

CITY OF LICENSE	Moscow, ID
FILE NUMBER	BNPED-20071018BDS
FACILITY ID	172586
PREPARED FOR	Radio Free Moscow, Inc.
VERSION	2.5
JOB	111023

CONSOLIDATED

ENGINEERING EXHIBIT

FCC Form 340 - Section VII - FM Engineering

ENGINEERING STATEMENT

PROPOSED MINOR-MODIFICATION OF BNPED-20071018BDS, MOSCOW, ID

This proposal is for a minor-modification of Construction Permit BNPED-20071018BDS of Radio Free Moscow, Inc. (RFM), for a new NCE station at Moscow, ID. A modification of the ERP & directional antenna pattern is proposed. All other parameters would remain exactly the same.

As shown by the attached **Exhibits 18 through 18f**, this proposal meets the contour overlap requirements of §73.509 with respect to all other reserved-band stations, with the following exceptions:

1. Second-adjacent station KNWV (Lic.), Clarkson, WA
2. Second-adjacent station KZUU, Pullman, WA
3. Second-adjacent construction permit BNPED-20071022AVN, Pullman, WA.

In the case of number 1., KNWV, the current authorization for 20071018BDS at Moscow, ID contains the following Special Operating Condition:

7 PROGRAM TESTS FOR THE NEW FACILITY SERVING MOSCOW, ID (FACILITY ID# 172586) WILL NOT COMMENCE ON CHANNEL 212A WITH THE FACILITIES SPECIFIED HEREIN UNTIL PROGRAM TESTS FOR KNWV (FACILITY ID# 71042) COMMENCE ON CHANNEL 213A WITH THE FACILITIES SPECIFIED IN BPED-20100910ADU AND A LICENSE WILL NOT BE GRANTED FOR THE NEW FACILITY SERVING MOSCOW, ID ON CHANNEL 212A WITH THE FACILITIES SPECIFIED HEREIN UNTIL A LICENSE IS GRANTED FOR KNWV ON CHANNEL 213A WITH THE FACILITIES SPECIFIED IN BPED-20100910ADU.

RFM requests similar consideration in the granting of this proposed minor-modification to 20071018BDS.

In the case of numbers 2. & 3., KZUU and 20071022AVN, there are small areas of *interference-received* from both, for which waivers are hereby requested. There is no area of interference *caused* to either KZUU or 20071022AVN.

Specifically:

- The population within the proposed FCC 60dBu contour is more than doubled by this proposal, from 29,459 persons to 61,268 persons.

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503-245-6065

- The proposed 60dBu service area encompasses 2,360km².
- The proposed area of interference-received from KZUU is 6.5km², just 0.27% of the total proposed service area of 20071018BDS.
- The proposed area of interference-received from 20071022AVN is 1.9km², just 0.08% of the total proposed service area of 20071018BDS.

The Commission has granted many such waivers of §73.509 in similar circumstances. Specifically, in *Education Information Corp.*, 6 FCC Rcd 2207 (1992) (“Raleigh”), the Commission granted waivers which allowed WCPE(FM) to receive interference which comprised 0.84% of its service area.

In this instant case, the applicant RFM believes that the benefit of more than doubling the NCE service of 20071018BDS heavily outweighs the potential for interference-received in a very limited area. RFM believes that the grant of such a “Raleigh” Waiver is therefore in the public interest, and is fully supported by past precedent.

Exhibit 16 - Community of License Coverage

Brown Broadcast Services, Inc.
Job: RFM amend 03312011db.fmj
Master Database: 2011_Mar_31.fmd
Lat: N46:40:54 Lon: W116:58:13 NAD-27
Scale: 1:416667
Channel: 212 Class: C3

rfInvestigator Version 3.4.27
by rfSoftware, Inc.
Date: 4/6/2011 7:08:12 PM
Key:
City Grade
Protected
Co-Channel
1st Adj
2nd/3rd Adj

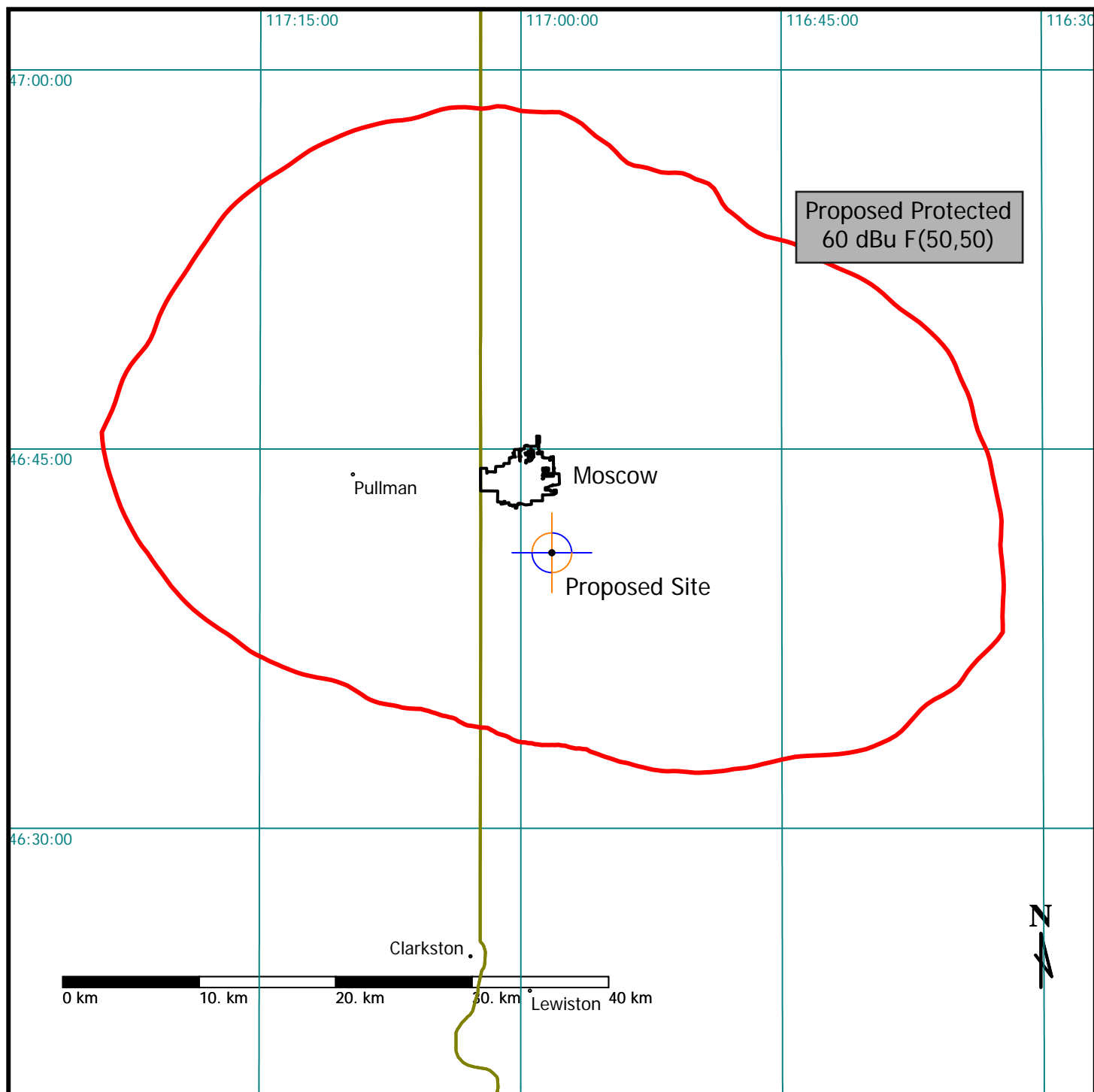


EXHIBIT 18

CONTOUR OVERLAP PROTECTION TO OTHER RESERVED-BAND STATIONS

The proposed modification meets the contour overlap requirements of §73.509 with respect to all other reserved-band stations, with the following exceptions:

- First-adjacent station KNWV (LIC), Clarkston, WA
- Second-adjacent station KZUU, Pullman, WA
- Second-adjacent station BNPED-20071022AVN (CP), Pullman, WA

Regarding KNWV: The applicant's current CP at Moscow, ID specifies that the it cannot commence Program Tests until KNWV has completed Program Tests of their CP. It also states that KNWV must be granted a license for their modified facility, before Moscow can be granted a license. Once KNWV builds its CP, there will be no overlap with either the current Moscow CP or the Moscow CP-MOD proposed herein. See the preceding **Engineering Statement** for details.

Waivers of *interference-received* from KZUU and 20071022AVN are requested, as noted in the preceding **Engineering Statement**.

Domestic stations considered:

ID	City	St	Chan	CL	Stat	Prefix	ARN	Dist	Min 207	Clear 207
Co-channel										
KTVR-FM	LA GRANDE	OR	212	C2	LIC	BLED	20040504ABP	163.6	177	-13.4
KPBZ	SPOKANE	WA	212	A	LIC	BLED	20100621AAA	132.2	142	-9.8
1st adjacent channel										
KNWV	CLARKSTON	WA	213	A	CP	BPED	20100910ADU	26.9	89	-62.1
KNWV	CLARKSTON	WA	213	A	LIC	BLED	20090312ABV	26.9	89	-62.1
KNOW	COTTONWOOD	ID	211	C2	CP	BPED	20100804AAZ	78.4	117	-38.6
KNWO	COTTONWOOD	ID	211	C3	LIC	BLED	19940207KA	78.4	99	-20.6
2nd & 3rd adjacent channel										
20071022AVN	PULLMAN	WA	210	A	CP	BNPED	20071022AVN	10.5	42	-31.5
KZUU	PULLMAN	WA	214	A	LIC	BLED	20090210AAL	15.6	42	-26.4
KAUC	WEST CLARKSTON	WA	209	A	LIC	BLED	20100625ALC	27.2	42	-14.9

All contour calculations were made using the methods and procedures described in 47 CFR §73.313(c). Areas were calculated using a spline integration in one-degree increments. Population totals were calculated by testing each U.S. Census-defined block-centroid population point in the region with a point-in-polygon method. The population was summed for each point within the polygon using data from the 2000 Census.

FMOver calculations were done using V-Soft FM Commander software, using “HAAT method 0 (zero)”, 51 data points per radial, and the FCC-modified version of the NGDC 30 second terrain database. According to V-Soft, this combination results in “astounding agreement” with FCC software.

