

TECHNICAL EXHIBIT
APPLICATION FOR DTV CONSTRUCTION PERMIT
NEW DTV STATION
DERBY, KANSAS
CH 46 570 KW 276 M

Technical Narrative

The technical exhibit of which this narrative is part was prepared on behalf of Entravision Holdings, LLC in support of an application for construction permit for a new DTV station on channel 46 at Derby, Kansas. On March 15, 2006 the FCC initiated an auction (Auction ID:64) for 11 vacant full-power, single channel TV allotments. Entravision Holdings, LLC was the winning bidder for the channel 46 DTV allotment at Derby, Kansas. On March 23, 2006 the FCC released a Public Notice (DA 06-648) requiring the winning bidders to file an FCC Form 301 by April 24, 2006. Therefore, in response to the Public Notice, this application is being filed to specify operation on DTV channel 46 at Derby with a non-directional effective radiated power (ERP) of 570 kW and an antenna radiation center height above average terrain (HAAT) of 276 meters.

Current DTV Freeze

Based on conversation with FCC staff, it is believed applications filed for the 11 vacant allotments of Auction 64 are not considered "frozen" by the FCC's Public Notice (DA 04-2446) released August 3, 2004, *Freeze on the Filing of Certain TV and DTV Requests for Allotment or Service Area Changes*. In addition, it does not appear that the proposed operation will adversely impact any DTV channel elections\facilities. However, if necessary a waiver of the freeze is respectfully requested.

Proposed Operation

It is proposed to operate on DTV channel 46 from the following site coordinates, N 37°48'01" W 97°31'29". It is also proposed to operate with an ERI ATW30H3-HSO-46H horizontally polarized non-directional antenna, a maximum ERP of 570 kW and an HAAT of 276 meters.

The proposed facilities (ERP 570 kW/HAAT 276 meters) are less than the maximum facilities permitted pursuant to Section 73.622(f) (8) (i) of the FCC Rules.

Notification to the FAA is not necessary, as there is no proposed change in the overall height of the existing structure. The antenna structure registration number (ASRN) for the existing tower is 1217036.

Response to Paragraph 10 - Antenna Data

Figure 1 provides a graph and tabulation of the vertical relative field pattern for the proposed ERI non-directional antenna.

Response to Paragraph 12 - City Coverage

Figure 2 is a map showing the FCC predicted DTV coverage contours. The map provides the FCC predicted 41 dBu f(50,90) noise-limited contour and 48 dBu f(50,90) city grade contour. The extent of the contours has been calculated using the normal FCC prediction method and a 30-second digitized terrain database. The Derby city limits were derived from information contained in the 2000 U.S. Census for Kansas. As shown, the 48 dBu contour encompasses the entire city limits of Derby.

Waiver of Section 73.623(d) (2)

Figure 3 is a DTV channel 46 separation study toward other NTSC and DTV allotments based on a 50 kilometer "buffer". The separation study is based on the minimum distance separation requirements set forth in Section 73.623(d) (2). As shown on Figure 3, the proposed site is fully spaced to all stations except with respect to the licensed (BLCT-20030207ABB) and authorized (BPCT-20040115AAQ) operations of TV station KOCM on channel 46 at Norman, Oklahoma. It is noted that the licensed and authorized KOCM operations are from the same transmitter site. The proposed DTV channel 46 operation will be located 244.43 kilometers from KOCM whereas the required separation is 244.6 kilometers. Thus, the

proposed DTV channel 46 operation will be short-spaced by only 0.17 kilometer (170 meters, 558 feet) which is believed to be *de minimis*. However, if necessary a waiver of Section 73.623(d) (2) is respectfully requested. As in similar cases involving NTSC short-spacings considered by the FCC, it is believed that waiver of Section 73.623(d) (2) is in the public interest as: (1) the proposal complies with the *de minimis* interference criteria contained in Section 73.622(c) (2) to KOCM; (2) the waiver will be for a short duration; (3) the waiver will hasten the construction of the new DTV facility to provide a first local service to Derby; (4) the proposal will permit use of an existing, registered tower located within an antenna farm; and (5) the waiver will provide a new DTV service to 47,138 Spanish-language viewers (2000 Census).¹

