

Channel Study

REFERENCE		CH# 215C0- 90.9 MHz, Pwr= 100 kW, HAAT= 329.3 M, COR= 2736 M						DISPLAY DATES			
41 18 35.9 N.		Average Protected F(50-50)= 74.6 km						DATA 07-24-21			
105 27 18.9 W.		Omni-directional						SEARCH 07-27-21			
CH	CALL	TYPE	ANT	AZI.	DIST	LAT.	Pwr (kW)	INT (km)	PRO (km)	*IN*	*OUT*
CITY		STATE		<--	FILE #	LNG.	HAAT (M)	COR (M)	LICENSEE	(Overlap	in km)
215C0 KLVW!		LIC	CN	51.4	0.14	41 18 38.90	100.000		---	Reference---	
Chugwater			WY	231.4	BLED20040621ABR	105 27 13.90	361	2765	Educational Media Foundati		
215C0 KLVW!		CP	CN	49.9	0.14	41 18 39.00	100.000		---	Reference---	
Chugwater			WY	229.9	0000086811	105 27 14.00	345	2749	Educational Media Foundati		
215D K215FM!		LIC	DCN	165.7	87.59	40 32 46.90	0.150	22.8	5.9	7.1	-73.5*
Fort Collins			CO	345.8	BLFT20170705AAI	105 11 54.90		2190	Public Broadcasting Of Col		
213D K213EL!		LIC	CN	161.6	2.57	41 17 16.90	0.013	0.3	10.6	-57.6*	-15.4*
Laramie			WY	341.6	0000118054	105 26 43.90	301	2713	Radio By Grace, Inc.		
217D K217EY!		LIC	CN	163.3	2.90	41 17 05.90	0.013	0.3	9.8	-56.9*	-14.2*
Laramie			WY	343.3	BLFT20040830ACG	105 26 42.90	275	2688	Bible Broadcasting Network		
218C1 KUNC		LIC	CN	172.1	77.72	40 37 02.90	36.000	9.5	73.0	11.4	-6.3
Greeley			CO	352.1	BLED20070727ACF	105 19 40.90	384	2565	Community Radio For Northe		
216C0 KLDV		LIC	CN	173.7	191.24	39 35 59.90	100.000	135.2	77.0	3.9	15.4
Morrison			CO	353.9	BMLED20160830ABQ	105 12 36.90	356	2448	Educational Media Foundati		
214C3 KUWV		LIC	CN	42.7	156.11	42 20 02.60	14.000	59.1	39.4	20.8	4.9
Lingle			WY	223.6	BLED20110316AAQ	104 09 58.00	96	1510	University Of Wyoming		
212C2 KWYC		LIC	CN	96.7	84.76	41 13 00.90	20.500	3.7	36.3	7.2	38.1
Cheyenne			WY	277.3	BLED20100511ABH	104 26 54.90	130	1848	CSN International		
214A KENC		LIC	DEN	183.0	105.70	40 21 37.90	0.200	19.1	8.5	32.9	8.1
Estes Park			CO	3.0	BMLED20130109AGF	105 31 13.90	13	2730	Community Radio For Northe		
216C KTNE-FM		LIC	CN	72.8	208.10	41 50 23.80	100.000	122.2	82.3	10.6	16.0
Alliance			NE	254.4	BLED19900515KB	103 03 19.70	404	1669	Nebraska Educational Telec		
216D K216FW!		LIC	DHN	229.1	144.12	40 27 15.90	0.010	2.9	1.6	56.9	15.8
Steamboat Springs			CO	48.3	BLFT20050406ABV	106 44 36.10	534	3168	Mercer County Community Co		
213C3 KCSU-FM		LIC	CN	162.3	82.83	40 35 59.90	10.000	1.8	18.1	21.1	57.4
Fort Collins			CO	342.5	BLED19850124LR	105 09 22.90	-108	1613	Board Of Governors Of The		
214A KGUD		LIC	DCN	164.1	123.62	40 14 23.90	0.920	13.3	9.7	50.5	25.2
Longmont			CO	344.3	0000151677	105 03 20.90	82	1619	Longmont Community Radio		
215A KVNC		LIC	CN	204.4	206.26	39 36 57.90	0.100	18.6	5.6	110.1	26.6
Minturn			CO	23.8	BLED20130927ATU	106 27 00.10	-211	2726	Community Radio For Northe		
214D K214DI!		LIC	CN	336.4	173.94	42 44 27.40	0.010	10.6	7.4	85.3	48.6
Casper			WY	155.9	0000115995	106 18 24.20		2493	Cedar Cove Broadcasting, I		

Terrain database is FCC NGDC 30 Sec, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference Zone= - Zone 2, Co to 3rd adjacent.
All separation margins (if shown) include rounding. Call signs with exclamation marks need not be protected.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
***affixed to 'IN' or 'OUT' values = site inside restricted contour.
« = Station meets FCC minimum distance spacing for its class.

Part 2

Educational Media Foundation ("EMF") desires to modify its licensed antenna center of radiation for KLWV Chugwater, WY. The proposed modification of a licensed facility meets all contour protection requirements except one licensed station.

As seen in Exhibit 1 Part 1 of this channel study, this proposed modification of KLWV will continue to overlap the service contour of KNUC.