Exhibit 18a - Co-channel Contour Protection

Brown Broadcast Services, Inc.
Job: RFM amend 03312011db.fmj
Master Database: 2011_Mar_31.fmd
Lat: N46:40:54 Lon: W116:58:13 NAD-27
Scale: 1:1750000
Channel: 212 Class: C3

rfInvestigator Version 3.4.27
by rfSoftware, Inc.
Date: 4/6/2011 7:06:39 PM

PROPOSED

Protected: 60dBu F(50,50)

Interfering: 40dBu F(50,10)

AFFECTED

Protected: 60dBu F(50,50)

Interfering: 40dBu F(50,10)

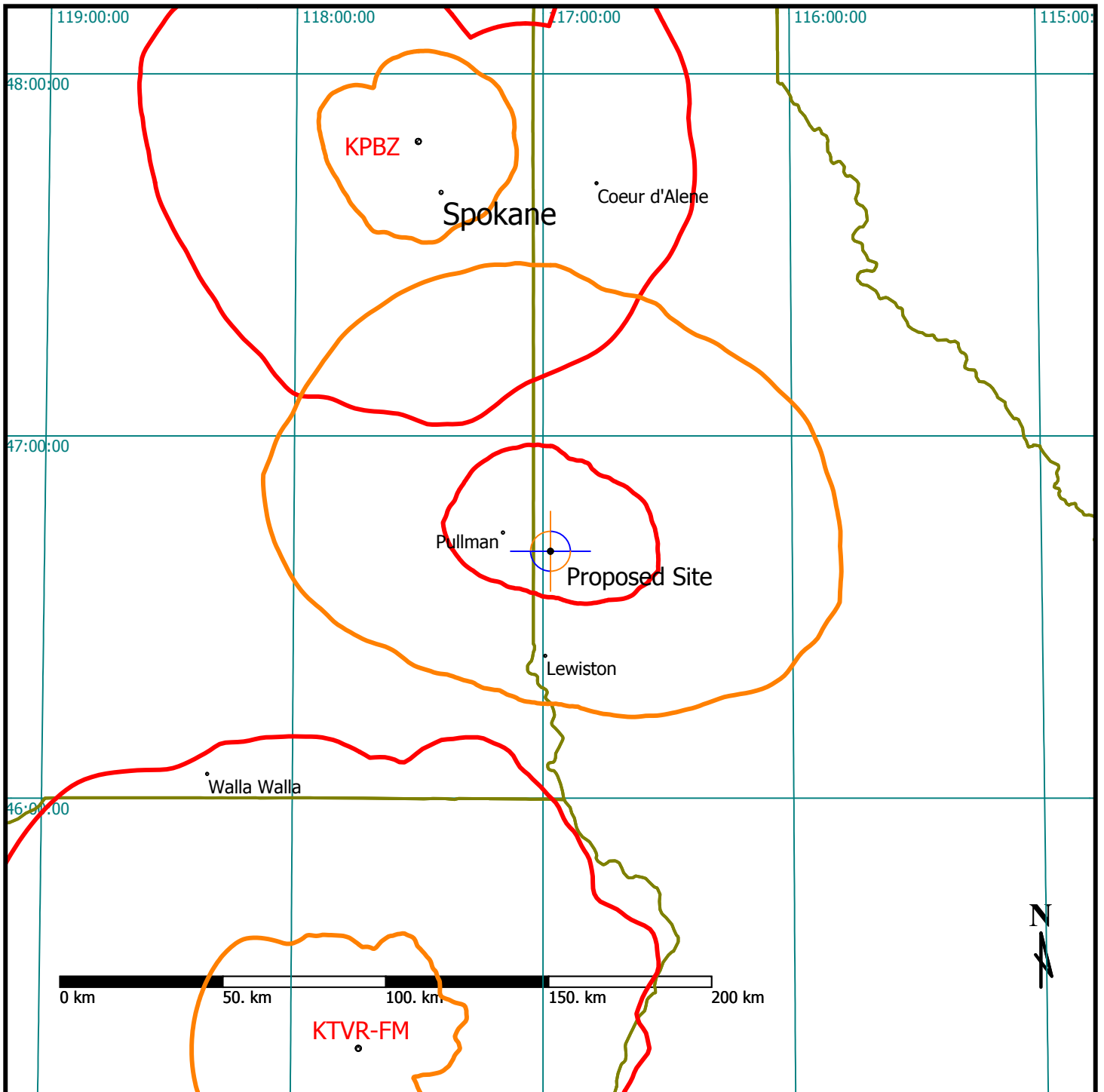


Exhibit 18b - 1st Adjacent Channel Contour Protection

Brown Broadcast Services, Inc.
Job: RFM amend 03312011db.fmj
Master Database: 2011_Mar_31.fmd
Lat: N46:40:54 Lon: W116:58:13 NAD-27
Scale: 1:1000000
Channel: 212 Class: C3

rfInvestigator Version 3.4.27
by rfSoftware, Inc.
Date: 4/6/2011 7:05:00 PM

PROPOSED

Protected: 60dBu F(50,50)

Interfering: 54dBu F(50,10)

AFFECTED

Protected: 60dBu F(50,50)

Interfering: 54dBu F(50,10)

KNWV (CP) to be licensed before this application can be built and licensed. (see Engineering Statement).

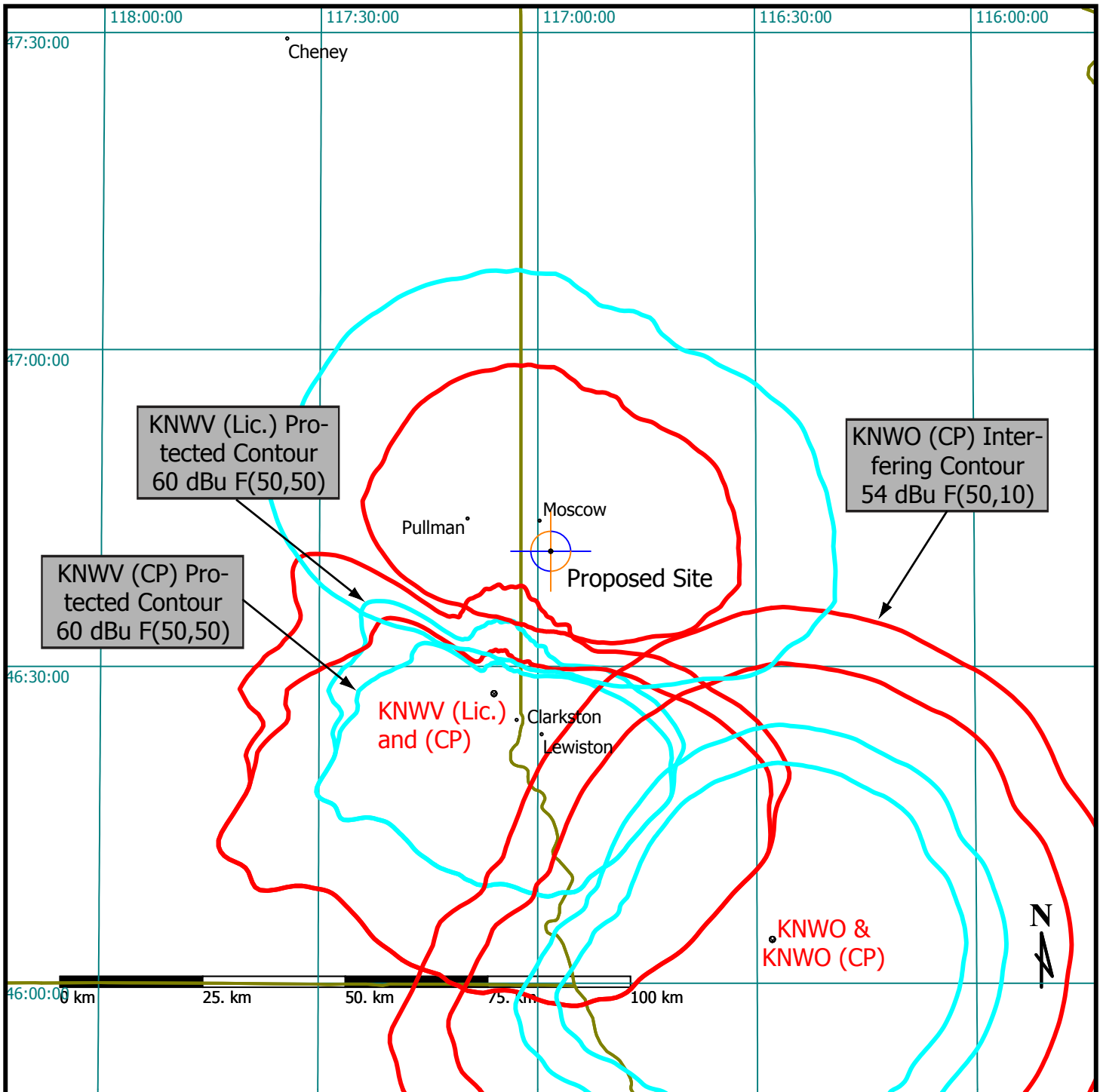


EXHIBIT 18c

FMOver Analysis -

20071018BDS Proposed Amend vs. KNWV (CP), Clarkston, WA

04-04-2011

Terrain Data: FCC NGDC 30 Sec

FMOver Analysis

20071018BDS Proposed Amend

KNWV (CP) BPED20100910ADU

Channel = 212C3
Max ERP = 1.1 kW
RCAMSL = 1146 M
N. Lat. 46 40 54.0
W. Lng. 116 58 13.0
Protected
60 dBu

Channel = 213A
Max ERP = 0.42 kW
RCAMSL = 908 M
N. Lat. 46 27 26.0
W. Lng. 117 06 00.0
Interfering
54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
157.0	000.0865	0291.8	017.1	060.9	000.0405	0068.9	019.0	42.97	
158.0	000.0826	0291.4	016.9	060.1	000.0390	0068.1	018.7	42.93	
159.0	000.0787	0290.9	016.6	059.3	000.0377	0067.0	018.5	42.87	
160.0	000.0749	0290.7	016.4	058.4	000.0364	0065.9	018.2	42.79	
161.0	000.0723	0290.7	016.3	057.7	000.0354	0064.9	018.0	42.74	
162.0	000.0696	0289.9	016.1	056.9	000.0342	0063.7	017.7	42.65	
163.0	000.0671	0288.8	015.9	056.1	000.0330	0062.9	017.5	42.57	
164.0	000.0645	0287.8	015.7	055.2	000.0317	0062.5	017.3	42.54	
165.0	000.0620	0287.0	015.5	054.3	000.0305	0062.5	017.1	42.53	
166.0	000.0596	0286.3	015.3	053.4	000.0293	0062.7	016.9	42.54	
167.0	000.0572	0285.8	015.2	052.5	000.0281	0062.9	016.8	42.53	
168.0	000.0549	0285.8	015.0	051.7	000.0269	0063.1	016.6	42.52	
169.0	000.0526	0285.8	014.8	050.8	000.0258	0063.7	016.4	42.54	
170.0	000.0504	0284.5	014.6	049.7	000.0246	0065.0	016.3	42.62	
171.0	000.0501	0282.2	014.6	049.0	000.0242	0066.2	016.1	42.83	
172.0	000.0499	0280.5	014.5	048.4	000.0238	0067.0	016.0	43.01	
173.0	000.0497	0279.7	014.5	047.7	000.0234	0067.3	015.8	43.14	
174.0	000.0494	0277.7	014.4	047.0	000.0229	0066.9	015.6	43.14	
175.0	000.0492	0274.6	014.3	046.1	000.0224	0065.5	015.5	42.99	
176.0	000.0490	0272.0	014.2	045.3	000.0219	0063.6	015.3	42.79	
177.0	000.0487	0270.5	014.1	044.5	000.0214	0061.7	015.2	42.60	
178.0	000.0485	0269.4	014.1	043.7	000.0210	0059.8	015.1	42.39	
179.0	000.0483	0269.9	014.1	043.1	000.0206	0058.3	014.9	42.04	
180.0	000.0480	0270.5	014.1	042.4	000.0202	0057.3	014.7	42.00	
181.0	000.0478	0271.1	014.1	041.7	000.0198	0056.7	014.6	42.03	
182.0	000.0476	0272.0	014.1	040.9	000.0194	0056.8	014.4	42.15	
183.0	000.0474	0272.9	014.1	040.2	000.0190	0057.1	014.2	42.29	
184.0	000.0471	0273.0	014.1	039.4	000.0186	0057.8	014.1	42.47	
185.0	000.0469	0272.9	014.1	038.5	000.0182	0058.5	014.0	42.63	
186.0	000.0467	0272.6	014.0	037.6	000.0178	0058.8	013.9	42.72	
187.0	000.0465	0273.0	014.0	036.7	000.0174	0058.7	013.7	42.76	
188.0	000.0462	0273.7	014.0	035.8	000.0170	0058.4	013.6	42.77	
189.0	000.0460	0274.7	014.1	034.9	000.0166	0058.1	013.5	42.79	
190.0	000.0458	0275.6	014.1	034.0	000.0162	0058.4	013.4	42.88	
191.0	000.0448	0276.7	014.0	032.9	000.0157	0059.4	013.3	42.97	
192.0	000.0438	0277.8	014.0	031.9	000.0153	0060.2	013.3	43.01	
193.0	000.0429	0278.2	013.9	030.8	000.0149	0060.4	013.3	42.93	
194.0	000.0419	0279.1	013.9	029.8	000.0145	0060.8	013.3	42.91	