Results of an interference analysis based on OET Bulletin No. 69 indicate that the proposal causes less than 2% new interference to TV station KOCM, and therefore the predicted interference is considered *de minimis* pursuant to 73.622(c) (2). Interference calculations with respect to KOCM and other pertinent stations are shown below. It is believed the proposal complies with the interference protection provisions of Section 73.623(c) (2).²

¹ See Memorandum Opinion and Order regarding File Nos. BPCT-980702KH (ID 22161), BPCT-981123KK (ID 35608) and BPCT-990324KE (ID 24518), adopted December 9, 1999, released December 14, 1999 (FCC 99-388). See also Letter dated September 12, 2000 to HIC Broadcast, Inc. from Clay C. Pendarvis, Chief, Television Branch, Video Services Division, Mass Media Bureau concerning the application of KFWD(TV), Fort Worth, Texas.

² The du Treil, Lundin & Rackley, Inc. DTV interference analysis program is based on the program and procedures outlined by the FCC in the Sixth Report and Order; subsequent Memorandum Opinion and Order; and FCC OET Bulletin No. 69. A nominal grid size resolution of 2 km was employed. A Sun based processor computer system was employed.

Protected NTSC/DTV Station	FCC Service Population	Proposed Interference Population
NEW NTSC Ch. 42 Wichita, KS Application (BPET-19960920KJ)	605,545	18 (0.003%)
NEW NTSC Ch. 42 Wichita, KS Application (BPET-19960930KH)	611,548	18 (0.003%)
NEW NTSC Ch. 42 Wichita, KS Application (BPET-19960528KP)	No Interference Calculated	
NEW NTSC Ch. 42 Wichita, KS Application (BPET-19960726KJ)	619,497	18 (0.003%)
KSNW-DT DTV Ch. 45 Wichita, KS Allotment Licensed (BLCDT-20041029AJF)	683,824	123 (0.018%) No Interference Calculated
KSNF-DT DTV Ch. 46 Joplin, MO Allotment CP (BMPCDT-20000501ABS)	397,625 397,625	66 (0.017%) 54 (0.014%)
KOCM NTSC Ch. 46 Norman, OK CP (BPCT-20040115AAQ) LIC (BLCT-20030207ABB)	1,078,203 1,024,254	20,768 (1.9%) 11,529 (1.1%)

From the above, it is apparent that the proposed DTV operation on channel 46 complies with the FCC's 2%/10% interference standard toward all authorized analog and DTV assignments.

Station KOCM did not receive a second channel for DTV use and has elected to operate its post-transition DTV operation on channel 46 which has been tentatively approved by the FCC. The required separation between co-channel DTV stations contained in Section 73.623(d)(2) is 223.7 kilometers. Therefore, the proposed DTV channel 46 operation will be fully-spaced to the KOCM DTV channel 46 operation when KOCM converts to DTV operation. Thus, the short-spacing waiver will be of "short duration".

Currently Derby has no local NTSC or DTV service. Therefore, approval of the short-spacing waiver will hasten the construction of the new, full power DTV facility to provide a first local service to Derby. In addition, the proposal will permit use of an existing, registered tower (ASR 1217036) located within an antenna farm where other TV and FM broadcasters operate. Finally, the waiver will provide a new DTV service to 47,138 Spanish-language viewers (2000 Census) located within the 41 dBu contour depicted on Figure 2.

Class A Allocation Considerations

A study has been conducted which indicates that the proposal will not be involved in prohibited contour overlap with any existing, authorized or proposed Class A stations except with respect to Class A station KTQW-CA on channel 49 at Wichita, Kansas. However, with respect to KTQW-CA, an interference analysis was conducted using the procedures outlined in the FCC's OET-69 bulletin, which demonstrates that the proposal complies with the FCC's de minimis interference criteria toward all Class A stations. Interference calculations with respect to Class A stations are summarized below.

