

ENGINEERING STATEMENT RE
APPLICATION TO MODIFY OUTSTANDING
DTV CONSTRUCTION PERMIT
FOR AN EXISTING TELEVISION TRANSLATOR
(FCC FILE NO. BNPDTV-20090825BVR)
K11WQ-D, WEST KNEES, MONTANA
CHANNEL 11 300 WATTS ERP 1192.4 METERS RC/AMSL

JUNE 2011

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

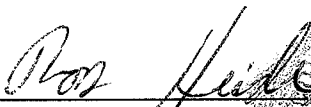
City of Washington)
) ss
District of Columbia)

Ross J. Heide, being duly sworn upon his oath, deposes and states that:

He is a graduate of the Massachusetts Institute of Technology in Operations Research and Management Science, a Registered Professional Engineer in the District of Columbia, and employed by Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1420 N Street, N.W., Suite One, Washington, D.C. 20005;

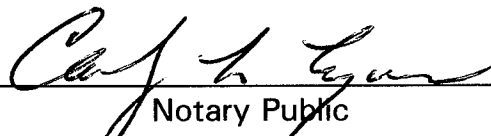
That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.



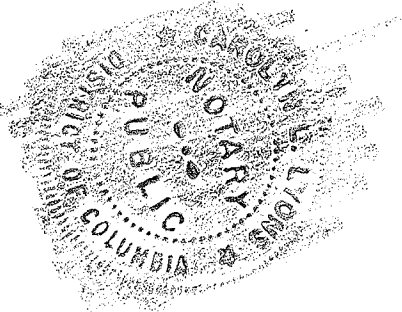
Ross J. Heide
District of Columbia
Professional Engineer
Registration No. PE900748

Subscribed and sworn to before me this 21st day of June, 2011.



Notary Public

My Commission Expires: 2/28/2013



INTRODUCTION

This engineering statement has been prepared on behalf of KRTV Communications, Inc. ("KRTV"), permittee of TV translator K11WQ-D, West Knees, Montana. This statement supports KRTV's request to modify its outstanding construction permit, FCC File No. BNPDTV-20090825BVR with a change in the antenna model. An allocation study (Table II) is provided showing that this facility meets FCC protection criteria for all existing, pending, and authorized stations.

TRANSMITTER SITE

The existing tower has not been significantly altered and the coordinates remain unchanged. The geographic coordinates of the site follow below.

North Latitude: 48° 00' 55"

West Longitude: 111° 20' 59.5"

NAD-27

ELEVATION DATA

Elevation of site above mean sea level	1174 meters (3851.7 feet)
Center of radiation of antenna above ground level	18.4 meters (60.4 feet)
Center of radiation of antenna above mean sea level	1192.4 meters (3912.1 feet)
Overall height of tower above ground	24.5 meters (80.4 feet)

The existing tower is less than 81 ft. and TOWAIR indicates that the structure does not require registration.

EQUIPMENT DATA

Transmitter:	Type-approved
Transmission Line:	Andrew, Type LDF4-50A, 1/2", 50 Ω foam heliax 24.4 meters (80 feet) or equivalent 0.981 dB loss/100 ft
Antenna:	Scala, HDCA-10/HRM/75N stacked yagi with a gain of 11.2 (10.5 dB) and 0.0° electrical beamtilt; see Exhibit E-2
Out-of-Channel Emission Mask:	Simple

POWER DATA

Transmitter:	32.1 watts	15.06 dBW
Transmission Line Efficiency/Loss:	83.47%	0.785 dB
Input Into Antenna:	26.79 watts	12.28 dBW
Antenna Gain:	11.2	10.5 dB
ERP:	300 watts	24.77 dBW (-5.23 dBk)

Other Broadcast Facilities

A brief analysis was completed to determine the presence of stations in the vicinity of the K11WQ-D tower using the June 17, 2011, data contained within the Commission's Consolidated Database System ("CDBS"). Within 0.5 km of the proposed site, there are no other authorized broadcast facilities. Although no adverse technical effects are expected due to the proposed changes, the licensee will take measures to resolve any problems proven to be related to the changes proposed in this application.

Topographic Data

The average elevation data of each radial from 3.2-16.1 km was obtained from the 3-second database. The distances along each radial to the limits of the normally protected 48 dBu F(50,90) contour were determined from reference to the propagation data for Channels 7-13, as published by the FCC in Figures 10 and 10a, Section 73.699 of the FCC Rules without the use of the roughness correction.

Utilizing the formula in Section 73.684(c)(1) for the effective heights shown on the attached tabulation, it is found that the depression angle A_{θ} , varies between 0.32 to 0.39 degrees. The relative field in the vertical radiation pattern at these angles is greater than 90% of the maximum. Therefore, maximum power at the vertical angle was used in determining the distance to the respective contours.