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503-245-6065

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
195.0	000.0410	0280.9	013.8	028.7	000.0144	0061.8	013.2	43.04	
196.0	000.0400	0283.8	013.8	027.7	000.0142	0062.9	013.2	43.21	
197.0	000.0391	0286.4	013.8	026.6	000.0141	0064.5	013.1	43.42	
198.0	000.0382	0288.0	013.8	025.6	000.0140	0066.5	013.1	43.62	
199.0	000.0373	0289.4	013.7	024.5	000.0139	0068.0	013.2	43.73	
200.0	000.0364	0290.8	013.7	023.5	000.0137	0068.2	013.2	43.67	
201.0	000.0370	0291.6	013.8	022.5	000.0136	0067.7	013.1	43.69	
202.0	000.0375	0292.3	013.8	021.4	000.0135	0067.7	013.0	43.74	
203.0	000.0380	0293.0	013.9	020.3	000.0133	0068.9	013.0	43.92	
204.0	000.0385	0294.0	014.0	019.3	000.0133	0071.3	012.9	44.26	
205.0	000.0391	0295.3	014.0	018.1	000.0133	0074.3	012.9	44.68	
206.0	000.0396	0295.9	014.1	017.0	000.0133	0077.2	012.9	45.04	
207.0	000.0402	0295.5	014.1	015.9	000.0133	0079.2	012.9	45.24	
208.0	000.0407	0293.9	014.1	014.8	000.0133	0079.9	012.9	45.26	
209.0	000.0413	0291.3	014.1	013.8	000.0133	0079.5	013.0	45.11	
210.0	000.0418	0288.3	014.1	012.8	000.0133	0078.1	013.1	44.82	
211.0	000.0433	0285.7	014.1	011.7	000.0133	0076.5	013.1	44.60	
212.0	000.0448	0284.0	014.2	010.6	000.0133	0076.3	013.1	44.56	
213.0	000.0463	0282.9	014.3	009.5	000.0133	0076.3	013.1	44.54	
214.0	000.0479	0282.1	014.4	008.3	000.0133	0075.6	013.2	44.44	
215.0	000.0494	0281.3	014.5	007.1	000.0133	0074.2	013.2	44.23	
216.0	000.0510	0280.4	014.6	006.0	000.0133	0073.0	013.2	44.04	
217.0	000.0527	0279.3	014.7	004.9	000.0133	0073.6	013.3	44.03	
218.0	000.0543	0278.4	014.7	003.7	000.0133	0076.1	013.4	44.21	
219.0	000.0560	0277.9	014.8	002.6	000.0133	0078.1	013.4	44.33	
220.0	000.0577	0278.0	015.0	001.4	000.0133	0076.8	013.5	44.10	
221.0	000.0607	0278.7	015.2	000.0	000.0133	0074.8	013.5	43.87	
222.0	000.0638	0279.6	015.4	358.5	000.0133	0073.0	013.5	43.65	
223.0	000.0669	0280.1	015.6	357.1	000.0133	0072.1	013.6	43.50	
224.0	000.0702	0280.0	015.8	355.7	000.0133	0073.2	013.6	43.53	
225.0	000.0735	0279.4	016.0	354.4	000.0133	0071.6	013.7	43.22	
226.0	000.0769	0279.2	016.2	353.1	000.0133	0068.5	013.8	42.72	
227.0	000.0804	0279.8	016.4	351.7	000.0133	0066.4	013.9	42.33	
228.0	000.0839	0280.7	016.6	350.3	000.0133	0065.4	014.0	42.06	
229.0	000.0875	0281.4	016.8	348.9	000.0133	0064.8	014.2	41.81	
230.0	000.0912	0281.3	017.0	347.7	000.0133	0064.0	014.4	41.50	
231.0	000.0961	0279.9	017.2	346.6	000.0133	0063.8	014.5	41.25	
232.0	000.1010	0277.0	017.3	345.6	000.0133	0063.8	014.8	41.00	
233.0	000.1061	0273.4	017.4	344.8	000.0133	0063.5	015.0	40.91	
234.0	000.1112	0269.7	017.5	344.1	000.0133	0062.8	015.3	40.61	
235.0	000.1165	0267.1	017.6	343.3	000.0133	0061.6	015.5	40.24	
236.0	000.1220	0265.1	017.8	342.4	000.0133	0060.0	015.8	39.82	
237.0	000.1275	0264.0	017.9	341.6	000.0133	0058.4	016.0	39.37	
238.0	000.1332	0263.8	018.1	340.6	000.0133	0056.5	016.3	38.87	
239.0	000.1390	0265.1	018.4	339.6	000.0133	0054.8	016.5	38.37	
240.0	000.1449	0268.2	018.7	338.3	000.0133	0053.7	016.8	37.96	
241.0	000.1525	0272.6	019.1	336.9	000.0133	0052.6	017.1	37.52	
242.0	000.1603	0277.7	019.5	335.4	000.0133	0051.8	017.4	37.12	
243.0	000.1683	0282.8	019.9	334.0	000.0133	0052.1	017.7	36.89	
244.0	000.1765	0287.8	020.3	332.7	000.0133	0053.4	018.1	36.83	
245.0	000.1849	0292.2	020.7	331.5	000.0133	0054.3	018.4	36.65	
246.0	000.1935	0295.9	021.1	330.5	000.0133	0054.3	018.8	36.33	

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503-245-6065

04-04-2011 Terrain Data

KNWV (CP) BPED20100910ADU

20071018BDS Proposed Amend

Channel = 213A
 Max ERP = 0.42 kW
 RCAMSL = 908 M
 N. Lat. 46 27 26.0
 W. Lng. 117 06 00.0
 Protected
 60 dBu

Channel = 212C3
 Max ERP = 1.1 kW
 RCAMSL = 1146 M
 N. Lat. 46 40 54.0
 W. Lng. 116 58 13.0
 Interfering
 54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
322.0	000.0187	0089.8	006.4	214.9	000.0493	0281.3	024.2	52.10	
323.0	000.0179	0082.2	006.1	214.1	000.0480	0282.0	024.2	52.00	
324.0	000.0172	0075.0	005.8	213.3	000.0467	0282.7	024.3	51.89	
325.0	000.0165	0068.3	005.4	212.5	000.0456	0283.4	024.3	51.79	
326.0	000.0159	0063.3	005.2	211.9	000.0446	0284.1	024.3	51.71	
327.0	000.0152	0060.1	005.0	211.4	000.0440	0284.8	024.3	51.67	
328.0	000.0146	0057.8	004.9	211.0	000.0434	0285.6	024.3	51.64	
329.0	000.0139	0055.7	004.7	210.6	000.0428	0286.5	024.3	51.62	
330.0	000.0133	0054.4	004.6	210.3	000.0423	0287.4	024.2	51.60	
331.0	000.0133	0054.3	004.6	210.2	000.0421	0287.7	024.2	51.65	
332.0	000.0133	0054.0	004.6	210.1	000.0420	0288.0	024.1	51.68	
333.0	000.0133	0053.1	004.6	209.9	000.0418	0288.6	024.1	51.71	
334.0	000.0133	0052.1	004.5	209.7	000.0417	0289.2	024.0	51.74	
335.0	000.0133	0051.7	004.5	209.5	000.0416	0289.7	024.0	51.79	
336.0	000.0133	0052.0	004.5	209.5	000.0415	0289.9	023.9	51.84	
337.0	000.0133	0052.7	004.5	209.4	000.0415	0290.1	023.8	51.91	
338.0	000.0133	0053.5	004.6	209.4	000.0415	0290.2	023.7	51.97	
339.0	000.0133	0054.2	004.6	209.3	000.0414	0290.4	023.7	52.04	
340.0	000.0133	0055.4	004.7	209.3	000.0414	0290.5	023.6	52.11	
341.0	000.0133	0057.3	004.8	209.3	000.0414	0290.4	023.4	52.20	
342.0	000.0133	0059.2	004.8	209.3	000.0414	0290.4	023.3	52.28	
343.0	000.0133	0061.1	004.9	209.3	000.0414	0290.5	023.2	52.36	
344.0	000.0133	0062.7	005.0	209.2	000.0414	0290.6	023.1	52.44	
345.0	000.0133	0063.6	005.0	209.1	000.0414	0290.9	023.0	52.51	
346.0	000.0133	0063.8	005.0	209.0	000.0413	0291.3	023.0	52.56	
347.0	000.0133	0063.8	005.0	208.8	000.0412	0291.8	022.9	52.61	
348.0	000.0133	0064.1	005.0	208.7	000.0411	0292.2	022.8	52.66	
349.0	000.0133	0064.8	005.0	208.6	000.0410	0292.5	022.8	52.72	
350.0	000.0133	0065.3	005.1	208.4	000.0410	0292.9	022.7	52.78	
351.0	000.0133	0065.8	005.1	208.3	000.0409	0293.3	022.6	52.83	
352.0	000.0133	0066.8	005.1	208.2	000.0408	0293.6	022.5	52.89	
353.0	000.0133	0068.4	005.2	208.1	000.0407	0293.8	022.4	52.97	
354.0	000.0133	0070.6	005.2	208.0	000.0407	0293.9	022.3	53.06	
355.0	000.0133	0072.8	005.3	207.9	000.0407	0294.1	022.2	53.15	
356.0	000.0133	0073.0	005.3	207.7	000.0406	0294.5	022.2	53.19	
357.0	000.0133	0072.2	005.3	207.5	000.0404	0294.9	022.1	53.21	
358.0	000.0133	0072.3	005.3	207.2	000.0403	0295.2	022.1	53.24	
359.0	000.0133	0073.5	005.4	207.1	000.0402	0295.4	022.0	53.30	
000.0	000.0133	0074.8	005.4	206.9	000.0401	0295.5	021.9	53.36	
001.0	000.0133	0076.2	005.4	206.8	000.0400	0295.7	021.8	53.42	
002.0	000.0133	0077.6	005.5	206.6	000.0399	0295.8	021.8	53.48	
003.0	000.0133	0077.6	005.5	206.4	000.0398	0295.9	021.7	53.50	

