

Black & Associates Microwave  
2052 Bridgegate Court  
Westlake Village, California 91361

[www.bamicrowave.com](http://www.bamicrowave.com)  
Tel (805) 495-7619

03/28/2017

BEAR LAKE COMMUNICATIONS, INC.  
PO BOX 7  
35 SOUTH STATE STREET  
FAIRVIEW, UT 84629  
ATTN: EDDIE L. COX  
Subject: Expedited Prior Coordination Notice (PCN)

Applicant/Licensee: Bear River Communications, LLC  
Frequency Band: 11GHz

PCN Response date: 4/14/2017 (this is an *expedited response request*)

Pursuant to Parts 101.103(d) and 101.105 of the FCC Rules and Regulations, a microwave interference study has been completed for the proposed microwave paths in accordance with industry-accepted standards for interference protection criteria. The results from the interference study show your path(s) is/are protected from harmful interference.

History:

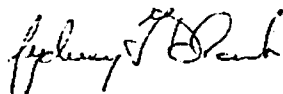
Date	Reference Number	Description
3/28/2017	BA2017032001-0001-01	Original PCN
3/28/2017	BA2017032001-0003-01	Original PCN

We respectfully request you review the attached technical parameters of the proposed paths. If you believe there could be a conflict between a proposed path and your path(s) and object to a proposed path, please respond in writing by the PCN response date giving a detailed technical reason supporting your objection. Unless a response is received by this date, it will be assumed there is no objection to the proposed microwave paths.

FCC Rule 2.105(c)(2)(i) requires you to protect the proposed path from harmful interference, if your path is licensed on a secondary basis.

Please contact the undersigned at (805) 495-7619 if you have any questions or require more information. A response may be emailed to [mcs@bamicrowave.com](mailto:mcs@bamicrowave.com). Please copy future PCNs within 125 miles of this system to [mcs@bamicrowave.com](mailto:mcs@bamicrowave.com).

Sincerely,



Sydney T. Black

Enclosures: (2)

Cc: Comsearch  
Micronet Communications, Inc.

CMS Holdings, LLC dba IntelPath  
Radyn, Inc.

Consolidated Spectrum Services  
Wireless Applications Corporation

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
5708 SOUTH CAMPUS DRIVE  
CHICAGO, ILLINOIS 60637

TO: [Name]  
FROM: [Name]  
SUBJECT: [Subject]

[Text]

[Text]

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Path Data Sheet

<b>APPLICANT:</b>	Bear River Communications, LLC
<b>REFERENCE NUMBER:</b>	BA2017032001-0001-01
<b>PCN DATE:</b>	03/28/2017

SITES	A		B	
	Name/State	BSB-UT-0400 / UT Mendon / CACHE WQUQ365	Name/State	BSB-UT-0200 / UT Logan / CACHE
City/County				
Call Sign				
Latitude N	NAD83	41 45 20.4		41 44 04.8
Longitude W	NAD83	112 01 25.5		111 51 33.0
Elevation AMSL	ft/m	5567.6 / 1697.0		4455.4 / 1358.0
ASR Number				
Azimuth	deg	99.6		279.7
Distance	m/km		8.63 / 13.89	
<b>ANTENNAS</b>				
Manufacturer		RADIO WAVES INC.		RADIO WAVES INC.
Model Number		HP3-11		HP3-11
Gain	dBi	38.5		38.5
Beamwidth	deg	2.1		2.1
Center Line AGL	ft/m	13.1 / 4.0		72.2 / 22.0
Tilt	deg	-1.4		1.3
<b>DIVERSITY ANTENNAS</b>				
Manufacturer				
Model Number				
Gain	dBi			
Beamwidth	deg			
Center Line AGL	ft/m	/		/
<b>RADIOS</b>				
Manufacturer		UBIQUITI NETWORKS		UBIQUITI NETWORKS
Model Number		AF-11FX		AF-11FX
FCC Identifier				
Emission Designator		See Table 1		See Table 1
Frequency Stability	%	0.00013		0.00013
Modulation		See Table 1		See Table 1
Loading	kbps/vc	See Table 1		See Table 1
ATPC/Trigger Level	dBm	N /		N /
Power Output - Nominal	dBm	See Table 1		See Table 1
Power Output - Coord	dBm	See Table 1		See Table 1
Power Output - Maximum	dBm	See Table 1		See Table 1
Fixed Loss (Tx/Com/Rx)	dB	0.0 / 0.0 / 0.0		0.0 / 0.0 / 0.0
<b>PATH</b>				
EIRP	dBm	56.5 (1024QAM)		56.5 (1024QAM)
Free Space Loss	dB		136.46	
Receive Level	dBm	-41.46 (1024QAM)		-41.46 (1024QAM)
Transmit Frequency	MHz	11175.00000000H		11665.00000000H