Contour Data

The distances to the contours, average elevations, and effective antenna heights are included on the attached tabulation (Table I). The contours determined from these distances are shown on the attached map, Exhibit E-1.

Interference Analysis

A study of predicted interference caused by the proposed K11WQ-D low-power digital operation has been performed using the Longley-Rice program for which the source data has been posted by the Commission on its website at http://www.fcc.gov/oet/dtv/dtv_apps.html. The FCC's FORTRAN-77 code was modified only to the extent necessary (primarily input/output handling) for the program to run on a Microsoft Windows XP/Intel platform. Comparison of service/interference areas and population indicates this model closely matches the FCC's digital low-power TV/translator evaluation program. Best efforts have been made to use data and calculation identical to the FCC's program. The model employs the Longley-Rice propagation methodology and evaluates in grid cells of approximately 1 sq. km. Using 3-second terrain data sampled approximately every 1.0 km at one-degree azimuth intervals with 2000 census centroids, all studies are based upon data in the current CDBS database update of the FCC's engineering database. A Longley-Rice study was performed with the proposed K11WQ low-power digital facilities and all relevant stations listed in the FCC data base as of June 17, 2011. The study results and the included stations are listed in Table II.

FCC Rule, Section 1.1307

The proposed 300 W operation will utilize the Scala antenna (or equivalent) described above with a center of radiation above ground of 18.4 meters. The antenna will be mounted on an existing tower with an overall height of 24.5 meters above ground. The proposed digital operation of K11WQ-D will create a radio frequency field level of less than $2 \mu\text{W}/\text{cm}^2$ at the base of the tower. This level is less than 1% of the Maximum Permissible Exposure (“MPE”) level for the general population and uncontrolled environment.

Authorized personnel and rigging contractors will be alerted to the potential zone of high radio frequency field levels on the tower, and if necessary, the station will operate with reduced power or terminate the operation of the transmitter as appropriate when it is necessary for authorized personnel or contractors to perform work on or near the tower. Workers and the general public, therefore, will not be subjected to RFF levels in excess of the current FCC guidelines.

Environmental Assessment

An environmental assessment (“EA”) is categorically excluded under Section 1.1306 of the FCC Rules and Regulations as the tower was constructed prior to the requirements specified in WT Docket No. 03-128 and the applicant indicates:

- (a)(1) The existing tower is not located in an officially designated wilderness area.
- (a)(2) The existing tower is not located in an officially designated wildlife preserve.
- (a)(3) The proposed facilities will not affect any listed threatened or endangered species or habitats.

- (a)(3)(ii) The proposed facilities will not jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats.
- (a)(4) The proposed facilities will be located on a tower which was built prior to the adoption of WT Docket No. 03-128 and will not affect any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.
- (a)(5) The existing tower is not located near any known Indian religious sites.
- (a)(6) The existing tower is not located in a flood plain.
- (a)(7) The installation of the DTV facilities on an existing tower will not involve a significant change in surface features of the ground in the vicinity of the tower.
- (a)(8) It is not proposed to equip the tower with high intensity white lights unless required by the FAA.
- (b) Workers and the general public will not be subjected to RFF levels in excess of the current FCC guidelines contained in OET Bulletin No. 65, Edition 97-01, dated August 1997 and Supplement A.