BROWN BROADCAST SERVICES
 INCORPORATED

Michael D. Brown

3740 S.W. Comus St.

Portland, Oregon 97219-7418

503-245-6065

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
004.0	000.0133	0075.6	005.4	206.1	000.0397	0295.9	021.7	53.46	
005.0	000.0133	0073.4	005.3	205.7	000.0395	0295.9	021.8	53.41	
006.0	000.0133	0073.0	005.3	205.5	000.0394	0295.8	021.8	53.41	
007.0	000.0133	0074.0	005.4	205.3	000.0392	0295.6	021.7	53.44	
008.0	000.0133	0075.3	005.4	205.1	000.0391	0295.4	021.6	53.48	
009.0	000.0133	0076.1	005.4	204.9	000.0390	0295.2	021.6	53.50	
010.0	000.0133	0076.4	005.5	204.6	000.0389	0294.9	021.5	53.50	
011.0	000.0133	0076.2	005.4	204.4	000.0388	0294.5	021.5	53.49	
012.0	000.0133	0076.8	005.5	204.2	000.0386	0294.3	021.5	53.50	
013.0	000.0133	0078.5	005.5	203.9	000.0385	0294.0	021.4	53.54	
014.0	000.0133	0079.7	005.6	203.7	000.0384	0293.7	021.3	53.57	
015.0	000.0133	0079.9	005.6	203.5	000.0383	0293.4	021.3	53.56	
016.0	000.0133	0079.1	005.6	203.2	000.0381	0293.1	021.3	53.52	
017.0	000.0133	0077.3	005.5	202.9	000.0380	0292.9	021.4	53.46	
018.0	000.0133	0074.7	005.4	202.6	000.0378	0292.7	021.5	53.37	
019.0	000.0133	0071.9	005.3	202.4	000.0377	0292.5	021.6	53.28	
020.0	000.0133	0069.5	005.2	202.1	000.0375	0292.3	021.6	53.20	
021.0	000.0134	0068.0	005.2	201.9	000.0374	0292.2	021.7	53.14	
022.0	000.0135	0067.6	005.2	201.6	000.0373	0292.0	021.7	53.12	
023.0	000.0137	0068.0	005.2	201.4	000.0372	0291.9	021.7	53.12	
024.0	000.0138	0068.2	005.2	201.2	000.0370	0291.8	021.6	53.12	
025.0	000.0139	0067.4	005.2	200.9	000.0369	0291.6	021.7	53.08	
026.0	000.0140	0065.7	005.1	200.7	000.0368	0291.4	021.7	53.01	
027.0	000.0142	0063.9	005.1	200.5	000.0367	0291.2	021.8	52.95	
028.0	000.0143	0062.5	005.0	200.3	000.0366	0291.0	021.8	52.89	
029.0	000.0144	0061.5	005.0	200.0	000.0365	0290.8	021.9	52.83	
030.0	000.0145	0060.7	005.0	199.8	000.0366	0290.5	021.9	52.82	
031.0	000.0149	0060.3	005.0	199.6	000.0368	0290.2	021.9	52.84	
032.0	000.0154	0060.1	005.0	199.3	000.0370	0289.9	021.9	52.86	
033.0	000.0158	0059.3	005.0	199.1	000.0372	0289.6	021.9	52.86	
034.0	000.0162	0058.4	005.0	198.9	000.0374	0289.3	022.0	52.85	
035.0	000.0166	0058.1	005.1	198.7	000.0376	0288.9	022.0	52.86	
036.0	000.0171	0058.4	005.1	198.4	000.0378	0288.6	021.9	52.89	
037.0	000.0175	0058.8	005.2	198.1	000.0381	0288.2	021.9	52.92	
038.0	000.0180	0058.8	005.2	197.9	000.0383	0287.8	021.9	52.94	
039.0	000.0184	0058.1	005.2	197.7	000.0385	0287.5	021.9	52.93	
040.0	000.0189	0057.3	005.2	197.5	000.0387	0287.2	022.0	52.91	
041.0	000.0194	0056.8	005.2	197.2	000.0389	0286.8	022.0	52.91	
042.0	000.0200	0056.9	005.2	197.0	000.0392	0286.3	022.0	52.92	
043.0	000.0206	0058.2	005.3	196.6	000.0394	0285.6	022.0	52.96	
044.0	000.0211	0060.4	005.5	196.3	000.0398	0284.6	021.9	53.03	
045.0	000.0217	0063.0	005.6	195.9	000.0402	0283.4	021.8	53.09	
046.0	000.0223	0065.2	005.7	195.5	000.0405	0282.3	021.8	53.14	
047.0	000.0229	0066.9	005.8	195.1	000.0409	0281.2	021.7	53.17	
048.0	000.0236	0067.3	005.9	194.8	000.0411	0280.5	021.7	53.17	
049.0	000.0242	0066.2	005.9	194.6	000.0413	0280.0	021.8	53.13	
050.0	000.0248	0064.6	005.8	194.4	000.0415	0279.7	021.9	53.07	
051.0	000.0261	0063.5	005.9	194.2	000.0417	0279.3	021.9	53.05	
052.0	000.0274	0063.0	005.9	193.9	000.0420	0278.9	022.0	53.05	
053.0	000.0287	0062.8	006.0	193.6	000.0423	0278.6	022.0	53.05	
054.0	000.0300	0062.6	006.0	193.3	000.0426	0278.4	022.0	53.06	
055.0	000.0314	0062.5	006.1	193.0	000.0429	0278.2	022.0	53.06	
056.0	000.0328	0062.8	006.2	192.6	000.0432	0278.0	022.0	53.08	
057.0	000.0343	0063.8	006.3	192.2	000.0436	0277.9	022.0	53.12	
058.0	000.0358	0065.3	006.4	191.8	000.0440	0277.6	022.0	53.16	
059.0	000.0373	0066.7	006.5	191.4	000.0444	0277.2	022.0	53.19	

BROWN BROADCAST SERVICES
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Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
060.0	000.0388	0068.0	006.7	190.9	000.0449	0276.6	022.0	53.22	
061.0	000.0408	0069.0	006.8	190.4	000.0453	0276.1	022.0	53.24	
062.0	000.0428	0070.1	006.9	190.0	000.0458	0275.6	022.0	53.26	
063.0	000.0449	0071.1	007.1	189.5	000.0459	0275.0	022.1	53.24	
064.0	000.0470	0072.3	007.2	189.1	000.0460	0274.7	022.1	53.22	
065.0	000.0491	0073.5	007.3	188.6	000.0461	0274.3	022.1	53.20	
066.0	000.0513	0075.1	007.5	188.0	000.0462	0273.8	022.1	53.18	
067.0	000.0536	0077.4	007.7	187.4	000.0464	0273.2	022.1	53.17	
068.0	000.0559	0081.3	008.0	186.6	000.0465	0272.8	022.1	53.19	
069.0	000.0582	0087.3	008.4	185.4	000.0468	0272.7	022.0	53.26	
070.0	000.0606	0095.3	008.9	184.1	000.0471	0273.1	022.0	53.36	
071.0	000.0638	0103.9	009.4	182.7	000.0474	0272.8	021.9	53.42	
072.0	000.0669	0112.1	009.9	181.4	000.0477	0271.2	021.9	53.41	
073.0	000.0702	0121.6	010.4	180.0	000.0480	0270.5	021.9	53.40	
074.0	000.0735	0132.4	010.9	178.5	000.0484	0269.5	021.9	53.38	
075.0	000.0769	0144.0	011.5	176.9	000.0488	0270.6	022.0	53.41	
076.0	000.0804	0156.8	012.2	175.0	000.0492	0274.4	022.1	53.50	
077.0	000.0840	0169.0	012.9	173.3	000.0496	0279.2	022.2	53.58	
078.0	000.0876	0180.8	013.4	171.8	000.0499	0280.6	022.4	53.52	
079.0	000.0914	0189.7	013.9	170.7	000.0502	0283.0	022.6	53.44	
080.0	000.0952	0197.3	014.3	169.7	000.0511	0285.1	022.8	53.40	
081.0	000.1000	0207.2	014.8	168.4	000.0540	0285.9	023.1	53.46	

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EXHIBIT 18d

FMOver Analysis -

20071018BDS Proposed Amend vs. KNWO (CP), Cottonwood, WA

04-04-2011 Terrain Data: FCC NGDC 30 Sec FMOver Analysis

20071018BDS Proposed Amend

KNWO (CP) BPED20100804AAZ

Channel = 212C3
Max ERP = 1.1 kW
RCAMSL = 1146 M
N. Lat. 46 40 54.0
W. Lng. 116 58 13.0
Protected
60 dBu

Channel = 211C2
Max ERP = 0.55 kW
RCAMSL = 1759 M
N. Lat. 46 04 09.0
W. Lng. 116 27 54.0
Interfering
54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
105.0	000.8920	0330.5	032.0	352.4	000.5500	0533.9	060.4	52.80	
106.0	000.8530	0332.1	031.7	352.0	000.5500	0532.1	060.0	52.90	
107.0	000.8149	0336.8	031.6	351.7	000.5500	0531.0	059.5	53.03	
108.0	000.7776	0340.8	031.4	351.3	000.5500	0529.7	059.1	53.15	
109.0	000.7413	0341.5	031.1	350.8	000.5500	0527.9	058.7	53.22	
110.0	000.7058	0339.7	030.7	350.1	000.5500	0526.1	058.5	53.26	
111.0	000.6777	0334.8	030.1	349.4	000.5500	0524.0	058.3	53.27	
112.0	000.6502	0332.3	029.7	348.8	000.5500	0522.2	058.1	53.30	
113.0	000.6232	0332.5	029.4	348.3	000.5500	0520.7	057.8	53.36	
114.0	000.5968	0335.1	029.2	347.8	000.5500	0519.5	057.5	53.44	
115.0	000.5710	0338.5	029.1	347.4	000.5500	0518.5	057.2	53.53	
116.0	000.5458	0342.4	029.0	347.0	000.5500	0517.6	056.9	53.61	
117.0	000.5211	0346.0	028.8	346.5	000.5500	0516.8	056.6	53.70	
118.0	000.4970	0348.5	028.6	346.0	000.5500	0516.1	056.4	53.76	
119.0	000.4735	0349.2	028.3	345.5	000.5500	0515.6	056.2	53.81	
120.0	000.4506	0348.6	027.9	344.9	000.5500	0515.1	056.1	53.83	
121.0	000.4326	0347.1	027.6	344.3	000.5500	0514.6	056.0	53.85	
122.0	000.4150	0344.9	027.2	343.7	000.5500	0514.2	055.9	53.86	
123.0	000.3977	0340.7	026.8	343.0	000.5500	0513.9	056.0	53.85	
124.0	000.3808	0335.2	026.3	342.3	000.5500	0513.7	056.1	53.81	
125.0	000.3643	0328.6	025.8	341.7	000.5500	0513.6	056.2	53.76	
126.0	000.3482	0321.6	025.2	341.0	000.5500	0513.5	056.4	53.69	
127.0	000.3324	0314.6	024.7	340.3	000.5500	0513.0	056.6	53.61	
128.0	000.3170	0308.4	024.2	339.7	000.5500	0512.0	056.8	53.51	
129.0	000.3019	0303.3	023.7	339.1	000.5500	0510.8	057.0	53.41	
130.0	000.2872	0299.3	023.3	338.5	000.5500	0509.4	057.1	53.31	
131.0	000.2758	0296.6	023.0	338.0	000.5500	0508.0	057.2	53.24	
132.0	000.2645	0294.8	022.7	337.5	000.5500	0506.7	057.3	53.18	
133.0	000.2535	0293.5	022.4	337.1	000.5500	0505.3	057.4	53.11	
134.0	000.2428	0292.5	022.1	336.6	000.5500	0504.0	057.5	53.05	
135.0	000.2323	0292.4	021.9	336.2	000.5500	0502.6	057.6	52.98	
136.0	000.2220	0293.0	021.7	335.7	000.5500	0501.2	057.6	52.92	
137.0	000.2119	0293.4	021.4	335.3	000.5500	0499.8	057.7	52.85	
138.0	000.2021	0293.5	021.2	334.9	000.5500	0498.3	057.9	52.77	
139.0	000.1925	0293.4	021.0	334.5	000.5500	0496.9	058.0	52.69	
140.0	000.1831	0293.4	020.7	334.1	000.5500	0495.8	058.1	52.60	
141.0	000.1758	0293.3	020.5	333.7	000.5500	0494.9	058.3	52.54	
142.0	000.1687	0293.3	020.3	333.3	000.5500	0494.2	058.4	52.47	