<b>APPLICANT:</b>	Bear River Communications, LLC
<b>REFERENCE NUMBER:</b>	BA2017032001-0001-01
<b>PCN DATE:</b>	03/28/2017

Table 1: Adaptive Modulation Modes

Emission Designator	Modulation	Loading (kbps/vc)	A			B		
			Power Output (dBm)			Power Output (dBm)		
			Nom	Coord	Max	Nom	Coord	Max
39M9D7D	1024QAM	251200.0	18.00	18.00	18.00	18.00	18.00	18.00
	/							
39M9D7D	256QAM	200900.0	21.00	21.00	21.00	21.00	21.00	21.00
	/							
39M9D7D	64QAM	150700.0	24.00	24.00	24.00	24.00	24.00	24.00
	/							
39M9D7D	16QAM	100450.0	30.00	30.00	30.00	24.00	24.00	24.00
	/							
39M9D7D	QPSK	50200.0	30.00	30.00	30.00	24.00	24.00	24.00
	/							

Path Data Sheet

<b>APPLICANT:</b>	Bear River Communications, LLC
<b>REFERENCE NUMBER:</b>	BA2017032001-0003-01
<b>PCN DATE:</b>	03/28/2017

SITES	A		B	
	BSB-UT-0400 / UT Mendon / CACHE WQUQ365		BSB-UT-0200 / UT Logan / CACHE	
Name/State				
City/County				
Call Sign				
Latitude N	NAD83	41 45 20.4		41 44 04.8
Longitude W	NAD83	112 01 25.5		111 51 33.0
Elevation AMSL	ft/m	5567.6 / 1697.0		4455.4 / 1358.0
ASR Number				
Azimuth	deg	99.6		279.7
Distance	mi/km		8.63 / 13.89	
<b>ANTENNAS</b>				
Manufacturer		RADIO WAVES INC.		RADIO WAVES INC.
Model Number		HP3-11		HP3-11
Gain	dBi	38.5		38.5
Beamwidth	deg	2.1		2.1
Center Line AGL	ft/m	13.1 / 4.0		72.2 / 22.0
Tilt	deg	-1.4		1.3
<b>DIVERSITY ANTENNAS</b>				
Manufacturer				
Model Number				
Gain	dBi			
Beamwidth	deg			
Center Line AGL	ft/m	/		/
<b>RADIOS</b>				
Manufacturer		UBIQUITI NETWORKS		UBIQUITI NETWORKS
Model Number		AF-11FX		AF-11FX
FCC Identifier				
Emission Designator		See Table 1		See Table 1
Frequency Stability	%	0.00013		0.00013
Modulation		See Table 1		See Table 1
Loading	kbps/vc	See Table 1		See Table 1
ATPC/Trigger Level	dBm	N /		N /
Power Output - Nominal	dBm	See Table 1		See Table 1
Power Output - Coord	dBm	See Table 1		See Table 1
Power Output - Maximum	dBm	See Table 1		See Table 1
Fixed Loss (Tx/Com/Rx)	dB	0.0 / 0.0 / 0.0		0.0 / 0.0 / 0.0
<b>PATH</b>				
EIRP	dBm	56.5 (1024QAM)		55.5 (1024QAM)
Free Space Loss	dB		136.46	
Receive Level	dBm	-42.46 (1024QAM)		-41.46 (1024QAM)
Transmit Frequency	MHz	11175.00000000V		11665.00000000V

Path Data Sheet

<b>APPLICANT:</b>	Bear River Communications, LLC
<b>REFERENCE NUMBER:</b>	BA2017032001-0003-01
<b>PCN DATE:</b>	03/28/2017

Table 1: Adaptive Modulation Modes

Emission Designator	Modulation	Loading (kbps/vc)	A			B		
			Power Output (dBm)			Power Output (dBm)		
			Nom	Coord	Max	Nom	Coord	Max
39M9D7D	1024QAM	251200.0	18.00	18.00	18.00	17.00	17.00	17.00
	/							
39M9D7D	256QAM	200900.0	21.00	21.00	21.00	17.00	17.00	17.00
	/							
39M9D7D	64QAM	150700.0	22.00	22.00	22.00	17.00	17.00	17.00
	/							
39M9D7D	16QAM	100450.0	22.00	22.00	22.00	17.00	17.00	17.00
	/							
39M9D7D	QPSK	50200.0	22.00	22.00	22.00	17.00	17.00	17.00
	/							

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