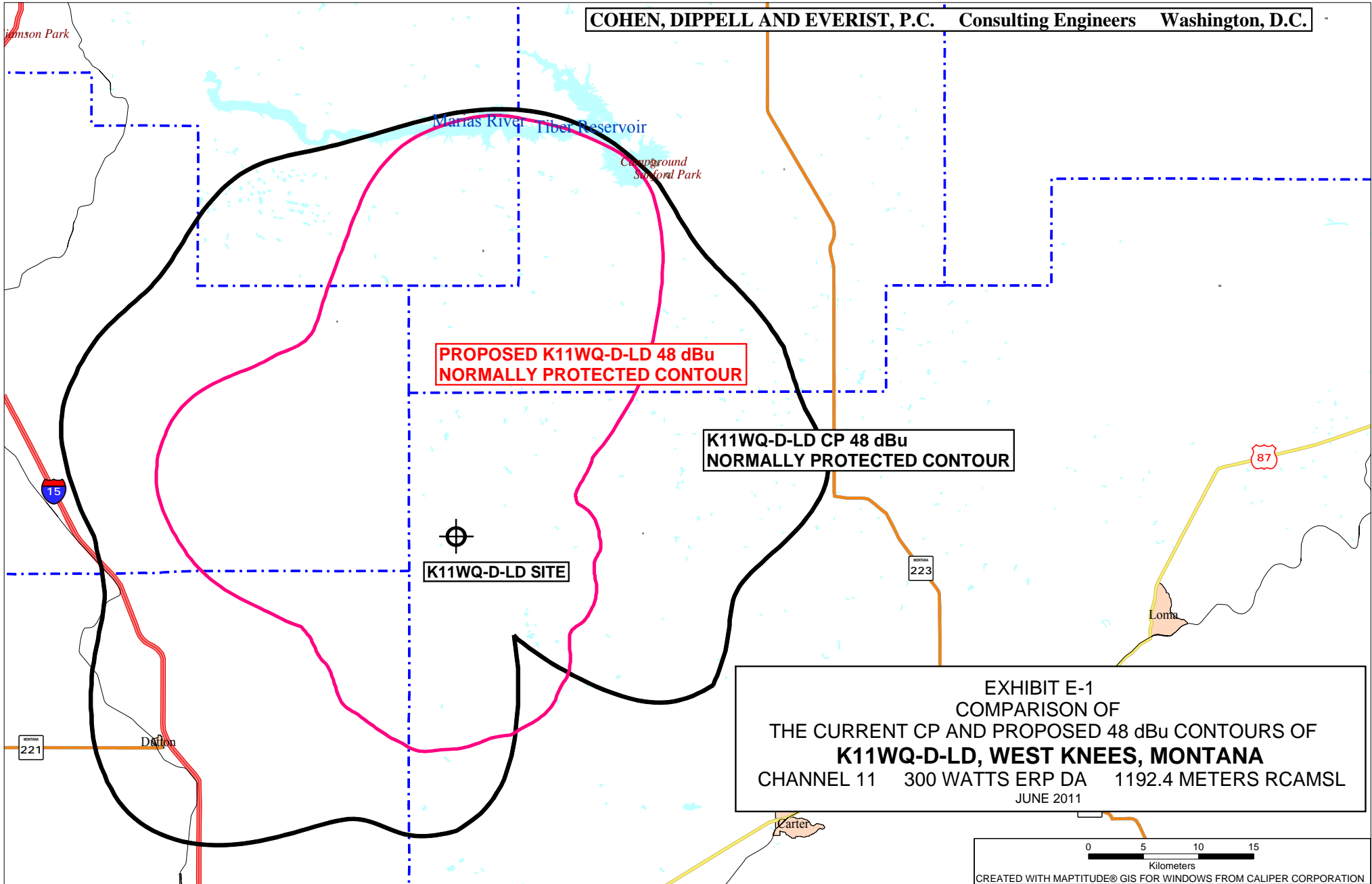


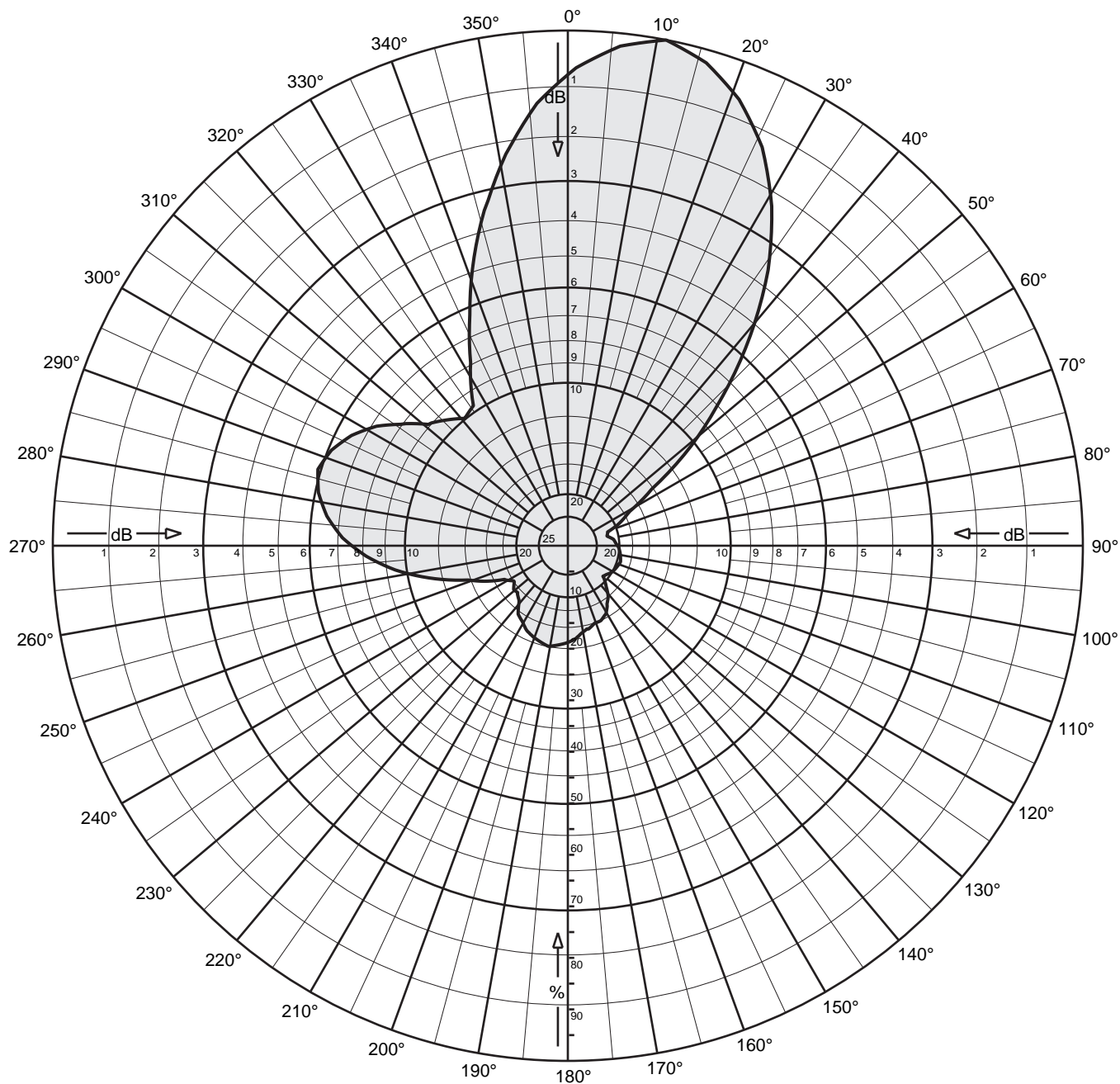
EXHIBIT E-1
COMPARISON OF
THE CURRENT CP AND PROPOSED 48 dBu CONTOURS OF
K11WQ-D-LD, WEST KNEES, MONTANA
CHANNEL 11 300 WATTS ERP DA 1192.4 METERS RCAMSL
JUNE 2011

COHEN, DIPPELL AND EVERIST, P.C.

EXHIBIT E-2

ANTENNA MANUFACTURER DATA

K11WQ-D, WEST KNEES, MONTANA



Three HDCA-10/HRM/75N Yagi Antennas

Oriented at 11, 11 & 287 degrees

CH: 11

Gain: 10.5 dBd (x11.2)

Horizontal Polarization

Vertical Stacked

Horizontal plane Pattern

K11WQ



Three HDCA-10/HRM/75N Yagi Antennas
 Oriented at 11, 11 & 287 degrees
 CH: 11
 Gain: 10.5 dBd (x11.2)

Horizontal Polarization
 Vertical Stacked
 Horizontal plane Pattern
 K11WQ

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
0	0.914	-0.78	9.72	9.38	180	0.188	-14.54	-4.04	0.39
5	0.966	-0.30	10.20	10.46	185	0.193	-14.29	-3.79	0.42
10	0.995	-0.04	10.46	11.11	190	0.198	-14.07	-3.57	0.44
15	0.980	-0.17	10.33	10.78	195	0.195	-14.20	-3.70	0.43
20	0.937	-0.56	9.94	9.86	200	0.190	-14.42	-3.92	0.41
25	0.874	-1.17	9.33	8.57	205	0.184	-14.70	-4.20	0.38
30	0.787	-2.08	8.42	6.95	210	0.174	-15.21	-4.71	0.34
35	0.683	-3.31	7.19	5.24	215	0.166	-15.62	-5.12	0.31
40	0.564	-4.97	5.53	3.57	220	0.148	-16.58	-6.08	0.25
45	0.442	-7.09	3.41	2.19	225	0.137	-17.25	-6.75	0.21
50	0.330	-9.63	0.87	1.22	230	0.135	-17.40	-6.90	0.20