Protected Class A Station	FCC Service Population	Proposed Interference Population
KPBI-CA Class A Ch. 46 Fort Smith, AR LIC (BLITL-20020220AAQ)	No Interference Calculated	
KTQW-CA Class A Ch. 49 Witchita, KS LIC (BLTTA-20040621AAX)	No Interference Calculated	

As shown above, the proposal on channel 46 complies with the FCC's interference standards towards all authorized Class A stations.

Objectionable Interference

There are no known authorized full service AM stations within 5 kilometers (3 miles) of the proposed transmitter site. With respect to FM and TV stations, the proposed transmitter site is

located in an antenna farm where various other broadcasters operate. Figure 4 provides a tabulation of the FM and TV stations within 16 kilometers of the proposed site. Although no adverse electromagnetic impact is expected, the applicant recognizes its responsibility to correct problems, which are a result of its proposed DTV operation.

The proposed transmitter site is more than 1,228 kilometers from the Canadian border. The proposed transmitter site is more than 961 kilometers from the US/Mexican border area. The closest FCC monitoring is at Grand Island, Nebraska, approximately 356 kilometers to the north. The proposed DTV site is outside the National Radio Quiet Zone (VA/WVA), the closest point being 1487 kilometers to the east. The closest point of the Table Mountain Radio Quiet Zone (CO) is more than 713 kilometers to the west-northwest. The closest radio astronomy site operating on TV channel 37 is at North Liberty, IA, located approximately 673 kilometers to the northeast. These separations are sufficient to not be a concern for coordination purposes.

Response to Paragraph 13 - Environmental Protection Act

The proposed facility has been evaluated in terms of potential radiofrequency electromagnetic field exposure at ground level in accordance with OET Bulletin No. 65, Evaluating Compliance with FCC Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields³. The power density at the base of the tower was calculated using the appropriate procedures contained in the Bulletin.

The radiation center for the proposed DTV antenna is located 277 meters above ground level. The maximum DTV ERP is 570 kW. A conservative vertical plane relative field value of 0.04 (for angles below 60 degrees downward) is assumed for the antenna's downward radiation (see Sheet 2 of Figure 1). The calculated power density at a point 2 meters above ground level is 0.0004 mW/cm². This is 0.09% of the FCC's recommended limit of 0.44 mW/cm² for DTV channel 46 for an "uncontrolled" environment. Therefore, based on

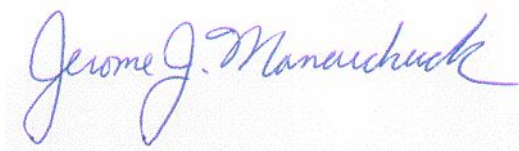
³ OET Bulletin 65, Second Edition 97-01, August, 1997.

the responsibility threshold of 5%, the proposal will comply with the FCC'S RF emission rules.

Access to the transmitting site will be restricted and appropriately marked with RFR warning signs. Furthermore, as this is a multi-user site, an agreement will be in effect with the other stations in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure.

Finally, it is noted that this technical exhibit only addresses the potential for radio frequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already has been provided to the FCC by the tower owner as part of the tower registration process.

If there are questions concerning the technical portion of this application, please contact the office of the undersigned.



