

**MODIFY BMPH-20080331ACU**  
**CUMULUS LICENSING LLC**  
**KNRQ-FM RADIO STATION**  
**CH 250C1 - 97.9 MHZ - 10.0 KW**  
**ALOHA, OREGON**  
**August 2010**

**EXHIBIT B**

The proposed KNRQ-FM antenna location will be shortspaced to one other FM station: KOMO-FM, Channel 249C, Oakville, Washington (licensed site, permitted site and pending modification application). The relevant distance between the stations is shown on Exhibit B1. Cumulus proposes to use the provisions of §73.215 of the Commission's rules to address this shortspace. The shortage to this station complies with §73.215(e) of the Commission's rules. Compliance with §73.215 will be met by operating with less than maximum effective radiated power for a Class C1 facility.

Exhibit B2 specifically demonstrates that there will be no prohibited overlap between the proposed KNRQ-FM and KOMO-FM (license, permit and application). The contours of the KOMO-FM license and permitted facilities are based on their respective authorizations, as each was granted pursuant to §73.215 of the rules. The pending application for KOMO-FM is based on maximum Class C facilities, as no contour protection is proposed.<sup>1</sup> Attached as Exhibits B3 through B8 are the tabulated distances to the protected and interfering contours along the pertinent arcs of the proposed KNRQ-FM and KOMO-FM (license, permit and application). Further, attached as Exhibit B9 are the tabulated protected and interfering contours of the proposed facility, in ten degree increments. Again, there is no prohibited overlap between the facilities.

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1) The center of radiation of the KOMO-FM applied for facilities was lowered to bring the height above average terrain to 600 meters and the power increased to 100.0 kilowatts for the §73.215 review.

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**ALOHA, OREGON**  
**August 2010**

**EXHIBIT B1**

Clearance Study for KNRQ-FM Aloha, Oregon  
Using Proposed Site as Reference

REFERENCE	CLASS = C1 Int = C1	DISPLAY DATES
45 31 21.0 N.	Current Spacings to 3rd Adj.	DATA 08-04-10
122 44 45.0 W.	Channel 250 - 97.9 MHz	SEARCH 08-04-10

Call	Channel	Location	Ant	Azi	Dist	FCC	Margin
	Lat.	Lng.		Power	HAAT		
KNRQ-FM	CP -N 250C2	Tualatin	OR	0.0	0.0	224.0	-224.0
	45 31 21.0	122 44 45.0	NCX	3.700 kW	470 M		
	Cumulus Licensing LLC		BMPH-20080331ACU				
KNRQ-FM	LIC 250C	Eugene	OR	189.9	171.4	270.0	-98.6
	44 00 08.0	123 06 50.0	EN	100.000 kW	308 M		
	Cumulus Licensing LLC		BLH-19910528KF				
AD251	ADD 250C1	Aloha	OR	133.0	5.5	224.0	-218.5
	45 29 20.0	122 41 40.0		100.0 kW	0.0 M		
	Allocation site for Aloha, Oregon						
KACI-FM	LIC 249C2	The Dalles	OR	82.5	115.8	158.0	-42.2
	45 38 58.0	121 16 25.0	CX	50.000 kW	271 M		
	Bicoastal Media Licenses		BLH-20071009ABD				
	> to Channel 228C2 per one step application BPH-20100205ACB						
KCYS	LIC 251A	Seaside	OR	297.8	104.3	133.0	-28.7
	45 57 08.0	123 56 14.0	C	6.000 kW	100 M		
	Dave's Broadcasting Corp.		BLH-20000225AAK				
	> to Channel 243A - Order to Show Cause requested						
1358321	APP-D 251C1	Madras	OR	112.0	171.7	177.0	-5.3
	44 55 40.0	120 43 40.2	DCX	100.000 kW	149 M		
	Tool Shed Pdx		BNPED-20100226AJY				
	> to Channel 243C1 - alternate channel						
KOMO-FM	CP -Z 249C	Oakville	WA	346.7	204.7	209.0	-4.3
	47 18 46.0	123 22 15.0	ZCX	63.000 kW	728 M		
	South Sound Broadcasting		BPH-20090626AAO				
	> shortage addressed pursuant §73.215						
* KOMO-FM	LIC-Z 249C	Oakville	WA	346.7	204.7	209.0	-4.3
	47 18 46.0	123 22 15.0	ZCX	63.000 kW	728 M		
	South Sound Broadcasting		BLH-20080514AGI				
	> shortage addressed pursuant §73.215						
* KOMO-FM	APP-D 249C	Oakville	WA	346.7	204.7	209.0	-4.3
	47 18 46.0	123 22 15.0	DCX	100.000 kW	701 M		
	South Sound Broadcasting		BMPH-20100602AKM				
	> shortage addressed pursuant §73.215						