55	0.219	-13.19	-2.69	0.54	235	0.127	-17.90	-7.40	0.18
60	0.149	-16.52	-6.02	0.25	240	0.134	-17.44	-6.94	0.20
65	0.116	-18.68	-8.18	0.15	245	0.162	-15.83	-5.33	0.29
70	0.088	-21.13	-10.63	0.09	250	0.198	-14.09	-3.59	0.44
75	0.079	-22.04	-11.54	0.07	255	0.253	-11.94	-1.44	0.72
80	0.086	-21.35	-10.85	0.08	260	0.314	-10.06	0.44	1.11
85	0.092	-20.74	-10.24	0.09	265	0.370	-8.63	1.87	1.54
90	0.097	-20.31	-9.81	0.10	270	0.419	-7.55	2.95	1.97
95	0.101	-19.94	-9.44	0.11	275	0.458	-6.78	3.72	2.35
100	0.103	-19.70	-9.20	0.12	280	0.486	-6.27	4.23	2.65
105	0.106	-19.50	-9.00	0.13	285	0.502	-5.98	4.52	2.83
110	0.105	-19.54	-9.04	0.12	290	0.500	-6.02	4.48	2.81
115	0.103	-19.74	-9.24	0.12	295	0.481	-6.36	4.14	2.59
120	0.100	-20.00	-9.50	0.11	300	0.451	-6.91	3.59	2.28
125	0.096	-20.40	-9.90	0.10	305	0.410	-7.74	2.76	1.89
130	0.091	-20.81	-10.31	0.09	310	0.368	-8.69	1.81	1.52
135	0.103	-19.70	-9.20	0.12	315	0.344	-9.28	1.22	1.32
140	0.121	-18.37	-7.87	0.16	320	0.322	-9.83	0.67	1.17
145	0.134	-17.47	-6.97	0.20	325	0.326	-9.74	0.76	1.19
150	0.149	-16.52	-6.02	0.25	330	0.378	-8.45	2.05	1.60
155	0.157	-16.07	-5.57	0.28	335	0.453	-6.88	3.62	2.30
160	0.159	-15.96	-5.46	0.28	340	0.548	-5.22	5.28	3.37
165	0.165	-15.64	-5.14	0.31	345	0.650	-3.74	6.76	4.74
170	0.170	-15.38	-4.88	0.32	350	0.749	-2.51	7.99	6.30
175	0.181	-14.87	-4.37	0.37	355	0.842	-1.49	9.01	7.96