Jerome J. Manarchuck

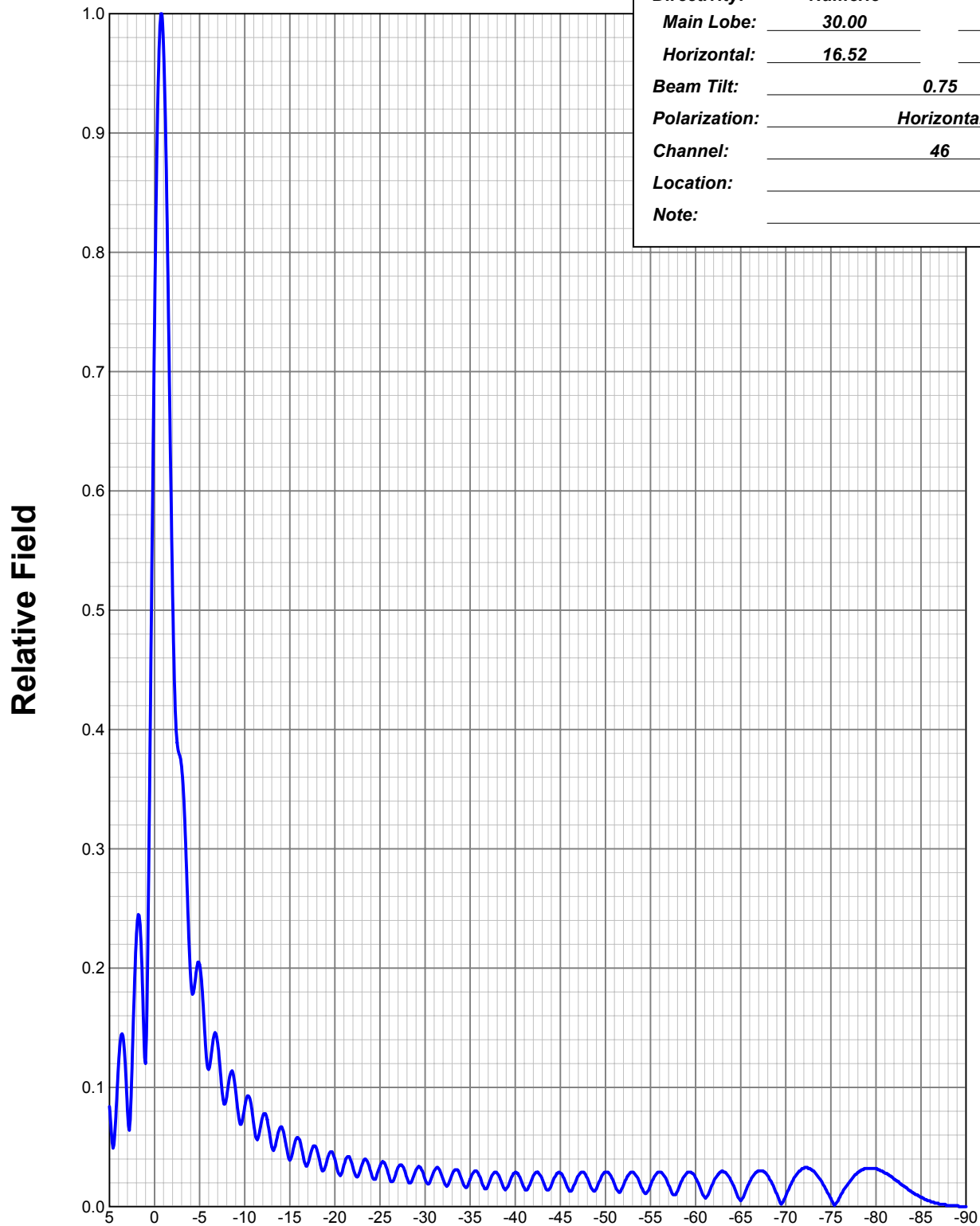
du Treil, Lundin & Rackley, Inc.
201 Fletcher Ave.
Sarasota, California 34237
(941)329-6000
JERRY@DLR.COM

April 24, 2006



ELEVATION PATTERN

Type:	ATW30H3H	
Directivity:	Numeric	dBd
Main Lobe:	30.00	14.77
Horizontal:	16.52	12.18
Beam Tilt:	0.75	
Polarization:	Horizontal	
Channel:	46	
Location:		
Note:		