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**ALOHA, OREGON**  
**August 2010**

**EXHIBIT B1 (continued)**

Call	Channel	Location	Azi	Dist	FCC	Margin
Lat.	Lng.	Ant	Power	HAAT		
AL6416	VAC 251C1	Madras	OR 115.5	173.5	177.0	-3.5
	44 50 02.0	120 45 55.0	100.000 kW	299 M		
	Madras Broadcasting RM-9961					
	> to Channel 243C1 - alternate channel					
1358487	APP 251C1	Madras	OR 115.5	173.5	177.0	-3.5
	44 50 02.0	120 45 55.0	CX 100.000 kW	300 M		
	Educational Broadcast Serv. BNPED-20100226AIL					
	> to Channel 243C1 - alternate channel					
KPPK	LIC 252A	Rainier	OR 347.5	75.2	75.0	0.25
	46 10 59.0	122 57 29.0	CX 1.600 kW	195 M		
	Bicoastal Media Licenses BLH2-0060802AFY					
1353945	APP 252C3	Dallas	OR 201.7	79.8	76.0	3.8
	44 51 18.0	123 07 15.0	CX 2.780 kW	297 M		
	Mano A Mano Family Center BNPED-20100225ADD					
1356434	APP 252C3	Dallas	OR 201.7	79.8	76.0	3.8
	44 51 18.0	123 07 15.0	CX 3.200 kW	282 M		
	Capital Community Television BNPED-20100226AEJ					
VA2391	VAC 252C3	Dallas	OR 213.8	80.7	76.0	4.7
	44 55 06.0	123 19 00.0	N 25.000 kW	100 M		
1357368	APP 252C3	Dallas	OR 214.9	82.6	76.0	6.6
	44 54 42.8	123 20 44.2	CX 25.000 kW	100 M		
	Dallas Seventh-day Adventist BNPED-20100223AAB					
1357190	APP 252C3	Dallas	OR 214.1	85.0	76.0	9.0
	44 53 18.0	123 21 05.0	CX 25.000 kW	59 M		
	Centro Cristiano Vida Abun BNPED-20100226ADS					
1357070	APP 252C3	Dallas	OR 214.1	85.0	76.0	9.0
	44 53 18.0	123 21 05.0	CX 25.000 kW	67 M		
	Calvary Chapel Of Mcminnville BNPED-20100222ACK					
1357754	APP 252C3	Dallas	OR 214.2	85.1	76.0	9.1
	44 53 17.4	123 21 09.3	CX 25.000 kW	61 M		
	Hispanic Family Christian BNPED-20100226AHE					
1358445	APP 252C3	Dallas	OR 224.4	91.6	76.0	15.6
	44 55 52.4	123 33 33.0	CX 0.650 kW	559 M		
	Grace Public Radio BNPED-20100224ACK					
KING-FM	LIC-D 251C	Seattle	WA 14.7	228.1	209.0	19.1
	47 30 14.0	121 58 29.0	DC 68.000 kW	707 M		
	Classic Radio, Inc. BLH-20080707AIW					

**KNRQ-FM Proposed**  
Latitude: 45-31-21 N  
Longitude: 122-44-45 W  
ERP: 10.00 kW  
Channel: 250C1  
Frequency: 97.9 MHz  
AMSL Height: 561.0 m  
Horiz. Pattern: Omni  
Prop Model : FCC

**Graham Brock, Inc. - Broadcast Technical Consultants**

**KOMO-FM License**  
BLH-20080514AGI  
Latitude: 47-18-46 N  
Longitude: 123-22-15 W  
ERP: 63.00 kW  
Channel: 249C  
Frequency: 97.7 MHz  
AMSL Height: 1019.0 m  
Horiz. Pattern: Directional  
Prop Model : FCC

**KOMO-FM CP**  
BPH-20090626AAO  
Latitude: 47-18-46 N  
Longitude: 123-22-15 W  
ERP: 63.00 kW  
Channel: 249C  
Frequency: 97.7 MHz  
AMSL Height: 1019.0 m  
Horiz. Pattern: Directional  
Prop Model : FCC

**KOMO-FM APP**  
BMPH-20100602AKM  
Latitude: 47-18-46 N  
Longitude: 123-22-15 W  
ERP: 100.00 kW  
Channel: 249C  
Frequency: 97.7 MHz  
AMSL Height: 891.0 m  
Horiz. Pattern: Omni  
Prop Model : FCC

