.7	47.0

Contour Overlap to Proposed Station

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 within the Canadian coordination distance
 Distance to border = 274.2km

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station	ARN
35	Call City/State KDHW-LD YAKIMA WA	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan No.	Call	City/State	Dist (km)	Status	Application	Ref.
34	K40AM	HOOD RIVER OR	121.4	CP	BDISTT	-
20070815ABG						
34	K40AM	HOOD RIVER, ETC. OR	121.2	APP	BSTA	-
20070815ABP						
34	K34DI	LA GRANDE OR	173.5	LIC	BLTT	-
19920304II						
34	K34HK	LONGVIEW WA	192.5	LIC	BLTTL	-
20080509AAL						
34	K34HK	LONGVIEW WA	192.6	APP	BSTA	-
20061109ADS						
34	KIRO-TV	OLYMPIA WA	192.2	CP	BDRTCT	-
20090403ACA						
34	K34JV-D	WALLA WALLA, ETC. WA	188.6	CP	BDCCDTT	-
20070418ACO						
34	K34EM	WENATCHEE WA	103.3	LIC	BLTT	-
19971030JA						
34	K34EM	WENATCHEE WA	103.3	CP	BDFCDTT	-
20060329AES						
35	K35IC-D	BONNERS FERRY ID	392.5	LIC	BLDTL	-
20090722ABW						
35	K35BW	LEWISTON ID	263.8	LIC	BLTT	-
19890203IC						
35	K35BW	LEWISTON ID	263.8	CP	BDFCDTT	-
20081105ABJ						
35	K56DL	FLORENCE OR	400.6	CP	BDFCDTT	-
20090202CCW						
35	K56DL	FLORENCE OR	400.6	CP	BDISTT	-
20051128AKY						
35	K35HU	GRAYS RIVER, ETC. OR	234.1	LIC	BLTT	-
20061018ABS						
35	K35GA	LA GRANDE OR	253.0	LIC	BLTT	-
20011212AAE						
35	K55HE	LONDON SPRINGS OR	381.2	CP	BDISTT	-
20051122AEL						
35	K55HE	LONDON SPRINGS OR	381.1	CP	BDISDTT	-
20081105ADL						
35	K35FO	MILTON-FREEWATER OR	188.6	APP	BDFCDTT	-
20090728AFE						
35	K35FO	MILTON-FREEWATER OR	186.4	LIC	BLTT	-

20020724AAD							
35	KORK-CA	PORTLAND OR	207.0	LIC	BLTTA	-	
20070831ACZ							
35	K35HJ	PRINEVILLE & REDMOND OR	262.3	CP	BNPTTL	-	
20000829AQZ							
35	K35CR	TILLAMOOK, ETC. OR	291.8	CP	BDFCDTL	-	
20060331BEU							
35	K35CR	TILLAMOOK-LINCOLN CI OR	291.8	LIC	BLTTL	-	
19940829IB							
35	KVOS-TV	BELLINGHAM WA	296.5	CP MOD	BMPCDT	-	
20060106AAF							
35	KVOS-TV	BELLINGHAM WA	210.6	APP	BMPCDT	-	
20080620AGP							
35	K35BJ	ELLISFORD, ETC. WA	263.3	LIC	BLTTL	-	
19861208ID							
36	K36FG	HOOD RIVER, ETC. OR	121.4	CP	BDFCDTT	-	
20081022AAT							
36	K36FG	HOOD RIVER, ETC. OR	121.4	LIC	BLTT	-	
20080528AAS							
36	K36DP	PENDLETON, ETC. OR	173.5	LIC	BLTT	-	
19950512IH							
36	K36EW	COLLEGE PARK WA	171.4	LIC	BLTTL	-	
19991018AAB							
36	K36EW	COLLEGE PLACE WA	172.1	LIC	BLDTA	-	
20090401AWP							
36	KEVE-LP	LONGVIEW WA	185.9	LIC	BLTT	-	
19931202IF							
36	KEVE-LP	LONGVIEW WA	185.8	CP	BDFCDTT	-	
20060328AJU							
36	KBWU-LD	RICHLAND, ET AL WA	114.9	APP	BSTA	-	
20070516AAW							
36	KBWU-LD	RICHLAND, ETC., WA	114.9	LIC	BLDTL	-	
20080701AEM							
36	KBWU-LD	RICHLAND, ETC., WA	110.6	CP	BPDTL	-	
20090324AAG							
36	KCWK-LD	YAKIMA WA	1.4	CP	BDCCDTT	-	
20061030ATA							
38	K53EI	HOOD RIVER OR	121.4	CP	BDISTT	-	
20070822ABB							
38	K38AH	PENDLETON, ETC. OR	173.5	LIC	BLTT	-	
19950612II							
38	K38IT	STEMILT, ETC. WA	82.6	APP	BPTT	-	
20080821ADD							
38	K38IT	STEMILT, ETC. WA	82.6	LIC	BLTT	-	
20080804ADO							
39	K39ES	HEPPNER, ETC. OR	83.7	LIC	BLTT	-	
19980803JH							
39	K25KS	THE DALLES OR	103.2	CP	BDISTT	-	
20071120AET							
39	DK39DM	ELLENSBURG WA	39.8	APP	BSTA	-	
20090724AEE							
39	DK39DM	ELLENSBURG WA	39.8	CP	BPTTL	-	
20060127ARI							
39	K39DL	MOSES LAKE WA	77.4	LIC	BLTTL	-	
19980107JB							
39	K39FU	YAKIMA WA	0.3	LIC	BLTTL	-	
20040616AAS							
42	K42CM	CENTRALIA, ETC. WA	196.1	LIC	BLTT	-	
19910320IO							
42	K53DN	EAST WENATCHEE WA	95.1	CP MOD	BMPTTL	-	
20090610ACE							

42	K42IO	ODELL WA	120.4	CP	BNPTTL	-
20000831	CLQ					
43	K43FH	HEPPNER, ETC. OR	83.7	LIC	BLTT	-
19980803	JJ					
43	K57BA	BAKER FLATS AREA WA	107.6	CP	BPTT	-
20060928	AIG					
43	K57AY	DRYDEN WA	118.6	CP	BPTT	-
20060928	AJG					
43	KUMN-LP	MOSES LAKE, ETC. WA	77.5	LIC	BLTT	-
20060428	ACH					
43	K43GY	YAKIMA, ETC. WA	0.3	LIC	BLTTL	-
20040615	ACA					

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

NONE.

POWER DENSITY CALCULATION
PROPOSED KDHW-CD
CHANNEL 35 – YAKIMA, WASHINGTON

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Yakima facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 15.0 kw, an antenna radiation center 10 meters above ground, and the vertical pattern of the ERI antenna, maximum power density two meters above ground of 0.32 mw/cm^2 is calculated to occur 2 meters from of the base of the tower. Since this is only 16 percent of the 2.0 mw/cm^2 reference for controlled environments (areas without public access) surrounding a facility operating on Channel 35 (596-602 MHz), and since this site is secure from unauthorized access, a grant of this proposal may be considered a minor environmental action with respect to public and occupational exposure to ground-level 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.