Electronics Research, Inc.
7777 Gardner Road
Chandler, Indiana U.S.A 47610



ELEVATION TABULATED DATA

Type: ATW30H3H

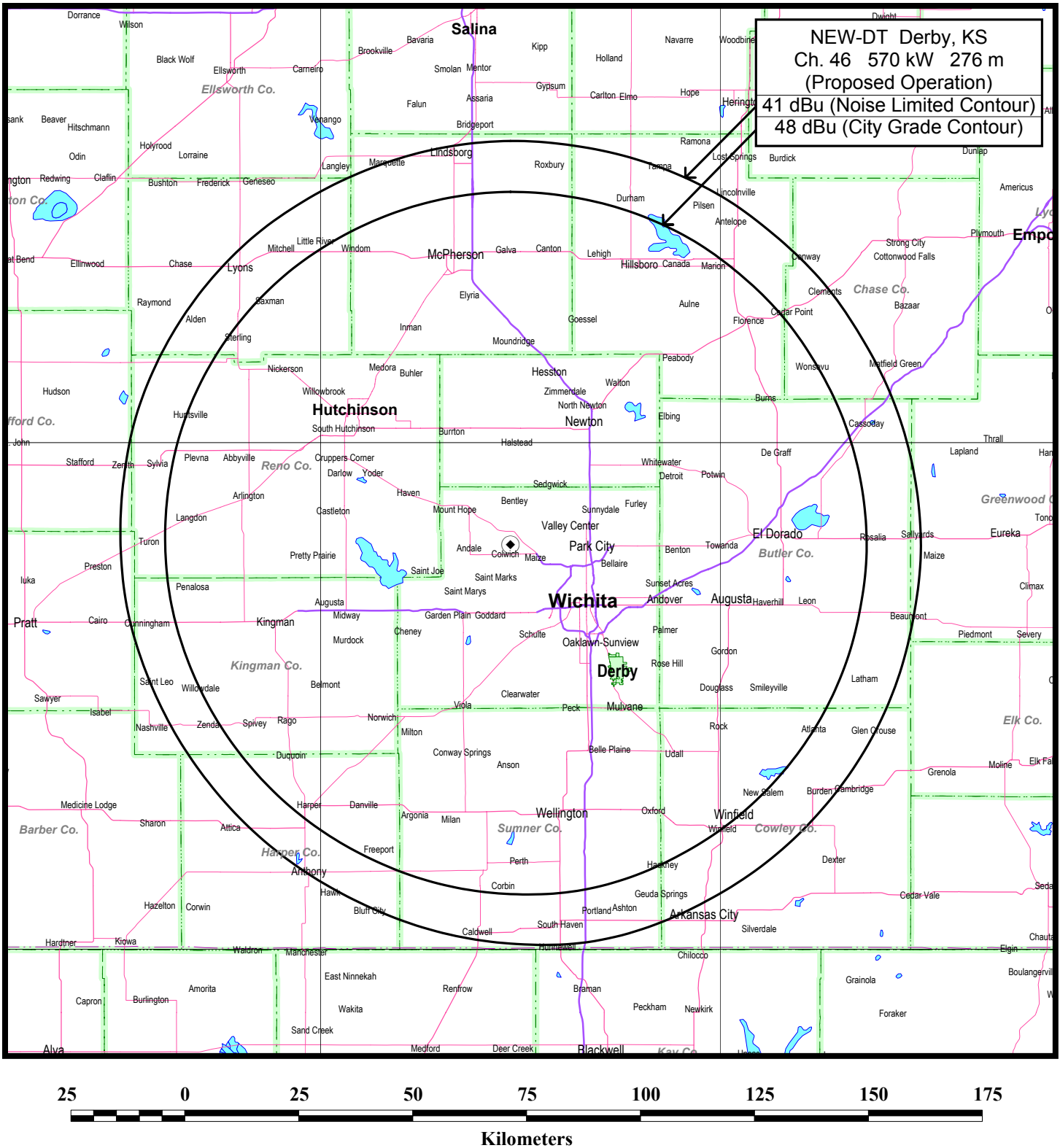
Polarization: Horizontal

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
5.00	0.084	-21.51	-6.50	0.140	-17.08	-42.00	0.026	-31.70	-88.00	0.001	-60.00
4.75	0.058	-24.66	-6.75	0.145	-16.74	-43.00	0.023	-32.77	-89.00	0.001	-60.00
4.50	0.052	-25.68	-7.00	0.137	-17.27	-44.00	0.018	-34.89	-90.00	0.000	-40.00
4.25	0.082	-21.67	-7.25	0.117	-18.60	-45.00	0.028	-31.06			
4.00	0.119	-18.49	-7.50	0.096	-20.35	-46.00	0.013	-37.72			
3.75	0.142	-16.98	-7.75	0.086	-21.31	-47.00	0.026	-31.70			
3.50	0.143	-16.89	-8.00	0.092	-20.72	-48.00	0.024	-32.40			
3.25	0.119	-18.45	-8.25	0.105	-19.53	-49.00	0.015	-36.48			
3.00	0.081	-21.83	-8.50	0.113	-18.94	-50.00	0.029	-30.75			
2.75	0.069	-23.29	-8.75	0.110	-19.17	-51.00	0.019	-34.42			
2.50	0.116	-18.71	-9.00	0.097	-20.26	-52.00	0.018	-34.89			
2.25	0.180	-14.89	-9.25	0.080	-21.94	-53.00	0.029	-30.75			
2.00	0.229	-12.80	-9.50	0.069	-23.22	-54.00	0.016	-35.92			
1.75	0.244	-12.23	-9.75	0.073	-22.73	-55.00	0.018	-34.89			
1.50	0.221	-13.11	-10.00	0.084	-21.51	-56.00	0.029	-30.75			
1.25	0.161	-15.84	-11.00	0.069	-23.22	-57.00	0.018	-34.89			
1.00	0.120	-18.42	-12.00	0.076	-22.38	-58.00	0.013	-37.72			
0.75	0.217	-13.25	-13.00	0.050	-26.02	-59.00	0.028	-31.06			
0.50	0.385	-8.29	-14.00	0.067	-23.48	-60.00	0.024	-32.40			
0.25	0.570	-4.89	-15.00	0.039	-28.18	-61.00	0.008	-41.94			
0.00	0.742	-2.59	-16.00	0.057	-24.88	-62.00	0.021	-33.56			