TABLE I
CONTOUR DATA
K11WQ, WEST KNEES, MONTANA
CHANNEL 11 300 WATTS KW ERP 1192.4 METERS RCAMSL
JUNE 2011

Radial	Average*	Effective	Depression	ERP At	Distance to Contour
<u>Bearing</u>	<u>Elevation</u>	<u>Height</u>	<u>Angle</u>	<u>Radio</u>	<u>F(50/90)</u>
(N ° E, T)	<u>3.2 to 16.1 km</u>	<u>meters</u>	<u>degrees</u>	<u>Horizon</u>	<u>48 dBu</u>
	<u>meters</u>	<u>meters</u>		<u>kW</u>	<u>km</u>
0	1008.6	183.8	0.375	0.251	37.6
5	1010.8	181.6	0.373	0.28	38.3
10	1016.7	175.7	0.367	0.297	38.3
15	1014.3	178.1	0.370	0.288	38.2
20	1009.2	183.2	0.375	0.263	37.9
25	1002.2	190.2	0.382	0.229	37.4
30	1004.5	187.9	0.380	0.186	35.7
35	1017.5	174.9	0.366	0.14	32.5
40	1029.6	162.8	0.353	0.095	28.8
45	1041.3	151.1	0.340	0.059	25.2
50	1049.0	143.4	0.332	0.033	21.7
55	1051.0	141.4	0.329	0.014	17.8
60	1062.5	129.9	0.316	0.007	14.2
65	1057.6	134.8	0.322	0.004	12.8
70	1048.4	144.0	0.332	0.002	11.5
75	1035.2	157.2	0.347	0.002	11.4
80	1024.2	168.2	0.359	0.002	12.3
85	1023.1	169.3	0.360	0.003	12.8
90	1027.7	164.7	0.355	0.003	12.9
95	1030.5	161.9	0.352	0.003	13.1
100	1041.7	150.7	0.340	0.003	12.7
105	1042.8	149.6	0.339	0.003	12.9
110	1027.4	165.0	0.356	0.003	13.5
115	1015.7	176.7	0.368	0.003	13.8
120	1007.7	184.7	0.377	0.003	13.9
125	1002.6	189.8	0.382	0.003	13.8
130	999.2	193.2	0.385	0.002	13.5
135	998.1	194.3	0.386	0.003	14.4
140	997.2	195.2	0.387	0.004	15.8