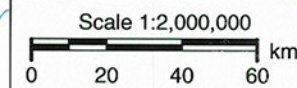
**KOMO-FM 54 dBu (50/10)**

**KNRQ-FM 54 dBu (50/10)**

**KNRQ-FM 60 dBu (50/50)**

**EXHIBIT B2**  
**MODIFY BMPH-20080331ACU**  
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125-00-00 W



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**ALOHA, OREGON**  
**August 2010**

**EXHIBIT B3**

KNRQ-FM - Proposed  
Channel = 250C2  
Max ERP = 10 kW  
RCAMSL = 561 M  
N. Lat = 45 31 21  
W. Lng = 122 44 45

KOMO-FM - BLH-20080514AGI  
Channel = 249C  
Max ERP = 63 kW  
RCAMSL = 1019 M  
N. Lat = 47 18 46  
W. Lng = 123 22 15

Protected  
60 dBu

Interfering  
54 dBu

**30 second terrain database**

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
333.0	010.0000	0371.1	054.6	171.2	063.0000	0872.6	152.1	51.1
334.0	010.0000	0385.5	055.4	170.9	063.0000	0872.6	151.0	51.4
335.0	010.0000	0398.0	056.1	170.7	063.0000	0872.6	150.1	51.6
336.0	010.0000	0408.4	056.7	170.4	063.0000	0871.7	149.3	51.8
337.0	010.0000	0417.4	057.2	170.0	063.0000	0871.7	148.5	52.0
338.0	010.0000	0425.7	057.7	169.7	062.1985	0871.7	147.9	52.1
339.0	010.0000	0433.4	058.1	169.3	061.2886	0871.2	147.2	52.2
340.0	010.0000	0440.3	058.5	169.0	060.3526	0871.2	146.7	52.3
341.0	010.0000	0446.6	058.9	168.6	059.3970	0871.2	146.2	52.4
342.0	010.0000	0452.5	059.2	168.2	058.4256	0870.9	145.7	52.4
343.0	010.0000	0458.2	059.6	167.8	057.4412	0870.9	145.3	52.5
344.0	010.0000	0463.3	059.9	167.4	056.4448	0870.8	144.9	52.5
345.0	010.0000	0468.0	060.2	167.0	055.4396	0870.8	144.6	52.5
346.0	010.0000	0472.3	060.4	166.6	054.4278	0870.8	144.3	52.5
347.0	010.0000	0475.9	060.6	166.2	053.4136	0870.6	144.0	52.5
348.0	010.0000	0478.8	060.8	165.7	052.3989	0870.6	143.9	52.5
349.0	010.0000	0481.3	061.0	165.3	051.3883	0870.4	143.8	52.4
350.0	010.0000	0483.3	061.1	164.9	050.3846	0870.4	143.7	52.3
351.0	010.0000	0484.6	061.2	164.4	049.3909	0870.4	143.8	52.2
352.0	010.0000	0485.5	061.3	164.0	048.4105	0870.4	143.8	52.1
353.0	010.0000	0486.5	061.3	163.6	047.4404	0870.4	143.9	52.0
354.0	010.0000	0487.6	061.4	163.2	046.4813	0870.6	144.0	51.9
355.0	010.0000	0488.5	061.4	162.7	045.5362	0870.6	144.2	51.8
356.0	010.0000	0489.2	061.5	162.3	044.6082	0871.0	144.4	51.6
357.0	010.0000	0489.2	061.5	161.9	043.7024	0871.0	144.7	51.5
358.0	010.0000	0489.2	061.5	161.5	042.8157	0871.3	144.9	51.3
359.0	010.0000	0489.1	061.5	161.1	041.9457	0871.3	145.3	51.1

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**ALOHA, OREGON**  
**August 2010**

**EXHIBIT B4**

KOMO-FM - BLH-20080514AGI  
Channel = 249C  
Max ERP = 63 kW  
RCAMSL = 1019 M  
N. Lat = 47 18 46  
W. Lng = 123 22 15

KNRQ-FM - Proposed  
Channel = 250C2  
Max ERP = 10 kW  
RCAMSL = 561 M  
N. Lat = 45 31 21  
W. Lng = 122 44 45