-0.25	0.879	-1.12	-17.00	0.036	-28.87	-63.00	0.030	-30.46			
-0.50	0.970	-0.26	-18.00	0.048	-26.38	-64.00	0.021	-33.56			
-0.75	1.000	0.00	-19.00	0.035	-29.12	-65.00	0.005	-46.02			
-1.00	0.972	-0.25	-20.00	0.040	-27.96	-66.00	0.021	-33.56			
-1.25	0.891	-1.01	-21.00	0.035	-29.12	-67.00	0.030	-30.46			
-1.50	0.772	-2.25	-22.00	0.033	-29.63	-68.00	0.026	-31.70			
-1.75	0.637	-3.91	-23.00	0.035	-29.12	-69.00	0.011	-39.17			
-2.00	0.514	-5.78	-24.00	0.029	-30.75	-70.00	0.009	-40.92			
-2.25	0.428	-7.36	-25.00	0.034	-29.37	-71.00	0.025	-32.04			
-2.50	0.389	-8.20	-26.00	0.026	-31.70	-72.00	0.032	-29.90			
-2.75	0.379	-8.43	-27.00	0.033	-29.63	-73.00	0.030	-30.46			
-3.00	0.369	-8.66	-28.00	0.024	-32.40	-74.00	0.021	-33.56			
-3.25	0.341	-9.36	-29.00	0.031	-30.17	-75.00	0.007	-43.10			
-3.50	0.293	-10.66	-30.00	0.023	-32.77	-76.00	0.008	-41.94			
-3.75	0.237	-12.51	-31.00	0.030	-30.46	-77.00	0.020	-33.98			
-4.00	0.192	-14.33	-32.00	0.023	-32.77	-78.00	0.029	-30.75			
-4.25	0.178	-14.97	-33.00	0.027	-31.37	-79.00	0.032	-29.90			
-4.50	0.189	-14.47	-34.00	0.024	-32.40	-80.00	0.032	-29.90			
-4.75	0.203	-13.85	-35.00	0.023	-32.77	-81.00	0.028	-31.06			
-5.00	0.203	-13.85	-36.00	0.026	-31.70	-82.00	0.023	-32.77			
-5.25	0.185	-14.66	-37.00	0.018	-34.89	-83.00	0.018	-34.89			
-5.50	0.155	-16.19	-38.00	0.028	-31.06	-84.00	0.012	-38.42			
-5.75	0.126	-18.03	-39.00	0.015	-36.48	-85.00	0.008	-41.94			
-6.00	0.115	-18.79	-40.00	0.029	-30.75	-86.00	0.005	-46.02			
-6.25	0.125	-18.06	-41.00	0.016	-35.92	-87.00	0.002	-53.98			