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Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
143.0	000.1617	0293.2	020.1	332.9	000.5500	0493.7	058.5	52.41	
144.0	000.1549	0293.2	019.9	332.6	000.5500	0493.5	058.7	52.35	
145.0	000.1482	0293.2	019.7	332.2	000.5500	0493.3	058.9	52.28	
146.0	000.1416	0293.2	019.4	331.8	000.5500	0493.3	059.0	52.22	
147.0	000.1352	0293.1	019.2	331.5	000.5500	0493.3	059.2	52.15	
148.0	000.1290	0292.8	019.0	331.2	000.5500	0493.3	059.4	52.07	
149.0	000.1229	0292.0	018.7	330.8	000.5500	0493.3	059.7	51.98	
150.0	000.1169	0291.6	018.5	330.5	000.5500	0493.3	059.9	51.90	
151.0	000.1123	0292.2	018.3	330.2	000.5500	0493.3	060.1	51.84	
152.0	000.1078	0292.8	018.1	329.9	000.5500	0493.2	060.3	51.77	
153.0	000.1033	0292.8	017.9	329.6	000.5500	0493.1	060.5	51.70	
154.0	000.0990	0292.6	017.7	329.4	000.5500	0492.9	060.7	51.61	
155.0	000.0948	0292.3	017.5	329.1	000.5500	0492.6	060.9	51.52	
156.0	000.0906	0292.1	017.3	328.8	000.5500	0492.3	061.2	51.43	
157.0	000.0865	0291.8	017.1	328.6	000.5500	0492.0	061.4	51.33	
158.0	000.0826	0291.4	016.9	328.4	000.5500	0491.6	061.7	51.22	
159.0	000.0787	0290.9	016.6	328.1	000.5500	0491.2	062.0	51.12	
160.0	000.0749	0290.7	016.4	327.9	000.5500	0490.8	062.3	51.01	
161.0	000.0723	0290.7	016.3	327.7	000.5500	0490.4	062.5	50.92	
162.0	000.0696	0289.9	016.1	327.5	000.5500	0489.9	062.7	50.83	
163.0	000.0671	0288.8	015.9	327.3	000.5500	0489.5	063.0	50.73	
164.0	000.0645	0287.8	015.7	327.1	000.5500	0489.1	063.2	50.63	
165.0	000.0620	0287.0	015.5	326.9	000.5500	0488.7	063.5	50.53	
166.0	000.0596	0286.3	015.3	326.8	000.5500	0488.3	063.8	50.43	
167.0	000.0572	0285.8	015.2	326.6	000.5500	0488.0	064.0	50.33	
168.0	000.0549	0285.8	015.0	326.4	000.5500	0487.6	064.3	50.24	
169.0	000.0526	0285.8	014.8	326.3	000.5500	0487.2	064.5	50.15	
170.0	000.0504	0284.5	014.6	326.1	000.5500	0486.9	064.8	50.05	
171.0	000.0501	0282.2	014.6	326.0	000.5500	0486.5	065.0	49.97	
172.0	000.0499	0280.5	014.5	325.8	000.5500	0486.0	065.1	49.91	
173.0	000.0497	0279.7	014.5	325.6	000.5500	0485.6	065.3	49.84	
174.0	000.0494	0277.7	014.4	325.4	000.5500	0485.1	065.5	49.77	
175.0	000.0492	0274.6	014.3	325.3	000.5500	0484.8	065.7	49.69	
176.0	000.0490	0272.0	014.2	325.1	000.5500	0484.4	065.9	49.61	
177.0	000.0487	0270.5	014.1	325.0	000.5500	0483.9	066.0	49.54	
178.0	000.0485	0269.4	014.1	324.8	000.5500	0483.5	066.2	49.47	
179.0	000.0483	0269.9	014.1	324.7	000.5500	0482.9	066.4	49.41	
180.0	000.0480	0270.5	014.1	324.5	000.5500	0482.4	066.5	49.35	
181.0	000.0478	0271.1	014.1	324.3	000.5500	0481.9	066.6	49.29	
182.0	000.0476	0272.0	014.1	324.1	000.5500	0481.3	066.8	49.23	
183.0	000.0474	0272.9	014.1	324.0	000.5500	0480.7	066.9	49.16	
184.0	000.0471	0273.0	014.1	323.8	000.5500	0480.2	067.1	49.09	
185.0	000.0469	0272.9	014.1	323.7	000.5500	0479.7	067.3	49.02	
186.0	000.0467	0272.6	014.0	323.5	000.5500	0479.1	067.5	48.95	
187.0	000.0465	0273.0	014.0	323.4	000.5500	0478.6	067.6	48.88	
188.0	000.0462	0273.7	014.0	323.2	000.5500	0478.0	067.8	48.81	
189.0	000.0460	0274.7	014.1	323.1	000.5500	0477.5	068.0	48.74	
190.0	000.0458	0275.6	014.1	323.0	000.5500	0476.9	068.1	48.66	
191.0	000.0448	0276.7	014.0	322.8	000.5500	0476.5	068.4	48.58	
192.0	000.0438	0277.8	014.0	322.7	000.5500	0476.1	068.6	48.50	
193.0	000.0429	0278.2	013.9	322.7	000.5500	0475.8	068.8	48.42	
194.0	000.0419	0279.1	013.9	322.6	000.5500	0475.4	069.0	48.34	

BROWN BROADCAST SERVICES
INCORPORATED

Michael D. Brown

3740 S.W. Comus St.

Portland, Oregon 97219-7418

503-245-6065

04-04-2011 Terrain Data

KNWO (CP) BPED20100804AAZ

20071018BDS Proposed Amend

Channel = 211C2
 Max ERP = 0.55 kW
 RCAMSL = 1759 M
 N. Lat. 46 04 09.0
 W. Lng. 116 27 54.0
 Protected
 60 dBu

Channel = 212C3
 Max ERP = 1.1 kW
 RCAMSL = 1146 M
 N. Lat. 46 40 54.0
 W. Lng. 116 58 13.0
 Interfering
 54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
286.0	000.5500	0426.6	032.3	172.5	000.0498	0280.2	059.7	35.37	
287.0	000.5500	0422.8	032.2	172.1	000.0499	0280.4	059.2	35.56	
288.0	000.5500	0422.4	032.1	171.9	000.0499	0280.6	058.7	35.76	
289.0	000.5500	0422.5	032.1	171.6	000.0500	0280.8	058.2	35.97	
290.0	000.5500	0422.7	032.2	171.4	000.0500	0281.2	057.7	36.18	
291.0	000.5500	0423.7	032.2	171.2	000.0501	0281.8	057.2	36.41	
292.0	000.5500	0423.8	032.2	170.9	000.0502	0282.5	056.7	36.63	
293.0	000.5500	0423.3	032.2	170.6	000.0502	0283.3	056.3	36.85	
294.0	000.5500	0423.8	032.2	170.3	000.0503	0284.0	055.8	37.07	
295.0	000.5500	0424.5	032.2	170.0	000.0505	0284.6	055.3	37.29	
296.0	000.5500	0425.4	032.3	169.6	000.0512	0285.2	054.8	37.56	
297.0	000.5500	0426.8	032.3	169.3	000.0519	0285.6	054.4	37.82	
298.0	000.5500	0428.6	032.4	169.0	000.0526	0285.8	053.9	38.08	
299.0	000.5500	0430.5	032.5	168.7	000.0533	0285.9	053.4	38.34	
300.0	000.5500	0432.3	032.5	168.4	000.0541	0285.9	052.9	38.59	
301.0	000.5500	0433.8	032.6	168.0	000.0549	0285.8	052.5	38.84	
302.0	000.5500	0435.2	032.6	167.6	000.0558	0285.7	052.0	39.09	
303.0	000.5500	0436.9	032.7	167.2	000.0567	0285.7	051.6	39.34	
304.0	000.5500	0438.8	032.8	166.8	000.0577	0285.9	051.1	39.59	
305.0	000.5500	0441.0	032.9	166.4	000.0587	0286.1	050.7	39.85	
306.0	000.5500	0443.3	033.0	166.0	000.0597	0286.3	050.2	40.11	
307.0	000.5500	0445.4	033.0	165.5	000.0608	0286.6	049.8	40.37	
308.0	000.5500	0447.3	033.1	165.1	000.0619	0286.9	049.4	40.63	
309.0	000.5500	0448.9	033.2	164.6	000.0631	0287.3	049.0	40.88	
310.0	000.5500	0450.1	033.2	164.0	000.0644	0287.8	048.6	41.13	
311.0	000.5500	0451.1	033.3	163.5	000.0658	0288.3	048.2	41.38	
312.0	000.5500	0452.1	033.3	162.9	000.0673	0288.9	047.9	41.63	
313.0	000.5500	0453.0	033.3	162.3	000.0688	0289.6	047.6	41.87	
314.0	000.5500	0454.0	033.4	161.7	000.0703	0290.2	047.3	42.12	
315.0	000.5500	0455.2	033.4	161.1	000.0719	0290.6	047.0	42.35	
316.0	000.5500	0457.0	033.5	160.5	000.0735	0290.8	046.6	42.58	
317.0	000.5500	0459.6	033.6	159.9	000.0752	0290.7	046.3	42.82	
318.0	000.5500	0462.5	033.7	159.3	000.0775	0290.8	046.0	43.09	
319.0	000.5500	0465.4	033.8	158.7	000.0800	0291.0	045.7	43.36	
320.0	000.5500	0468.0	033.9	158.0	000.0825	0291.3	045.4	43.63	
321.0	000.5500	0470.5	034.0	157.3	000.0852	0291.7	045.1	43.89	
322.0	000.5500	0473.4	034.2	156.6	000.0880	0291.9	044.8	44.15	
323.0	000.5500	0477.1	034.3	155.9	000.0908	0292.1	044.5	44.41	
324.0	000.5500	0480.8	034.5	155.2	000.0938	0292.2	044.3	44.67	
325.0	000.5500	0484.0	034.6	154.5	000.0969	0292.4	044.0	44.92	
326.0	000.5500	0486.6	034.7	153.7	000.1001	0292.6	043.8	45.16	
327.0	000.5500	0488.9	034.8	153.0	000.1035	0292.8	043.7	45.38	
328.0	000.5500	0490.9	034.9	152.2	000.1069	0292.8	043.5	45.58	