Protected  
60 dBu

Interfering  
54 dBu

**30 second terrain database**

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
150.0	025.0841	0861.0	086.3	357.6	010.0000	0489.2	124.3	45.0
151.0	026.3968	0861.1	086.9	357.1	010.0000	0489.2	123.2	45.3
152.0	027.7430	0861.6	087.4	356.6	010.0000	0489.2	122.0	45.6
153.0	029.1226	0862.5	088.0	356.1	010.0000	0489.2	120.9	45.9
154.0	030.5358	0863.5	088.5	355.5	010.0000	0488.5	119.8	46.1
155.0	031.9823	0865.1	089.0	354.9	010.0000	0488.5	118.8	46.4
156.0	033.4624	0867.7	089.6	354.3	010.0000	0487.6	117.7	46.6
157.0	034.9760	0870.2	090.1	353.6	010.0000	0487.6	116.8	46.9
158.0	036.5230	0871.5	090.6	352.9	010.0000	0486.5	115.8	47.1
159.0	038.1035	0871.7	091.1	352.2	010.0000	0485.5	115.0	47.3
160.0	039.7175	0871.6	091.6	351.5	010.0000	0485.5	114.2	47.5
161.0	041.8051	0871.3	092.1	350.8	010.0000	0484.6	113.4	47.7
162.0	043.9462	0871.0	092.6	350.0	010.0000	0483.3	112.6	47.8
163.0	046.1408	0870.6	093.2	349.2	010.0000	0481.3	111.9	48.0
164.0	048.3888	0870.4	093.7	348.4	010.0000	0478.8	111.3	48.1
165.0	050.6904	0870.4	094.2	347.6	010.0000	0478.8	110.7	48.2
166.0	053.0454	0870.6	094.7	346.8	010.0000	0475.9	110.1	48.3
167.0	055.4538	0870.8	095.2	345.9	010.0000	0472.3	109.6	48.3
168.0	057.9157	0870.9	095.7	345.0	010.0000	0468.0	109.2	48.3
169.0	060.4311	0871.2	096.2	344.1	010.0000	0463.3	108.8	48.3
170.0	063.0000	0871.7	096.6	343.2	010.0000	0458.2	108.5	48.2
171.0	063.0000	0872.6	096.7	342.4	010.0000	0452.5	108.7	48.0
172.0	063.0000	0873.7	096.7	341.5	010.0000	0452.5	109.0	47.9
173.0	063.0000	0875.3	096.7	340.6	010.0000	0446.6	109.3	47.7
174.0	063.0000	0877.6	096.8	339.8	010.0000	0440.3	109.6	47.4
175.0	063.0000	0880.5	096.9	338.9	010.0000	0433.4	110.0	47.1
176.0	063.0000	0883.7	097.0	338.1	010.0000	0425.7	110.4	46.8
177.0	063.0000	0886.5	097.1	337.3	010.0000	0417.4	110.9	46.4
178.0	063.0000	0887.7	097.1	336.4	010.0000	0408.4	111.4	46.0
179.0	063.0000	0887.3	097.1	335.6	010.0000	0408.4	112.1	45.8
180.0	063.0000	0886.7	097.1	334.9	010.0000	0398.0	112.8	45.4

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**August 2010**

**EXHIBIT B5**

KNRQ-FM - Proposed  
Channel = 250C2  
Max ERP = 10 kW  
RCAMSL = 561 M  
N. Lat = 45 31 21  
W. Lng = 122 44 45

KOMO-FM - BPH-20090626AAO  
Channel = 249C  
Max ERP = 63 kW  
RCAMSL = 1019 M  
N. Lat = 47 18 46  
W. Lng = 123 22 15