TABLE I
CONTOUR DATA
K11WQ, WEST KNEES, MONTANA
CHANNEL 11 300 WATTS KW ERP 1192.4 METERS RCAMSL
JUNE 2011

Radial	Average*	Effective	Depression	ERP At	Distance to Contour
<u>Bearing</u>	<u>Elevation</u>	<u>Height</u>	<u>Angle</u>	<u>Radio</u>	<u>F(50/90)</u>
(N ° E, T)	<u>3.2 to 16.1 km</u>	<u>meters</u>	<u>degrees</u>	<u>Horizon</u>	<u>48 dBu</u>
	meters	meters		kW	km
145	996.6	195.8	0.388	0.005	16.5
150	996.0	196.4	0.388	0.007	17.5
155	994.1	198.3	0.390	0.007	18.1
160	991.1	201.3	0.393	0.008	18.3
165	991.0	201.4	0.393	0.008	18.6
170	999.1	193.3	0.385	0.009	18.5
175	1003.0	189.4	0.381	0.01	18.9
180	1002.6	189.8	0.382	0.011	19.3
185	1003.8	188.6	0.380	0.011	19.4
190	1002.0	190.4	0.382	0.012	19.8
195	1006.3	186.1	0.378	0.011	19.4
200	1008.1	184.3	0.376	0.011	19.1
205	1009.7	182.7	0.374	0.01	18.7
210	1004.8	187.6	0.379	0.009	18.5
215	998.0	194.4	0.386	0.008	18.4
220	997.5	194.9	0.387	0.007	17.4
225	998.8	193.6	0.385	0.006	16.6
230	997.5	194.9	0.387	0.005	16.6
235	994.7	197.7	0.389	0.005	16.3
240	1001.4	191.0	0.383	0.005	16.4
245	1008.8	183.6	0.375	0.008	17.7
250	1016.4	176.0	0.367	0.012	19.1
255	1023.3	169.1	0.360	0.019	20.9
260	1026.7	165.7	0.357	0.03	22.7
265	1027.4	165.0	0.356	0.041	24.3
270	1027.4	165.0	0.356	0.053	25.6
275	1022.5	169.9	0.361	0.063	26.9
280	1019.3	173.1	0.364	0.071	27.8
285	1019.2	173.2	0.365	0.076	28.2

TABLE I
CONTOUR DATA
K11WQ, WEST KNEES, MONTANA
CHANNEL 11 300 WATTS KW ERP 1192.4 METERS RCAMSL
JUNE 2011

Radial	Average*	Effective	Depression	ERP At	Distance to Contour
<u>Bearing</u>	<u>Elevation</u>	<u>Height</u>	<u>Angle</u>	<u>Radio</u>	<u>F(50/90)</u>
(N ° E, T)	<u>3.2 to 16.1 km</u>	<u>meters</u>	<u>degrees</u>	<u>Horizon</u>	<u>48 dBu</u>
	meters	meters		kW	km
290	1019.9	172.5	0.364	0.075	28.1
295	1019.6	172.8	0.364	0.069	27.7
300	1023.7	168.8	0.360	0.061	26.7
305	1028.6	163.8	0.354	0.05	25.3
310	1031.1	161.3	0.352	0.041	24.0
315	1031.9	160.5	0.351	0.036	23.3
320	1033.1	159.3	0.350	0.031	22.5
325	1031.0	161.4	0.352	0.032	22.8
330	1028.0	164.4	0.355	0.043	24.5
335	1026.0	166.4	0.357	0.062	26.5
340	1021.2	171.2	0.362	0.09	29.1
345	1010.1	182.3	0.374	0.127	32.4
350	1004.6	187.8	0.380	0.168	34.9
355	1005.8	186.6	0.378	0.213	36.6

*Based on data from 3-second database.

COHEN, DIPPELL AND EVERIST, P.C.

TABLE II
LONGLEY-RICE INTERFERENCE
FOR THE OPERATION FOR
K11WQ, WEST KNEES, MONTANA
CHANNEL 11 0.300 KW ERP 1192.4 METERS RCAMSL
JUNE 2011