BROWN BROADCAST SERVICES INCORPORATED

Michael D. Brown

3740 S.W. Comus St.

Portland, Oregon 97219-7418

503-245-6065

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
329.0	000.5500	0492.5	034.9	151.4	000.1105	0292.5	043.4	45.76	
330.0	000.5500	0493.2	035.0	150.6	000.1142	0291.9	043.4	45.90	
331.0	000.5500	0493.3	035.0	149.8	000.1182	0291.6	043.4	46.04	
332.0	000.5500	0493.3	035.0	149.0	000.1230	0292.0	043.4	46.22	
333.0	000.5500	0493.8	035.0	148.2	000.1279	0292.6	043.4	46.40	
334.0	000.5500	0495.6	035.1	147.4	000.1330	0293.1	043.4	46.59	
335.0	000.5500	0498.7	035.2	146.5	000.1382	0293.2	043.3	46.78	
336.0	000.5500	0502.1	035.3	145.7	000.1436	0293.2	043.3	46.97	
337.0	000.5500	0505.2	035.5	144.9	000.1491	0293.2	043.3	47.13	
338.0	000.5500	0508.0	035.6	144.0	000.1547	0293.2	043.3	47.28	
339.0	000.5500	0510.6	035.7	143.2	000.1603	0293.2	043.4	47.42	
340.0	000.5500	0512.6	035.8	142.4	000.1660	0293.3	043.5	47.53	
341.0	000.5500	0513.5	035.8	141.6	000.1717	0293.3	043.6	47.61	
342.0	000.5500	0513.7	035.8	140.8	000.1772	0293.3	043.8	47.66	
343.0	000.5500	0513.9	035.8	140.0	000.1828	0293.4	044.0	47.70	
344.0	000.5500	0514.4	035.9	139.3	000.1897	0293.4	044.3	47.77	
345.0	000.5500	0515.2	035.9	138.5	000.1968	0293.5	044.5	47.83	
346.0	000.5500	0516.1	035.9	137.8	000.2040	0293.5	044.8	47.88	
347.0	000.5500	0517.6	036.0	137.1	000.2113	0293.4	045.0	47.92	
348.0	000.5500	0519.9	036.1	136.3	000.2188	0293.1	045.2	47.97	
349.0	000.5500	0522.8	036.2	135.6	000.2265	0292.7	045.5	48.01	
350.0	000.5500	0525.7	036.3	134.8	000.2343	0292.4	045.7	48.04	
351.0	000.5500	0528.6	036.5	134.1	000.2420	0292.5	046.0	48.08	
352.0	000.5500	0532.2	036.6	133.3	000.2500	0293.1	046.3	48.13	
353.0	000.5500	0536.1	036.8	132.6	000.2581	0294.0	046.5	48.18	
354.0	000.5500	0539.5	036.9	131.9	000.2660	0295.0	046.8	48.22	
355.0	000.5500	0542.5	037.1	131.2	000.2736	0296.2	047.2	48.24	
356.0	000.5500	0543.6	037.1	130.6	000.2804	0297.5	047.6	48.22	
357.0	000.5500	0545.9	037.2	130.0	000.2876	0299.4	048.0	48.23	
358.0	000.5500	0549.4	037.3	129.3	000.2971	0301.9	048.4	48.29	
359.0	000.5500	0552.8	037.5	128.7	000.3063	0304.7	048.8	48.35	
000.0	000.5500	0555.3	037.6	128.1	000.3149	0307.6	049.2	48.39	
001.0	000.5500	0557.4	037.6	127.6	000.3232	0310.8	049.7	48.42	
002.0	000.5500	0559.6	037.7	127.1	000.3313	0314.2	050.2	48.44	
003.0	000.5500	0559.1	037.7	126.7	000.3377	0316.9	050.7	48.40	
004.0	000.5500	0558.3	037.7	126.3	000.3436	0319.6	051.3	48.33	
005.0	000.5500	0557.3	037.6	125.9	000.3492	0322.0	051.9	48.26	
006.0	000.5500	0557.4	037.6	125.6	000.3551	0324.6	052.5	48.20	
007.0	000.5500	0558.1	037.7	125.2	000.3612	0327.3	053.0	48.14	
008.0	000.5500	0558.9	037.7	124.8	000.3671	0329.7	053.6	48.07	
009.0	000.5500	0560.2	037.7	124.5	000.3730	0332.2	054.1	48.00	
010.0	000.5500	0560.4	037.8	124.2	000.3780	0334.1	054.7	47.89	
011.0	000.5500	0560.1	037.7	123.9	000.3825	0335.7	055.3	47.76	
012.0	000.5500	0560.0	037.7	123.6	000.3868	0337.2	056.0	47.63	
013.0	000.5500	0561.4	037.8	123.3	000.3918	0338.9	056.5	47.51	
014.0	000.5500	0562.6	037.8	123.1	000.3964	0340.3	057.2	47.39	
015.0	000.5500	0563.0	037.9	122.8	000.4003	0341.4	057.8	47.23	

BROWN BROADCAST SERVICES
INCORPORATED

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3740 S.W. Comus St.

Portland, Oregon 97219-7418

503-245-6065

Exhibit 18e - 2nd & 3rd Adjacent Channel Contour Protection

Brown Broadcast Services, Inc.
Job: RFM amend 03312011db.fmj
Master Database: 2011_Mar_31.fmd
Lat: N46:40:54 Lon: W116:58:13 NAD-27
Scale: 1:416667
Channel: 212 Class: C3

PROPOSED

Protected: 60dBu F(50,50)

Interfering: 100dBu F(50,10)

AFFECTED

Protected: 60dBu F(50,50)

Interfering: 100dBu F(50,10)

rfInvestigator Version 3.4.27
by rfSoftware, Inc.
Date: 4/6/2011 7:03:28 PM

Waiver of Interference Received from KZUU and 20071022AVN is hereby requested.
See Engineering Statement.

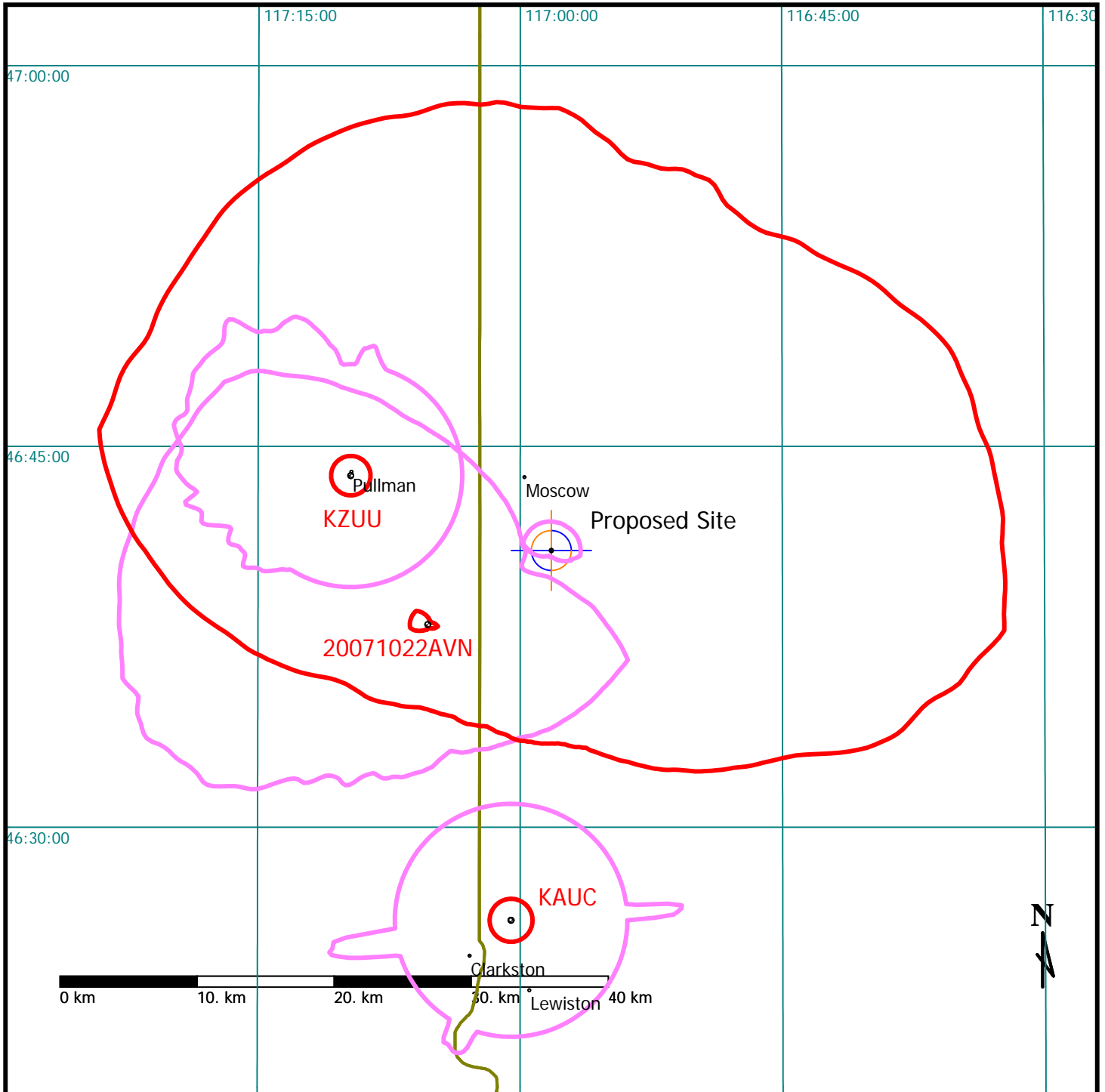


EXHIBIT 18f

FMOver Analysis -

20071018BDS Proposed Amend vs. 20071022AVN (CP), Pullman, WA

04-04-2011 Terrain Data: FCC NGDC 30 Sec FMOver Analysis

20071018BDS Proposed Amend

NEW (CP) BNPED20071022AVN

Channel = 212C3
Max ERP = 1.1 kW
RCMSL = 1146 M
N. Lat. 46 40 54.0
W. Lng. 116 58 13.0
Protected
60 dBu

Channel = 210A
Max ERP = 0.35 kW
RCMSL = 1057 M
N. Lat. 46 37 59.0
W. Lng. 117 05 17.0
Interfering
100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
194.0	000.0419	0279.1	013.9	144.9	000.0239	0207.3	009.8	61.12	
195.0	000.0410	0280.9	013.8	145.7	000.0234	0207.5	009.6	61.38	
196.0	000.0400	0283.8	013.8	146.6	000.0227	0208.1	009.4	61.62	
197.0	000.0391	0286.4	013.8	147.5	000.0221	0209.1	009.3	61.89	
198.0	000.0382	0288.0	013.8	148.3	000.0216	0210.2	009.0	62.21	
199.0	000.0373	0289.4	013.7	149.1	000.0211	0211.0	008.8	62.53	
200.0	000.0364	0290.8	013.7	149.8	000.0206	0211.7	008.6	62.86	
201.0	000.0370	0291.6	013.8	151.2	000.0198	0213.9	008.5	63.05	
202.0	000.0375	0292.3	013.8	152.6	000.0191	0216.8	008.3	63.26	
203.0	000.0380	0293.0	013.9	154.0	000.0183	0218.6	008.2	63.43	
204.0	000.0385	0294.0	014.0	155.5	000.0175	0219.6	008.1	63.54	
205.0	000.0391	0295.3	014.0	157.1	000.0167	0220.0	007.9	63.60	
206.0	000.0396	0295.9	014.1	158.6	000.0160	0221.2	007.8	63.72	
207.0	000.0402	0295.5	014.1	160.1	000.0153	0223.2	007.6	63.93	
208.0	000.0407	0293.9	014.1	161.4	000.0150	0226.0	007.5	64.32	
209.0	000.0413	0291.3	014.1	162.6	000.0148	0227.0	007.3	64.70	
210.0	000.0418	0288.3	014.1	163.8	000.0146	0227.0	007.1	65.07	
211.0	000.0433	0285.7	014.1	165.5	000.0143	0226.8	006.9	65.28	
212.0	000.0448	0284.0	014.2	167.4	000.0139	0223.4	006.8	65.33	
213.0	000.0463	0282.9	014.3	169.4	000.0136	0221.3	006.7	65.40	
214.0	000.0479	0282.1	014.4	171.5	000.0143	0221.1	006.6	65.86	
215.0	000.0494	0281.3	014.5	173.7	000.0155	0221.9	006.5	66.48	
216.0	000.0510	0280.4	014.6	175.9	000.0168	0226.2	006.4	67.20	
217.0	000.0527	0279.3	014.7	178.2	000.0182	0233.5	006.3	68.00	
218.0	000.0543	0278.4	014.7	180.5	000.0198	0231.5	006.2	68.52	
219.0	000.0560	0277.9	014.8	182.9	000.0220	0227.5	006.1	69.05	
220.0	000.0577	0278.0	015.0	185.6	000.0245	0222.5	006.1	69.50	
221.0	000.0607	0278.7	015.2	188.7	000.0277	0221.4	006.1	69.91	
222.0	000.0638	0279.6	015.4	191.9	000.0297	0218.7	006.2	70.01	
223.0	000.0669	0280.1	015.6	195.0	000.0309	0227.9	006.2	70.34	
224.0	000.0702	0280.0	015.8	198.1	000.0320	0223.8	006.3	70.24	
225.0	000.0735	0279.4	016.0	201.0	000.0339	0217.5	006.3	70.18	
226.0	000.0769	0279.2	016.2	204.0	000.0371	0233.7	006.4	70.94	
227.0	000.0804	0279.8	016.4	207.1	000.0406	0259.1	006.5	71.81	
228.0	000.0839	0280.7	016.6	210.1	000.0443	0238.5	006.6	71.36	
229.0	000.0875	0281.4	016.8	213.0	000.0500	0232.7	006.7	71.44	
230.0	000.0912	0281.3	017.0	215.8	000.0558	0252.5	006.8	72.28	

BROWN BROADCAST SERVICES
INCORPORATED

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3740 S.W. Comus St.