Protected  
60 dBu

Interfering  
54 dBu

**30 second terrain database**

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
333.0	010.0000	0371.1	054.6	171.2	063.0000	0872.6	152.1	51.1
334.0	010.0000	0385.5	055.4	170.9	063.0000	0872.6	151.0	51.4
335.0	010.0000	0398.0	056.1	170.7	063.0000	0872.6	150.1	51.6
336.0	010.0000	0408.4	056.7	170.4	063.0000	0871.7	149.3	51.8
337.0	010.0000	0417.4	057.2	170.0	063.0000	0871.7	148.5	52.0
338.0	010.0000	0425.7	057.7	169.7	063.0000	0871.7	147.9	52.2
339.0	010.0000	0433.4	058.1	169.3	063.0000	0871.2	147.2	52.3
340.0	010.0000	0440.3	058.5	169.0	063.0000	0871.2	146.7	52.5
341.0	010.0000	0446.6	058.9	168.6	063.0000	0871.2	146.2	52.6
342.0	010.0000	0452.5	059.2	168.2	063.0000	0870.9	145.7	52.8
343.0	010.0000	0458.2	059.6	167.8	063.0000	0870.9	145.3	52.9
344.0	010.0000	0463.3	059.9	167.4	063.0000	0870.8	144.9	53.0
345.0	010.0000	0468.0	060.2	167.0	063.0000	0870.8	144.6	53.1
346.0	010.0000	0472.3	060.4	166.6	063.0000	0870.8	144.3	53.1
347.0	010.0000	0475.9	060.6	166.2	063.0000	0870.6	144.0	53.2
348.0	010.0000	0478.8	060.8	165.7	063.0000	0870.6	143.9	53.3
349.0	010.0000	0481.3	061.0	165.3	063.0000	0870.4	143.8	53.3
350.0	010.0000	0483.3	061.1	164.9	062.6392	0870.4	143.7	53.3
351.0	010.0000	0484.6	061.2	164.4	061.4664	0870.4	143.8	53.2
352.0	010.0000	0485.5	061.3	164.0	060.3087	0870.4	143.8	53.1
353.0	010.0000	0486.5	061.3	163.6	059.1626	0870.4	143.9	53.0
354.0	010.0000	0487.6	061.4	163.2	058.0288	0870.6	144.0	52.9
355.0	010.0000	0488.5	061.4	162.7	056.9110	0870.6	144.2	52.7
356.0	010.0000	0489.2	061.5	162.3	055.8128	0871.0	144.4	52.6
357.0	010.0000	0489.2	061.5	161.9	054.7403	0871.0	144.7	52.4
358.0	010.0000	0489.2	061.5	161.5	053.6898	0871.3	144.9	52.3
359.0	010.0000	0489.1	061.5	161.1	052.6586	0871.3	145.3	52.1
000.0	010.0000	0489.1	061.5	160.7	051.6469	0871.3	145.6	51.9
001.0	010.0000	0489.0	061.5	160.3	050.6566	0871.6	146.0	51.7
002.0	010.0000	0488.9	061.5	159.9	049.7406	0871.6	146.4	51.6
003.0	010.0000	0488.7	061.5	159.5	048.9460	0871.7	146.8	51.4
004.0	010.0000	0488.5	061.4	159.1	048.1683	0871.7	147.2	51.2
005.0	010.0000	0488.4	061.4	158.7	047.4057	0871.7	147.7	51.0

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**ALOHA, OREGON**  
**August 2010**

**EXHIBIT B6**

KOMO-FM - BPH-20090626AAO  
Channel = 249C  
Max ERP = 63 kW  
RCAMSL = 1019 M  
N. Lat = 47 18 46  
W. Lng = 123 22 15

KNRQ-FM - Proposed  
Channel = 250C2  
Max ERP = 10 kW  
RCAMSL = 561 M  
N. Lat = 45 31 21  
W. Lng = 122 44 45

Protected  
60 dBu

Interfering  
54 dBu

**30 second terrain database**

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
148.0	029.0285	0861.2	087.9	359.2	010.0000	0489.1	124.5	45.0
149.0	030.2906	0860.8	088.4	358.7	010.0000	0489.1	123.3	45.3
150.0	031.5796	0861.0	088.8	358.2	010.0000	0489.2	122.2	45.6
151.0	033.2332	0861.1	089.3	357.6	010.0000	0489.2	121.0	45.9
152.0	034.9290	0861.6	089.9	357.1	010.0000	0489.2	119.8	46.2
153.0	036.6670	0862.5	090.4	356.5	010.0000	0489.2	118.6	46.5
154.0	038.4472	0863.5	091.0	355.9	010.0000	0489.2	117.5	46.7
155.0	040.2696	0865.1	091.5	355.3	010.0000	0488.5	116.4	47.0
156.0	042.1342	0867.7	092.1	354.6	010.0000	0488.5	115.4	47.3
157.0	044.0410	0870.2	092.6	354.0	010.0000	0487.6	114.4	47.5
158.0	045.9900	0871.5	093.1	353.3	010.0000	0486.5	113.4	47.7
159.0	047.9811	0871.7	093.6	352.5	010.0000	0486.5	112.6	47.9
160.0	050.0145	0871.6	094.1	351.8	010.0000	0485.5	111.8	48.1
161.0	052.4918	0871.3	094.6	351.0	010.0000	0484.6	111.0	48.3
162.0	055.0291	0871.0	095.1	350.2	010.0000	0483.3	110.2	48.5
163.0	057.6262	0870.6	095.6	349.4	010.0000	0481.3	109.5	48.6
164.0	060.2831	0870.4	096.1	348.5	010.0000	0481.3	108.8	48.8
165.0	063.0000	0870.4	096.6	347.7	010.0000	0478.8	108.2	48.9
166.0	063.0000	0870.6	096.6	346.8	010.0000	0475.9	108.2	48.8
167.0	063.0000	0870.8	096.6	345.9	010.0000	0472.3	108.2	48.7
168.0	063.0000	0870.9	096.6	345.0	010.0000	0468.0	108.3	48.6
169.0	063.0000	0871.2	096.6	344.1	010.0000	0463.3	108.4	48.4
170.0	063.0000	0871.7	096.6	343.2	010.0000	0458.2	108.5	48.2
171.0	063.0000	0872.6	096.7	342.4	010.0000	0452.5	108.7	48.0
172.0	063.0000	0873.7	096.7	341.5	010.0000	0452.5	109.0	47.9
173.0	063.0000	0875.3	096.7	340.6	010.0000	0446.6	109.3	47.7
174.0	063.0000	0877.6	096.8	339.8	010.0000	0440.3	109.6	47.4
175.0	063.0000	0880.5	096.9	338.9	010.0000	0433.4	110.0	47.1
176.0	063.0000	0883.7	097.0	338.1	010.0000	0425.7	110.4	46.8
177.0	063.0000	0886.5	097.1	337.3	010.0000	0417.4	110.9	46.4
178.0	063.0000	0887.7	097.1	336.4	010.0000	0408.4	111.4	46.0
179.0	063.0000	0887.3	097.1	335.6	010.0000	0408.4	112.1	45.8
180.0	063.0000	0886.7	097.1	334.9	010.0000	0398.0	112.8	45.4