<u>Channel</u>	<u>Call</u>	<u>City/State</u>	<u>Dist(km)</u>	<u>Status</u>	<u>FCC File No.</u>	<u>Result</u>
10	CBRT6	LETHBRIDGE AB	219.2	LIC	NULL-301544NULL	0.00%
10	CBRT-6	LETHBRIDGE AB	218.8	LIC	BPFS-20081103ABZ	0.00%
10	CBRT-6	LETHBRIDGE AB	218.8	OP	CANADA-1418	0.00%
10	CBRT-PT-	LETHBRIDGE AB	218.8	AL	CANADA-1435603NULL	0.00%
10	K10BK	BIG SANDY MT	99	LIC	BLTTV-261	No interference
10	K10HD	BOULDER MT	208.4	LIC	BLTTV-19840426IF	0.00%
10	K10DX	CONRAD MT	56	LIC	BLTTV-4649	No interference
10	K10MK	EAST GLACIER PARK MT	147	LIC	BLTTV-3586	0.00%
10	K50LB	PO;SON MT	211.6	APP	BDFCDTV-20080711ACO	0.00%
10	K10LH	W. GLACIER,MARTIN MT	199.4	LIC	BLTTV-19830216II	0.00%
10	K10LH	WEST GLACIER, ETC MT	199.1	APP	BDFCDTV-20101004AAK	0.00%
11	CBRT5	ROSEMARY AB	307.4	LIC	NULL-301788NULL	No interference
11	CBRT-5	ROSEMARY AB	307.4	LIC	BPFS-20081104ABV	No interference
11	CBRT-5	ROSEMARY AB	307.4	OP	CANADA-1333	No interference
11	CBRT-PT-	ROSEMARY AB	307.4	AL	CANADA-1435949NULL	No interference
11	CBUBT10	NATAL BC	319.4	LIC	NULL-301790NULL	No interference
11	CBUBT-10	SPARWOOD BC	319.5	LIC	BPFS-20081119AOL	No interference
11	CBUBT-10	SPARWOOD BC	319.5	OP	CANADA-1157	No interference
11	CBUBT-PT	SPARWOOD BC	319.5	AL	CANADA-1434376NULL	No interference
11	K11HM-D	BONNERS FERRY ID	368.7	LIC	BLDTV-20090722ABQ	0.00%
11	K11UN-D	COOLIN ID	415.8	LIC	BLDTV-20100909AAG	0.00%
11	K11KO	KAMIAH ID	408.1	LIC	BLTTV-3724	0.00%
11	K11BD-D	LEADORE ID	397.8	LIC	BLDTV-20101216AAV	0.00%
11	K11TY-D	SALMON ID	380.2	LIC	BLDTV-20110104AAL	0.00%
11	K11LA-D	BASIN MT	205.5	LIC	BLDTV-20091123AAC	No interference
11	K11RX-D	BIG ARM MT	222.4	LIC	BLDTV-20090810ADC	No interference
11	KULR-TV	BILLINGS MT	333.5	LIC	BLCDT-20070521AFW	No interference
11	K11IL-D	BITTERROOT RANGE, ET MT	243.9	LIC	BLDTV-20090909ACI	No interference
11	K11UJ	BOZEMAN MT	262.9	LIC	BLTVL-20010917AAF	No interference
11	K11KP	BULL LAKE VALLEY MT	333.7	APP	BSTA-20100826AFN	0.00%

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TABLE II
LONGLEY-RICE INTERFERENCE
FOR THE OPERATION FOR
K11WQ, WEST KNEES, MONTANA
CHANNEL 11 0.300 KW ERP 1192.4 METERS RCMSL
JUNE 2011

<u>Channel</u>	<u>Call</u>	<u>City/State</u>	<u>Dist(km)</u>	<u>Status</u>	<u>FCC File No.</u>	<u>Result</u>
11	K11KP	BULL LAKE VALLEY MT	333.8	LIC	BLTTV-3664	0.00%
11	K11CC	CHECKERBOARD MT	169.8	LIC	BLTTV-3551	No interference
11	K11GE	COOKE CITY, ETC. MT	350.3	LIC	BLTTV-1255	0.00%
11	K11CB	FORSYTH MT	403.9	LIC	BLTTV-796	0.00%
11	K11VX-D	GALLATIN RIVER, ETC. MT	304.7	CP	BDCCDVL-20061010ANS	No interference
11	K11IA	GLASGOW MT	350.8	CP	BDFCDTV-20091013ACJ	0.00%
11	K11HE	JORDAN, ETC. MT	328.2	LIC	BLTTV-3030	0.00%
11	K11IA	KING SPRINGS, ETC. MT	350.6	LIC	BLTTV-1958	0.00%
11	K11MB	LAVINA MT	268.1	LIC	BLTTV-4268	No interference
11	K11IH	MALTA MT	260.5	CP	BDFCDTV-20101108ADW	No interference
11	K11IH	MALTA, ETC. MT	261.1	LIC	BLTTV-1931	No interference
11	KUFM-TV	MISSOULA MT	238.9	LIC	BLEDT-20101008ACD	No interference
11	K11JP-D	PLAINS-PARADISE MT	275	LIC	BLDTV-20090617AAF	No interference
11	K11HO-D	POLSON MT	211.7	LIC	BLDTV-20090723ACX	No interference
11	K11MF	QUARTZ CREEK, ETC. MT	323.7	APP	BSTA-20090109APX	0.00%
11	K11MF	QUARTZ CREEK, ETC. MT	322.9	LIC	BLTTV-4347	0.00%
11	K11FS	ROUNDUP MT	271.6	LIC	BLTTV-4858	No interference
11	K11KE	SOMERS MT	201.3	LIC	BLTT-3563	No interference
11	K11WK-D	STANFORD MT	123.9	CP	BPDTV-20100127ADS	No interference
11	K11WK-D	STANFORD MT	124.1	LIC	BLDTV-20090824AHO	No interference
11	K11FF	SUPERIOR MT	282.1	APP	BDFCDTV-20090527AGM	No interference
11	K11FF	SUPERIOR MT	283.2	LIC	BRTTV-19780821IG	No interference
11	K11FQ-D	THOMPSON FALLS MT	301	LIC	BLDTV-20090610ADS	No interference
11	K11FQ-D	THOMPSON FALLS MT	300.9	APP	BSTA-20060308ALP	No interference
11	K11WM-D	TOWNSEND MT	193.8	LIC	BLDTV-20100528AEO	No interference
11	K11KP	TROY MT	333.7	APP	BDFCDTV-20100208AAH	0.00%
11	K11MP	WHITE SULPHUR SPRING MT	172.6	LIC	BLTTV-19790720ID	No interference
11	K11GX	WHITE WATER MT	278.2	APP	BDFCDTV-20101108ADS	No interference
11	K11NH	WINIFRED, ETC. MT	156.7	LIC	BLTTV-4829	No interference
11	K11KE	WOODS BAY MT	201.3	CP	BDFCDTV-20070618ACO	No interference