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503-245-6065

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
231.0	000.0961	0279.9	017.2	218.6	000.0618	0266.5	006.9	72.88	
232.0	000.1010	0277.0	017.3	221.2	000.0693	0259.3	007.0	73.03	
233.0	000.1061	0273.4	017.4	223.8	000.0786	0280.0	007.0	74.03	
234.0	000.1112	0269.7	017.5	226.4	000.0883	0308.6	007.1	75.04	
235.0	000.1165	0267.1	017.6	228.9	000.0987	0312.5	007.2	75.43	
236.0	000.1220	0265.1	017.8	231.5	000.1113	0323.2	007.3	75.92	
237.0	000.1275	0264.0	017.9	234.0	000.1257	0335.8	007.4	76.39	
238.0	000.1332	0263.8	018.1	236.5	000.1407	0321.9	007.6	76.31	
239.0	000.1390	0265.1	018.4	238.8	000.1560	0312.0	007.8	76.14	
240.0	000.1449	0268.2	018.7	241.1	000.1735	0308.2	008.2	75.98	
241.0	000.1525	0272.6	019.1	243.3	000.1930	0301.8	008.6	75.58	
242.0	000.1603	0277.7	019.5	245.4	000.2124	0297.2	009.0	75.13	
243.0	000.1683	0282.8	019.9	247.3	000.2318	0303.6	009.4	74.91	
244.0	000.1765	0287.8	020.3	249.2	000.2511	0298.7	009.9	74.40	
245.0	000.1849	0292.2	020.7	251.0	000.2681	0286.4	010.3	73.64	
246.0	000.1935	0295.9	021.1	252.8	000.2834	0278.2	010.7	72.98	
247.0	000.2023	0299.5	021.4	254.5	000.2985	0264.1	011.1	72.09	
248.0	000.2112	0303.2	021.8	256.2	000.3136	0250.5	011.5	71.18	
249.0	000.2204	0307.1	022.1	257.8	000.3285	0252.1	011.9	70.80	
250.0	000.2297	0311.2	022.5	259.3	000.3433	0257.0	012.3	70.53	
251.0	000.2418	0314.8	022.9	260.8	000.3500	0257.0	012.8	69.94	
252.0	000.2541	0317.4	023.3	262.3	000.3500	0255.2	013.2	69.27	
253.0	000.2667	0318.7	023.6	263.7	000.3500	0254.7	013.6	68.73	
254.0	000.2796	0319.7	023.9	265.2	000.3500	0253.5	013.9	68.20	
255.0	000.2929	0320.9	024.2	266.6	000.3500	0251.5	014.3	67.65	
256.0	000.3064	0323.2	024.5	268.0	000.3500	0252.3	014.8	67.17	
257.0	000.3203	0327.3	024.9	269.3	000.3500	0253.2	015.2	66.96	
258.0	000.3344	0332.1	025.4	270.5	000.3500	0253.6	015.8	66.53	
259.0	000.3489	0336.6	025.8	271.8	000.3500	0253.6	016.3	66.10	
260.0	000.3637	0340.1	026.2	273.0	000.3500	0253.7	016.8	65.70	
261.0	000.3828	0342.3	026.6	274.2	000.3500	0253.8	017.2	65.29	
262.0	000.4024	0343.4	027.0	275.4	000.3500	0255.1	017.7	64.95	
263.0	000.4224	0344.3	027.3	276.6	000.3500	0256.9	018.2	64.63	
264.0	000.4430	0344.8	027.6	277.9	000.3500	0258.4	018.6	64.31	
265.0	000.4640	0345.6	028.0	279.0	000.3500	0259.2	019.0	63.97	
266.0	000.4856	0346.0	028.3	280.2	000.3500	0259.9	019.5	63.64	
267.0	000.5076	0346.3	028.6	281.4	000.3500	0260.3	019.9	63.31	
268.0	000.5301	0347.2	029.0	282.6	000.3500	0259.8	020.3	62.93	
269.0	000.5531	0348.2	029.3	283.7	000.3500	0259.0	020.8	62.54	
270.0	000.5766	0349.2	029.6	284.8	000.3500	0258.2	021.3	62.16	
271.0	000.6069	0350.1	030.1	285.9	000.3500	0257.4	021.8	61.72	
272.0	000.6380	0350.3	030.4	287.0	000.3500	0256.8	022.3	61.31	
273.0	000.6699	0349.9	030.8	288.1	000.3500	0256.9	022.8	60.96	
274.0	000.7026	0349.4	031.1	289.1	000.3500	0257.9	023.2	60.64	
275.0	000.7360	0348.9	031.4	290.2	000.3500	0258.8	023.7	60.33	
276.0	000.7703	0348.4	031.7	291.3	000.3500	0259.0	024.1	60.00	
277.0	000.8053	0347.4	032.0	292.4	000.3500	0258.6	024.6	59.68	
278.0	000.8410	0346.4	032.3	293.5	000.3500	0257.6	025.0	59.34	
279.0	000.8776	0345.7	032.6	294.5	000.3500	0256.5	025.4	58.99	
280.0	000.9149	0345.1	032.9	295.6	000.3500	0255.3	025.9	58.65	
281.0	000.9514	0344.9	033.2	296.6	000.3500	0254.5	026.3	58.32	
282.0	000.9865	0344.4	033.5	297.7	000.3500	0254.0	026.7	58.03	
283.0	001.0243	0344.0	033.7	298.8	000.3500	0254.2	027.1	57.76	

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Terrain Data

NEW (CP) BNPED20071022AVN

20071018BDS Proposed Amend

Channel = 210A
Max ERP = 0.35 kW
RCAMSL = 1057 M
N. Lat. 46 37 59.0
W. Lng. 117 05 17.0
Protected
60 dBu

Channel = 212C3
Max ERP = 1.1 kW
RCAMSL = 1146 M
N. Lat. 46 40 54.0
W. Lng. 116 58 13.0
Interfering
100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
014.0	000.0323	0253.1	012.4	317.9	001.1000	0349.3	008.9	83.52	
015.0	000.0312	0252.5	012.3	318.0	001.1000	0349.3	008.7	83.92	
016.0	000.0301	0252.2	012.2	318.2	001.1000	0349.3	008.4	84.30	
017.0	000.0291	0251.6	012.1	318.3	001.1000	0349.3	008.2	84.69	
018.0	000.0281	0250.5	011.9	318.3	001.1000	0349.3	008.0	85.09	
019.0	000.0271	0249.5	011.8	318.2	001.1000	0349.3	007.7	85.49	
020.0	000.0261	0249.7	011.7	318.3	001.1000	0349.3	007.5	85.88	
021.0	000.0252	0250.6	011.6	318.5	001.1000	0349.3	007.3	86.25	
022.0	000.0243	0251.5	011.5	318.7	001.1000	0349.2	007.1	86.64	
023.0	000.0234	0252.1	011.5	318.7	001.1000	0349.2	006.8	87.04	
024.0	000.0225	0252.6	011.4	318.8	001.1000	0349.2	006.6	87.44	
025.0	000.0217	0253.2	011.3	318.7	001.1000	0349.2	006.4	87.86	
026.0	000.0209	0253.4	011.2	318.6	001.1000	0349.2	006.2	88.29	
027.0	000.0201	0253.3	011.1	318.3	001.1000	0349.3	006.0	88.74	
028.0	000.0193	0253.5	011.0	318.0	001.1000	0349.3	005.8	89.21	
029.0	000.0185	0254.3	010.9	317.8	001.1000	0349.3	005.5	89.67	
030.0	000.0177	0255.1	010.8	317.5	001.1000	0349.2	005.3	90.14	
031.0	000.0173	0255.3	010.7	317.5	001.1000	0349.2	005.1	90.58	
032.0	000.0169	0254.7	010.6	317.2	001.1000	0349.0	004.9	91.04	
033.0	000.0165	0253.2	010.6	316.7	001.1000	0348.7	004.7	91.51	
034.0	000.0161	0251.6	010.5	316.0	001.1000	0348.0	004.5	91.99	
035.0	000.0157	0250.0	010.4	315.3	001.1000	0346.9	004.3	92.48	
036.0	000.0153	0248.8	010.3	314.5	001.1000	0345.5	004.2	92.98	
037.0	000.0150	0247.9	010.2	313.7	001.1000	0343.8	004.0	93.48	
038.0	000.0146	0246.7	010.1	312.7	001.1000	0341.8	003.8	94.00	
039.0	000.0142	0245.1	010.0	311.3	001.1000	0339.9	003.6	94.52	
040.0	000.0139	0243.6	009.9	309.8	001.1000	0338.2	003.4	95.04	
041.0	000.0137	0242.1	009.9	308.7	001.1000	0336.7	003.3	95.57	
042.0	000.0135	0239.9	009.8	307.1	001.1000	0335.2	003.1	96.10	
043.0	000.0133	0236.8	009.7	304.9	001.1000	0334.5	002.9	96.66	
044.0	000.0131	0233.3	009.6	302.3	001.1000	0332.8	002.8	97.20	
045.0	000.0130	0229.9	009.5	299.3	001.1000	0327.4	002.6	97.71	
046.0	000.0128	0227.0	009.4	296.2	001.1000	0329.0	002.5	98.25	
047.0	000.0126	0224.5	009.3	293.0	001.1000	0336.6	002.4	98.80	
048.0	000.0124	0222.0	009.2	289.4	001.1000	0336.1	002.3	99.26	
049.0	000.0123	0218.9	009.1	285.1	001.1000	0341.7	002.2	99.67	
050.0	000.0121	0215.1	009.0	280.1	000.9186	0345.1	002.1	99.15	
051.0	000.0127	0210.4	009.0	277.3	000.8167	0347.0	002.0	99.19	
052.0	000.0133	0204.7	009.0	273.6	000.6885	0349.6	001.9	98.88	
053.0	000.0138	0197.6	008.9	268.8	000.5484	0348.0	001.9	98.12	
054.0	000.0145	0188.5	008.8	263.0	000.4229	0344.3	001.9	96.93	
055.0	000.0151	0177.1	008.6	256.7	000.3167	0326.1	002.0	95.16	
056.0	000.0157	0165.3	008.4	250.9	000.2401	0314.3	002.2	93.10	