**MODIFY BMPH-20080331ACU**  
**CUMULUS LICENSING LLC**  
**KNRQ-FM RADIO STATION**  
**CH 250C1 - 97.9 MHZ - 10.0 KW**  
**ALOHA, OREGON**  
**August 2010**

**EXHIBIT B7**

KNRQ-FM - Proposed  
Channel = 250C2  
Max ERP = 10 kW  
RCAMSL = 561 M  
N. Lat = 45 31 21  
W. Lng = 122 44 45

KOMO-FM - BMPH-20100602AKM  
Channel = 249C  
Max ERP = 100 kW  
RCAMSL = 891 M  
N. Lat = 47 18 46  
W. Lng = 123 22 15

Protected  
60 dBu

Interfering  
54 dBu

**30 second terrain database**

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
334.0	010.0000	0385.5	055.4	170.9	100.0000	0744.6	151.0	52.1
335.0	010.0000	0398.0	056.1	170.7	100.0000	0744.6	150.1	52.3
336.0	010.0000	0408.4	056.7	170.4	100.0000	0743.7	149.3	52.5
337.0	010.0000	0417.4	057.2	170.0	100.0000	0743.7	148.5	52.7
338.0	010.0000	0425.7	057.7	169.7	100.0000	0743.7	147.9	52.8
339.0	010.0000	0433.4	058.1	169.3	100.0000	0743.2	147.2	53.0
340.0	010.0000	0440.3	058.5	169.0	100.0000	0743.2	146.7	53.1
341.0	010.0000	0446.6	058.9	168.6	100.0000	0743.2	146.2	53.3
342.0	010.0000	0452.5	059.2	168.2	100.0000	0742.9	145.7	53.4
343.0	010.0000	0458.2	059.6	167.8	100.0000	0742.9	145.3	53.5
344.0	010.0000	0463.3	059.9	167.4	100.0000	0742.8	144.9	53.6
345.0	010.0000	0468.0	060.2	167.0	100.0000	0742.8	144.6	53.7
346.0	010.0000	0472.3	060.4	166.6	100.0000	0742.8	144.3	53.8
347.0	010.0000	0475.9	060.6	166.2	100.0000	0742.6	144.0	53.8
348.0	010.0000	0478.8	060.8	165.7	100.0000	0742.6	143.9	53.9
349.0	010.0000	0481.3	061.0	165.3	100.0000	0742.4	143.8	53.9
350.0	010.0000	0483.3	061.1	164.9	100.0000	0742.4	143.7	53.9
351.0	010.0000	0484.6	061.2	164.4	100.0000	0742.4	143.8	53.9
352.0	010.0000	0485.5	061.3	164.0	100.0000	0742.4	143.8	53.9
353.0	010.0000	0486.5	061.3	163.6	100.0000	0742.4	143.9	53.9
354.0	010.0000	0487.6	061.4	163.2	100.0000	0742.6	144.0	53.8
355.0	010.0000	0488.5	061.4	162.7	100.0000	0742.6	144.2	53.8
356.0	010.0000	0489.2	061.5	162.3	100.0000	0743.0	144.4	53.7
357.0	010.0000	0489.2	061.5	161.9	100.0000	0743.0	144.7	53.7
358.0	010.0000	0489.2	061.5	161.5	100.0000	0743.3	144.9	53.6
359.0	010.0000	0489.1	061.5	161.1	100.0000	0743.3	145.3	53.5
000.0	010.0000	0489.1	061.5	160.7	100.0000	0743.3	145.6	53.4
001.0	010.0000	0489.0	061.5	160.3	100.0000	0743.6	146.0	53.3
002.0	010.0000	0488.9	061.5	159.9	100.0000	0743.6	146.4	53.2
003.0	010.0000	0488.7	061.5	159.5	100.0000	0743.7	146.8	53.1
004.0	010.0000	0488.5	061.4	159.1	100.0000	0743.7	147.2	53.0
005.0	010.0000	0488.4	061.4	158.7	100.0000	0743.7	147.7	52.9
006.0	010.0000	0488.6	061.5	158.3	100.0000	0743.5	148.2	52.8
007.0	010.0000	0489.2	061.5	158.0	100.0000	0743.5	148.7	52.6
008.0	010.0000	0489.9	061.5	157.6	100.0000	0743.5	149.1	52.5
009.0	010.0000	0490.5	061.6	157.2	100.0000	0742.2	149.7	52.4
010.0	010.0000	0491.1	061.6	156.9	100.0000	0742.2	150.2	52.2