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TABLE II
LONGLEY-RICE INTERFERENCE
FOR THE OPERATION FOR
K11WQ, WEST KNEES, MONTANA
CHANNEL 11 0.300 KW ERP 1192.4 METERS RCMSL
JUNE 2011

<u>Channel</u>	<u>Call</u>	<u>City/State</u>	<u>Dist(km)</u>	<u>Status</u>	<u>FCC File No.</u>	<u>Result</u>
11	K11GX	WYNOT, ETC. MT	278.2	LIC	BLTTV-1392	No interference
11	K11PK	CLARK, ETC. WY	382.2	LIC	BLTTV-19810318JT	0.00%
11	K11QL	SUNLIGHT BASIN, ETC. WY	392.6	LIC	BLTTV-19830314II	0.00%
12	CBCA-PT-	ETZIKOM AB	173.1	AL	CANADA-1435260NULL	0.00%
12	CBCATV1	ETZIKOM AB	173.1	LIC	NULL-301994NULL	0.00%
12	CBCA-TV-	ETZIKOM AB	173.1	LIC	BPFS-20080930AUZ	No interference
12	CBCA-TV-	ETZIKOM AB	173.1	OP	CANADA-1568	0.00%
12	K12DJ	CONRAD MT	56	LIC	BLTTV-4648	No interference
12	K12LO-D	FERNDAL MT	199.8	LIC	BLDVL-20090817ACX	0.00%
12	KTVH-DT	HELENA MT	134.9	CP	BPCDT-20080619ADQ	0.10%
12	K12LU	WEST GLACIER, ETC MT	199.1	APP	BDFCDTV-20101004AAL	0.00%
12	K12LU	WEST GLACIER, ETC. MT	199.4	LIC	BLTTV-19820408IB	0.00%

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: _____
2. Translator Input Channel No. _____
3. Station proposed to be rebroadcast:

Call Sign	City	State	Channel
-----------	------	-------	---------

4. Antenna Location Coordinates: (NAD 27)

_____ ° _____ ' _____ " ☐ N ☐ S Latitude
_____ ° _____ ' _____ " ☐ E ☐ W Longitude

5. Antenna Structure Registration Number: _____

☐

Not applicable

See Explanation
in Exhibit No.

☐

FAA Notification Filed with FAA

6. Antenna Location Site Elevation Above Mean Sea Level: _____ meters
7. Overall Tower Height Above Ground Level: _____ meters
8. Height of Radiation Center Above Ground Level: _____ meters
9. Maximum Effective Radiated Power (ERP): _____ kW
10. Transmitter Output Power: _____ kW

11. a. Transmitting Antenna: ☐ Nondirectional ☐ Directional ☐ Directional composite

Manufacturer	Model
--------------	-------

- b. Electrical Beam Tilt: _____ degrees ☐ Not applicable

c. Directional Antenna Relative Field Values:

Rotation: _____ ° ☐ 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.

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.

Exhibit No.

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.

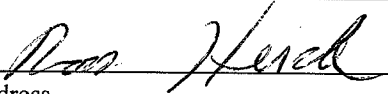
☐ Pursuant to Section 74.786(d), the applicant has notified, within 30 days of filing this application, all commercial wireless licensees of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.

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 Ross J. Heide		Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature 		Date June 21, 2011	
Mailing Address Cohen, Dippell and Everist, P.C., 1420 N Street, NW, Suite One			
City Washington	State or Country (if foreign address) DC		ZIP Code 20005
Telephone Number (include area code) (202) 898-0111		E-Mail Address (if available) cde@attglobal.net	

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 503).