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Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
057.0	000.0163	0155.6	008.2	246.2	000.1953	0296.7	002.3	91.38	
058.0	000.0170	0148.9	008.1	242.5	000.1641	0280.2	002.4	90.12	
059.0	000.0177	0145.5	008.1	239.2	000.1399	0265.5	002.5	89.31	
060.0	000.0184	0143.6	008.1	235.8	000.1211	0265.4	002.4	88.75	
061.0	000.0193	0142.7	008.2	232.3	000.1023	0276.1	002.4	88.35	
062.0	000.0203	0142.9	008.3	228.3	000.0849	0281.0	002.3	87.93	
063.0	000.0214	0143.7	008.4	223.7	000.0694	0280.1	002.2	87.45	
064.0	000.0224	0145.4	008.6	218.5	000.0551	0278.0	002.1	86.88	
065.0	000.0235	0147.8	008.7	212.4	000.0454	0283.5	002.0	86.46	
066.0	000.0246	0151.1	009.0	205.2	000.0392	0295.5	001.9	86.23	
067.0	000.0257	0154.7	009.2	197.1	000.0390	0286.6	001.9	86.41	
068.0	000.0269	0158.2	009.4	189.0	000.0460	0274.7	001.9	87.07	
069.0	000.0280	0160.7	009.6	182.0	000.0476	0272.0	002.0	86.90	
070.0	000.0292	0161.9	009.7	176.6	000.0488	0271.0	002.1	86.47	
071.0	000.0308	0162.7	009.9	171.6	000.0500	0280.9	002.2	85.97	
072.0	000.0323	0163.5	010.0	167.3	000.0565	0285.7	002.4	85.81	
073.0	000.0340	0164.4	010.2	163.5	000.0657	0288.2	002.5	85.73	
074.0	000.0356	0165.5	010.3	160.3	000.0742	0290.8	002.7	85.49	
075.0	000.0373	0166.4	010.5	157.6	000.0840	0291.5	002.9	85.26	
076.0	000.0390	0167.0	010.6	155.6	000.0923	0292.2	003.1	84.93	
077.0	000.0408	0168.2	010.8	153.6	000.1008	0292.7	003.3	84.59	
078.0	000.0426	0170.0	010.9	151.6	000.1095	0292.6	003.6	84.21	
079.0	000.0445	0172.2	011.1	149.7	000.1185	0291.6	003.8	83.79	
080.0	000.0464	0174.4	011.3	148.2	000.1277	0292.6	004.0	83.38	
081.0	000.0488	0176.9	011.5	146.5	000.1381	0293.2	004.3	82.97	
082.0	000.0513	0179.6	011.8	145.1	000.1477	0293.2	004.6	82.52	
083.0	000.0538	0182.2	012.0	144.0	000.1552	0293.2	004.9	82.04	
084.0	000.0564	0183.2	012.2	143.5	000.1585	0293.2	005.1	81.50	
085.0	000.0591	0183.7	012.3	143.3	000.1599	0293.2	005.4	80.93	
086.0	000.0619	0183.7	012.4	143.3	000.1595	0293.2	005.7	80.34	
087.0	000.0647	0184.1	012.6	143.3	000.1597	0293.2	005.9	79.76	
088.0	000.0675	0184.9	012.7	143.2	000.1600	0293.2	006.2	79.17	
089.0	000.0704	0185.7	012.9	143.3	000.1597	0293.2	006.5	78.59	
090.0	000.0734	0186.5	013.0	143.4	000.1591	0293.2	006.7	78.01	
091.0	000.0772	0187.2	013.2	143.3	000.1596	0293.2	007.0	77.42	
092.0	000.0812	0187.9	013.4	143.3	000.1595	0293.2	007.3	76.83	
093.0	000.0852	0188.6	013.6	143.4	000.1591	0293.2	007.6	76.25	
094.0	000.0893	0189.3	013.8	143.5	000.1583	0293.2	007.9	75.67	
095.0	000.0936	0190.0	014.0	143.7	000.1572	0293.2	008.2	75.09	
096.0	000.0979	0190.8	014.1	143.8	000.1560	0293.2	008.5	74.52	
097.0	000.1023	0191.6	014.3	144.1	000.1545	0293.2	008.8	73.93	
098.0	000.1068	0192.0	014.5	144.4	000.1524	0293.2	009.1	73.35	
099.0	000.1114	0192.4	014.7	144.7	000.1502	0293.2	009.4	72.76	
100.0	000.1161	0192.8	014.8	145.1	000.1478	0293.2	009.7	72.18	
101.0	000.1120	0193.2	014.7	146.6	000.1376	0293.2	009.8	71.70	
102.0	000.1080	0193.3	014.6	148.2	000.1277	0292.6	009.9	71.20	
103.0	000.1041	0193.3	014.4	149.8	000.1183	0291.6	010.0	70.69	

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EXHIBIT 21

TV CHANNEL 6 PROTECTION PER §73.525

The affected TV Channel 6 stations, as defined by §73.525(a), are:

ID	City	St	Chan	Stat	Serv	Dist	Min	Clear
NEW	SUPERIOR	MT	6	App	LD	166.8	195	-28.2
NEW	HERON	MT	6	App	LD	172.4	195	-22.6
NEW	PASCO	WA	6	App	LD	180.7	195	-14.3

This proposed minor-amendment will employ an antenna with mixed-polarization, and the interference area will fall outside any community with 50,000 or more persons. Therefore, the effective ERP is $1100 + 1100/40 = 1127.5 \text{ W}$ (1.1275kW).

Exhibit 19a shows that there would be no overlap of the proposal with the 62dBu Protected contour of any Low Power Channel 6 station. The U/D ratio at the 62dBu protected contour is 6.7dB, for a corresponding FM interfering contour of 68.7dBu. While a 6dB antenna directivity adjustment is allowed in this case, none was used on this map.

BROWN BROADCAST SERVICES

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Exhibit 21a - TV Channel 6 Protection - Low Power

Brown Broadcast Services, Inc.
Job: RFM amend 03312011db.fmj
Master Database: 2011_Mar_31.fmd
Lat: N46:40:54 Lon: W116:58:13 NAD-27
Scale: 1:2000000
Channel: 212 Class: C3

rfInvestigator Version 3.4.27
by rfSoftware, Inc.
Date: 4/6/2011 7:10:30 PM
Key:
Low Power TV 62dBu
Protected Contour

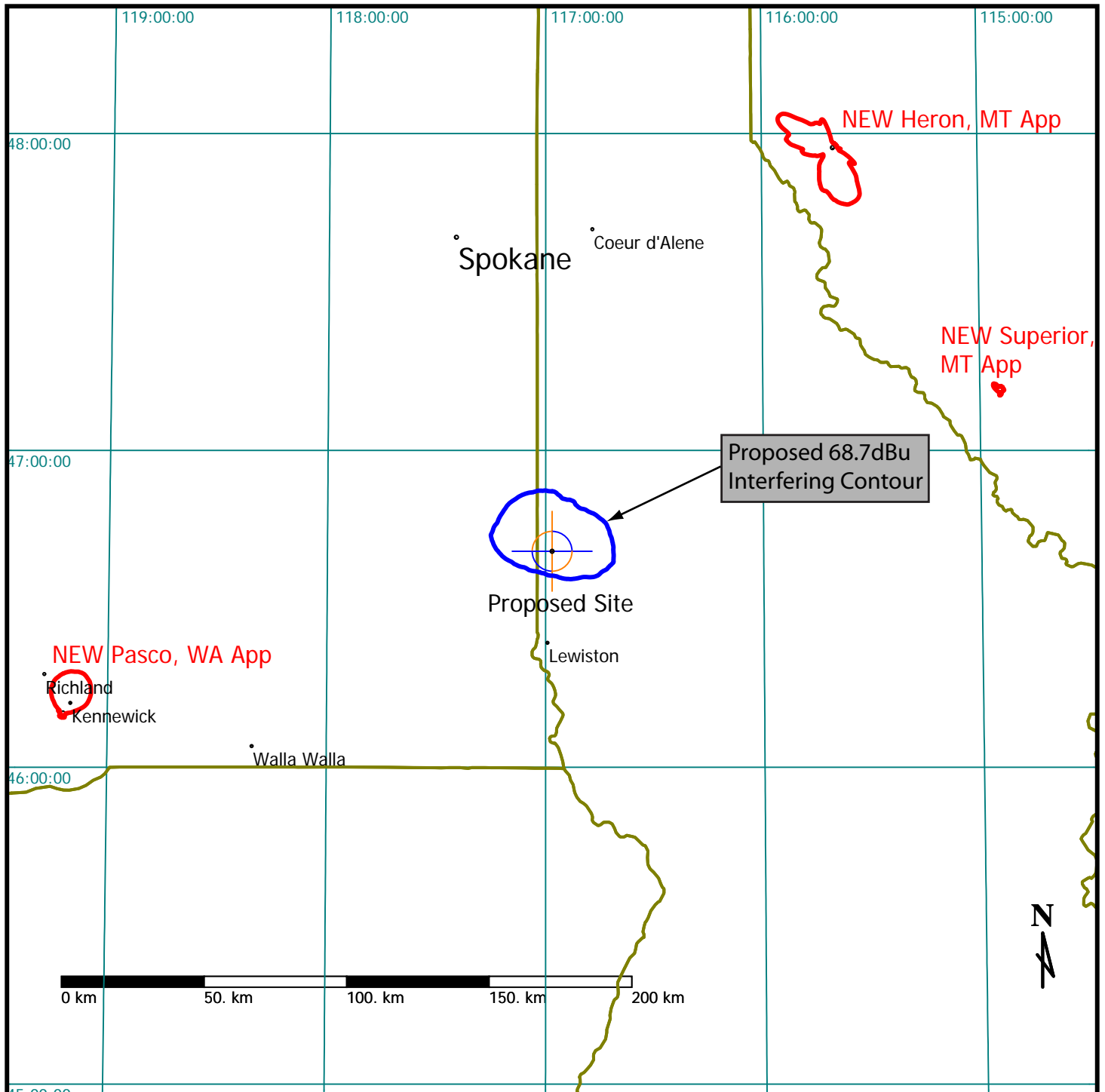


EXHIBIT 23

INTERNATIONAL BORDERS

This proposal is within the 320km Canadian border zone. There are no affected foreign stations.

EXHIBIT 24

ENVIRONMENTAL PROTECTION ACT / NIER ANALYSIS

The applicant proposes mounting a new antenna on an existing 101 meter registered tower. The proposed center of radiation is 49m AGL. A 2 bay 1.0 wave-spaced Shively 6810 circularly-polarized antenna is anticipated. Calculations were made using FM Model for Windows, version 2.10. FM Model predicted a peak exposure of $4.4\mu\text{w}/\text{cm}^2$, at 31 meters from the tower. This represents 2.2% of the Maximum Permissible Exposure (MPE) of $200\mu\text{w}/\text{cm}^2$ for uncontrolled environments. 47 CFR §1.1307(b)(3) exempts applicants from preparing an Environmental Assessment when the predicted exposure levels would be less than 5% of the FCC limits.

The applicant will ensure that public access to the tower is restricted by fencing, anti-climb devices, or other appropriate measures. The site will be posted with appropriate RF exposure warning signs. If tower climbing by authorized personnel becomes necessary, transmitter power will be reduced or operation will cease, as necessary, so as to not exceed the RF exposure limits.