**MODIFY BMPH-20080331ACU**  
**CUMULUS LICENSING LLC**  
**KNRQ-FM RADIO STATION**  
**CH 250C1 - 97.9 MHZ - 10.0 KW**  
**ALOHA, OREGON**  
**August 2010**

**EXHIBIT B8**

KOMO-FM - BMPH-20100602AKM  
Channel = 249C  
Max ERP = 100 kW  
RCAMSL = 891 M  
N. Lat = 47 18 46  
W. Lng = 123 22 15

KNRQ-FM - Proposed  
Channel = 250C2  
Max ERP = 10 kW  
RCAMSL = 561 M  
N. Lat = 45 31 21  
W. Lng = 122 44 45

Protected  
60 dBu

Interfering  
54 dBu

**30 second terrain database**

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
145.0	100.0000	0739.7	097.2	003.5	010.0000	0488.5	119.6	46.2
146.0	100.0000	0737.0	097.1	002.8	010.0000	0488.7	118.6	46.5
147.0	100.0000	0734.6	097.0	002.1	010.0000	0488.9	117.7	46.7
148.0	100.0000	0733.2	097.0	001.5	010.0000	0489.0	116.8	46.9
149.0	100.0000	0732.8	096.9	000.8	010.0000	0489.0	115.9	47.2
150.0	100.0000	0733.0	097.0	000.0	010.0000	0489.1	115.0	47.4
151.0	100.0000	0733.1	097.0	359.3	010.0000	0489.1	114.2	47.6
152.0	100.0000	0733.6	097.0	358.6	010.0000	0489.1	113.4	47.8
153.0	100.0000	0734.5	097.0	357.8	010.0000	0489.2	112.6	48.0
154.0	100.0000	0735.5	097.1	357.0	010.0000	0489.2	111.9	48.2
155.0	100.0000	0737.1	097.1	356.3	010.0000	0489.2	111.2	48.4
156.0	100.0000	0739.7	097.2	355.5	010.0000	0488.5	110.5	48.5
157.0	100.0000	0742.2	097.3	354.6	010.0000	0488.5	109.9	48.7
158.0	100.0000	0743.5	097.4	353.8	010.0000	0487.6	109.4	48.8
159.0	100.0000	0743.7	097.4	353.0	010.0000	0486.5	108.9	48.9
160.0	100.0000	0743.6	097.4	352.1	010.0000	0485.5	108.5	49.0
161.0	100.0000	0743.3	097.4	351.2	010.0000	0484.6	108.2	49.0
162.0	100.0000	0743.0	097.3	350.3	010.0000	0483.3	108.0	49.1
163.0	100.0000	0742.6	097.3	349.5	010.0000	0481.3	107.8	49.1
164.0	100.0000	0742.4	097.3	348.6	010.0000	0481.3	107.6	49.1
165.0	100.0000	0742.4	097.3	347.7	010.0000	0478.8	107.5	49.1
166.0	100.0000	0742.6	097.3	346.8	010.0000	0475.9	107.5	49.0
167.0	100.0000	0742.8	097.3	345.9	010.0000	0472.3	107.5	48.9
168.0	100.0000	0742.9	097.3	345.0	010.0000	0468.0	107.5	48.8
169.0	100.0000	0743.2	097.4	344.1	010.0000	0463.3	107.6	48.6
170.0	100.0000	0743.7	097.4	343.2	010.0000	0458.2	107.8	48.4
171.0	100.0000	0744.6	097.4	342.3	010.0000	0452.5	108.0	48.2
172.0	100.0000	0745.7	097.5	341.4	010.0000	0446.6	108.3	48.0
173.0	100.0000	0747.3	097.5	340.6	010.0000	0446.6	108.5	47.9
174.0	100.0000	0749.6	097.6	339.7	010.0000	0440.3	108.9	47.6
175.0	100.0000	0752.5	097.7	338.8	010.0000	0433.4	109.2	47.3
176.0	100.0000	0755.7	097.8	337.9	010.0000	0425.7	109.6	47.0
177.0	100.0000	0758.5	098.0	337.1	010.0000	0417.4	110.0	46.6
178.0	100.0000	0759.7	098.0	336.3	010.0000	0408.4	110.6	46.2