Electronics Research, Inc.
7777 Gardner Road
Chandler, Indiana U.S.A 47610

Figure 2



FCC PREDICTED COVERAGE CONTOURS

NEW DTV STATION
DERBY, KANSAS
CH 46 570 KW 276 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 3

CDBS TV/DTV SEPARATION STUDY

Job Title:
Channel: 46
Class:
Type: DT

Separation Buffer: 50 km
Coordinates: 37-48-01 97-31-29
Zone: II

Call Id	City St	Status	File Num	Channel Zone	ERP HAAT	DA Id	Latitude Longitude	Bear	Dist. (km)	Req. min max
960726K 83260	WICHITA KS	APP C	BPET 19960726KJ	42 (Z) II	2950.000 301	D 24109	37-46-40 097-30-42	155.4	2.7 21.35	24.1 Clear
960930K 84148	WICHITA KS	APP C	BPET 19960930KH	42 (Z) II	1860.000 303	N	37-46-40 097-30-42	155.4	2.7 21.35	24.1 Clear
960920K 84135	WICHITA KS	APP C	BPET 19960920KJ	42 (Z) II	1320.000 302	N	37-46-40 097-30-37	153.1	2.8 21.30	24.1 Clear
960528K 82700	WICHITA KS	APP C	BPET 19960528KP	42 (Z) II	5000.000 495	D 24093	38-04-04 097-45-43	325.1	36.3 12.18	24.1 Short
DKSNW	WICHITA KS	DTV		45 () II	1000.000 305	D	37-46-37 097-31-01	165.2	2.7 21.32	24.0 Clear
KSNW 72358	WICHITA KS	LIC C	BLCDT 20041029AJ	45 () II	891.000 312.2	N 67681	37-46-26 097-30-51	162.5	3.1 20.93	24.0 Clear
NEW 163993	DERBY KS	APP C	BNPCT 19960722AA	46 (Z) II	5000.000 333	N 68086	37-55-01 097-37-21	326.5	15.5	
KOCM 84225	NORMAN OK	LIC C	BLCT 20030207AB	46 (-) II	1000.000 416	D 46114	35-35-52 097-29-22	179.3	244.4 0.17	244.6 Short ¹
KOCM 84225	NORMAN OK	CP C	BPCT 20040115AA	46 (-) II	2000.000 415	D 65194	35-35-52 097-29-22	179.3	244.4 0.17	244.6 Short ¹
KTQW-CA 35255	WICHITA KS	LIC C	BLTTA 20040621AA	49 (+)	4.800	D 24144	37-41-13 097-20-23	127.7	20.6 3.51	0.0 Class A

¹ A waiver of the FCC's separation distance with respect to station KOCM is requested based on an OET-69 Bulletin interference analysis. Results of the interference analysis indicate the proposed operation will not cause prohibited interference to the licensed or authorized CP operation of KOCM.

du Treil, Lundin, and Rackley**Coordinates: 37-48-01 97-31-29 Frequency Range: 200-300****Range: 16**