**MODIFY BMPH-20080331ACU**  
**CUMULUS LICENSING LLC**  
**KNRQ-FM RADIO STATION**  
**CH 250C1 - 97.9 MHZ - 10.0 KW**  
**ALOHA, OREGON**  
**August 2010**

**EXHIBIT B9**

Predicted contour:

N. Lat. = 45 31 21.0 - Tabulated Protected and Interfering Contour Data  
W. Lng. = 122 44 45.0 - KNRQ-FM Radio Station Aloha, Oregon

HAAT and Distance to Contour - NGDC 30 Second terrain database

Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5	40-F1	54-F1	100-F1
000	71.9	489.1	10.0000	10.00	1.000	61.48	144.02	91.52	5.70
010	69.9	491.1	10.0000	10.00	1.000	61.61	144.23	91.67	5.71
020	62.8	498.2	10.0000	10.00	1.000	62.07	144.92	92.18	5.73
030	49.0	512.0	10.0000	10.00	1.000	62.98	146.19	93.18	5.77
040	51.1	509.9	10.0000	10.00	1.000	62.84	146.00	93.02	5.77
050	49.1	511.9	10.0000	10.00	1.000	62.97	146.18	93.17	5.77
060	55.5	505.5	10.0000	10.00	1.000	62.55	145.61	92.71	5.75
070	61.1	499.9	10.0000	10.00	1.000	62.18	145.09	92.31	5.74
080	74.0	487.0	10.0000	10.00	1.000	61.34	143.80	91.36	5.70
090	76.9	484.1	10.0000	10.00	1.000	61.16	143.49	91.14	5.69
100	82.7	478.3	10.0000	10.00	1.000	60.79	142.87	90.69	5.67
110	82.7	478.3	10.0000	10.00	1.000	60.79	142.88	90.69	5.67
120	88.2	472.8	10.0000	10.00	1.000	60.45	142.27	90.24	5.66
130	102.4	458.6	10.0000	10.00	1.000	59.59	140.68	89.00	5.62
140	113.7	447.3	10.0000	10.00	1.000	58.92	139.40	87.93	5.59
150	96.0	465.0	10.0000	10.00	1.000	59.97	141.39	89.57	5.64
160	121.6	439.4	10.0000	10.00	1.000	58.47	138.51	87.18	5.56
170	114.6	446.4	10.0000	10.00	1.000	58.87	139.30	87.85	5.59
180	81.8	479.2	10.0000	10.00	1.000	60.85	142.98	90.76	5.67
190	71.9	489.1	10.0000	10.00	1.000	61.48	144.02	91.52	5.70
200	76.8	484.2	10.0000	10.00	1.000	61.17	143.51	91.15	5.69
210	87.3	473.7	10.0000	10.00	1.000	60.50	142.36	90.31	5.66
220	93.5	467.5	10.0000	10.00	1.000	60.12	141.68	89.80	5.64
230	101.0	460.0	10.0000	10.00	1.000	59.67	140.83	89.13	5.62
240	77.8	483.2	10.0000	10.00	1.000	61.10	143.40	91.07	5.69
250	64.8	496.2	10.0000	10.00	1.000	61.94	144.73	92.04	5.72
260	63.8	497.2	10.0000	10.00	1.000	62.01	144.83	92.12	5.73
270	67.6	493.4	10.0000	10.00	1.000	61.76	144.46	91.84	5.72
280	73.3	487.7	10.0000	10.00	1.000	61.39	143.87	91.41	5.70
290	77.8	483.2	10.0000	10.00	1.000	61.10	143.40	91.07	5.69
300	90.9	470.1	10.0000	10.00	1.000	60.28	141.97	90.02	5.65
310	127.2	433.8	10.0000	10.00	1.000	58.15	137.90	86.65	5.55
320	194.2	366.8	10.0000	10.00	1.000	54.38	130.17	80.28	5.29
330	226.0	335.0	10.0000	10.00	1.000	52.38	125.56	77.18	5.15
340	120.7	440.3	10.0000	10.00	1.000	58.52	138.62	87.27	5.57
350	77.7	483.3	10.0000	10.00	1.000	61.11	143.41	91.07	5.69

AMSL= 561 M