Date: 4/21/2006

CDBS FM Inquiry List

Page: 1

Rec Type	Fac Id	Call	Status	Chan	Svc Class	Class	City	St	DA	Latitude	Longitude	ERP (kW)	HAAT (m)	RCAMSL (m)	Bear	Dist. (km)
C	53151	KEYN-F	LIC	279	FM	C0	WICHITA	KS	N	37-48-01	097-31-29	100.000307.0	729.0	729.0	0.0	0.0
C	53153	KFBZ	LIC	287	FM	C0	HAYSVILLE	KS	N	37-48-01	097-31-29	100.000307.0	729.0	729.0	0.0	0.0
C	63548	KICT-FM	LIC	236	FM	C1	WICHITA	KS		37-47-58	097-31-58	100.000274.0	688.0	688.0	262.5	0.7
C	59995	KSKU	CP	246	FM	C2	HAVEN	KS	N	37-47-47	097-31-59	11.500	312.0	737.3	239.4	0.9
C	72357	KFDI-FM	LIC	267	FM	C	WICHITA	KS		37-47-47	097-31-59	100.000347.0	771.0	771.0	239.4	0.9
C	61364	KZSN	LIC	271	FM	C	HUTCHINSON	KS		37-47-47	097-31-59	100.000315.0	738.0	738.0	239.4	0.9
C	39902	KRBB	CP	250	FM	C0	WICHITA	KS	N	37-46-40	097-30-37	100.000313.0	733.0	733.0	153.1	2.8
C	39902	KRBB	LIC	250	FM	C0	WICHITA	KS	N	37-46-40	097-30-37	100.000303.0	724.0	724.0	153.1	2.8
C	61364	KZSN	CP	271	FM	C0	HUTCHINSON	KS	N	37-46-40	097-30-37	100.000313.0	733.0	733.0	153.1	2.8
C	53600	KTHR	LIC	297	FM	C1	WICHITA	KS	N	37-46-40	097-30-37	100.000257.0	677.0	677.0	153.1	2.8

du Treil, Lundin, and Rackley**Coordinates: 37-48-01 97-31-29 Channel Range: 2-69****Range: 16**

Date: 4/21/2006

CDBS Tv Inquiry List

Page: 1

Rec Type	Facility Id	Call	Status	Chan	Svc Class	Class	City	St	DA	Latitude	Longitude	ERP (kW)	HAAT (m)	RCAMSL (m)	Bearing	Dist. (km)
C	72348	KSCW	LIC	31	DT		WICHITA	KS	N	37-48-01	097-31-29	1000.00	345	767	0	0
C	72348	KSCW	LIC	33	TV		WICHITA	KS	N	37-48-01	097-31-29	2300.00	328	750	0	0
C	65522	KAKE-TV	LIC	21	DT		WICHITA	KS	N	37-46-53	097-31-08	850.000	309.8	733	166.2	2.16
C	65522	KAKE-TV	LIC	10	TV		WICHITA	KS	N	37-46-53	097-31-08	316.000	309.8	733	166.2	2.16
C	82943	960724K	APP	15	TV		WICHITA	KS	D	37-46-40	097-30-42	2950.00	301	723	155.3	2.75
C	83260	960726K	APP	42	TV		WICHITA	KS	D	37-46-40	097-30-42	2950.00	301	723	155.3	2.75
C	84147	960930KI	APP	15	TV		WICHITA	KS	N	37-46-40	097-30-42	1860.00	303	723	155.3	2.75
C	84148	960930K	APP	42	TV		WICHITA	KS	N	37-46-40	097-30-42	1860.00	303	723	155.3	2.75
C	11911	KSAS-TV	LIC	26	DT		WICHITA	KS	D	37-46-40	097-30-37	350.000	303	723	153.1	2.8
C	11911	KSAS-TV	LIC	24	TV		WICHITA	KS	D	37-46-40	097-30-37	3310.00	341	761	153.1	2.8
C	84135	960920K	APP	42	TV		WICHITA	KS	N	37-46-40	097-30-37	1320.00	302	722	153.1	2.8
C	72358	KSNW	LIC	45	DT		WICHITA	KS	N	37-46-26	097-30-51	891.000	312.2	735	162.4	3.07
C	72358	KSNW	LIC	3	TV		WICHITA	KS	N	37-46-25	097-30-54	100.000	303.7	726	163.9	3.08
C	72358	KSNW	CP	3	TV		WICHITA	KS	N	37-46-25	097-30-54	100.000	303.7	726	163.9	3.08
C	127385	NEW	GRA	46	DN		DERBY	KS	N	37-54-12	097-37-06	1000.00	246	680	324.3	14.1
C	77063	KSCC	LIC	36	TV		HUTCHINSON	KS	D	37-56-23	097-30-42	3500.00	733	753	4.220	15.52
C	77063	KSCC	LIC	35	DT		HUTCHINSON	KS	D	37-56-23	097-30-42	1000.00	310	734	4.220	15.52
C	163993	NEW	APP	46	TV		DERBY	KS	N	37-55-01	097-37-21	5000.00	333	767	326.5	15.55