KUNC agreed to accept interference from KLWV as stated in their application for construction permit BPED-20060822AHM and as seen in the underlying station license BLED-20070727ACF, Special Operating Procedure Number 2: *"Further modifications to the facilities KLWV(FM), BLED-20040621ABR, FID #91514, Chugwater, WY, and KUWR(FM), BLED-19941031KW, FID #69131, Laramie, WY, will not be construed as per se modification of KUNC's license (BLED-20070727ACF). (See "Educational Information Corporation" 6 FCC Rcd 2207)."*

Therefore, EMF is in compliance with this proposed minor modification of a license.

FMCommander Single Allocation Study - 07-27-2021 - FCC NGDC 30 Sec
KLWV.C's Overlaps (In= 11.45 km, Out= -6.33 km)

KLWV.C CH 215 C0

Lat= 41 18 35.90, Lng= 105 27 18.90

100.0 kW 329.3 m HAAT, 2736 m COR

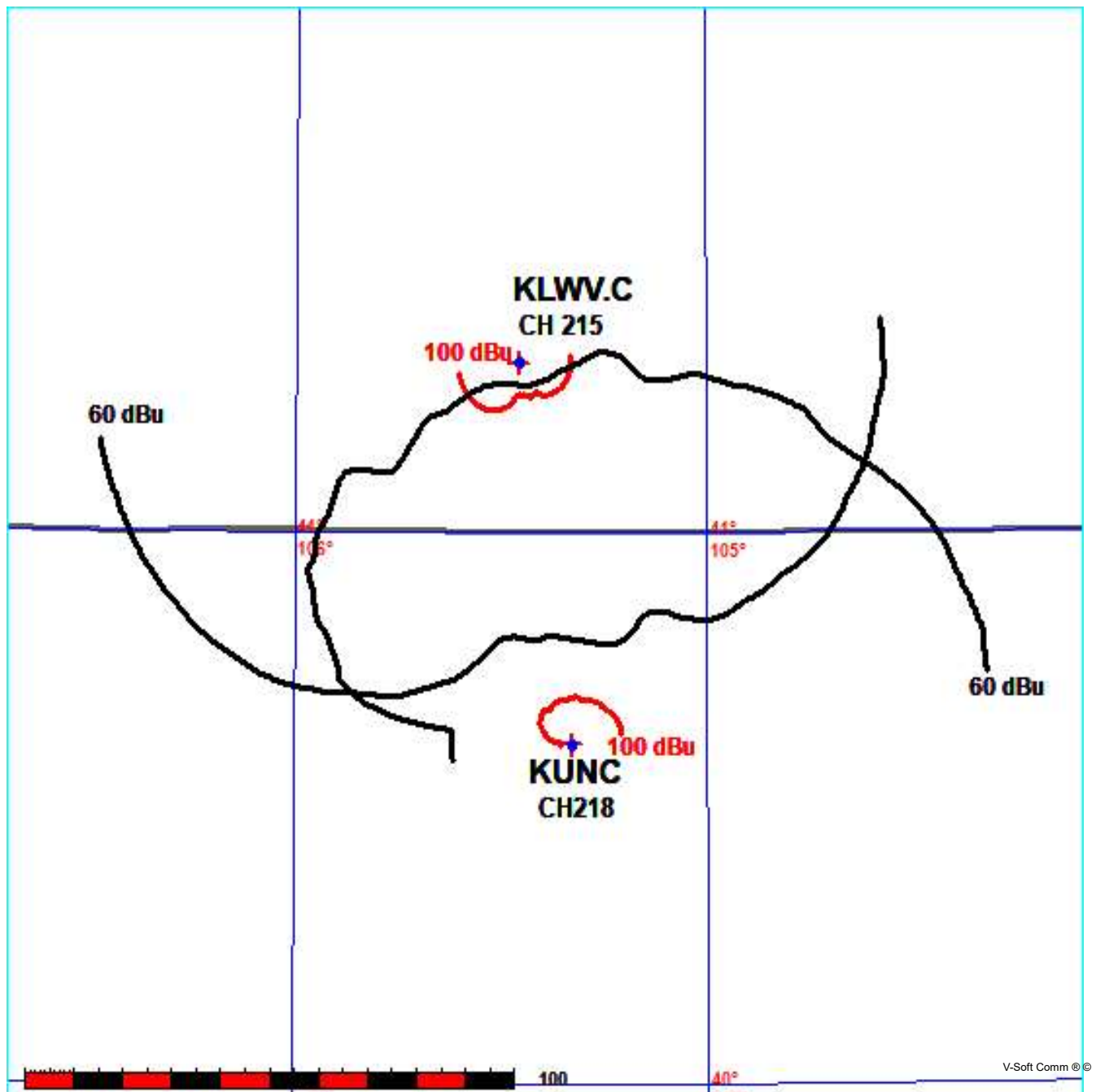
Prot.= 60 dBu, Intef.= 100 dBu

KUNC CH 218 C1 BLED20070727ACF

Lat= 40 37 02.90, Lng= 105 19 40.90

36.0 kW 384 m HAAT, 2565 m COR

Prot.= 60 dBu, Intef.= 100 dBu



FMCommander Single Allocation Study - 07-27-2021 - FCC NGDC 30 Sec
KLWV.C's Overlaps (In= 3.93 km, Out= 15.4 km)

KLWV.C CH 215 C0

Lat= 41 18 35.90, Lng= 105 27 18.90

100.0 kW 329.3 m HAAT, 2736 m COR

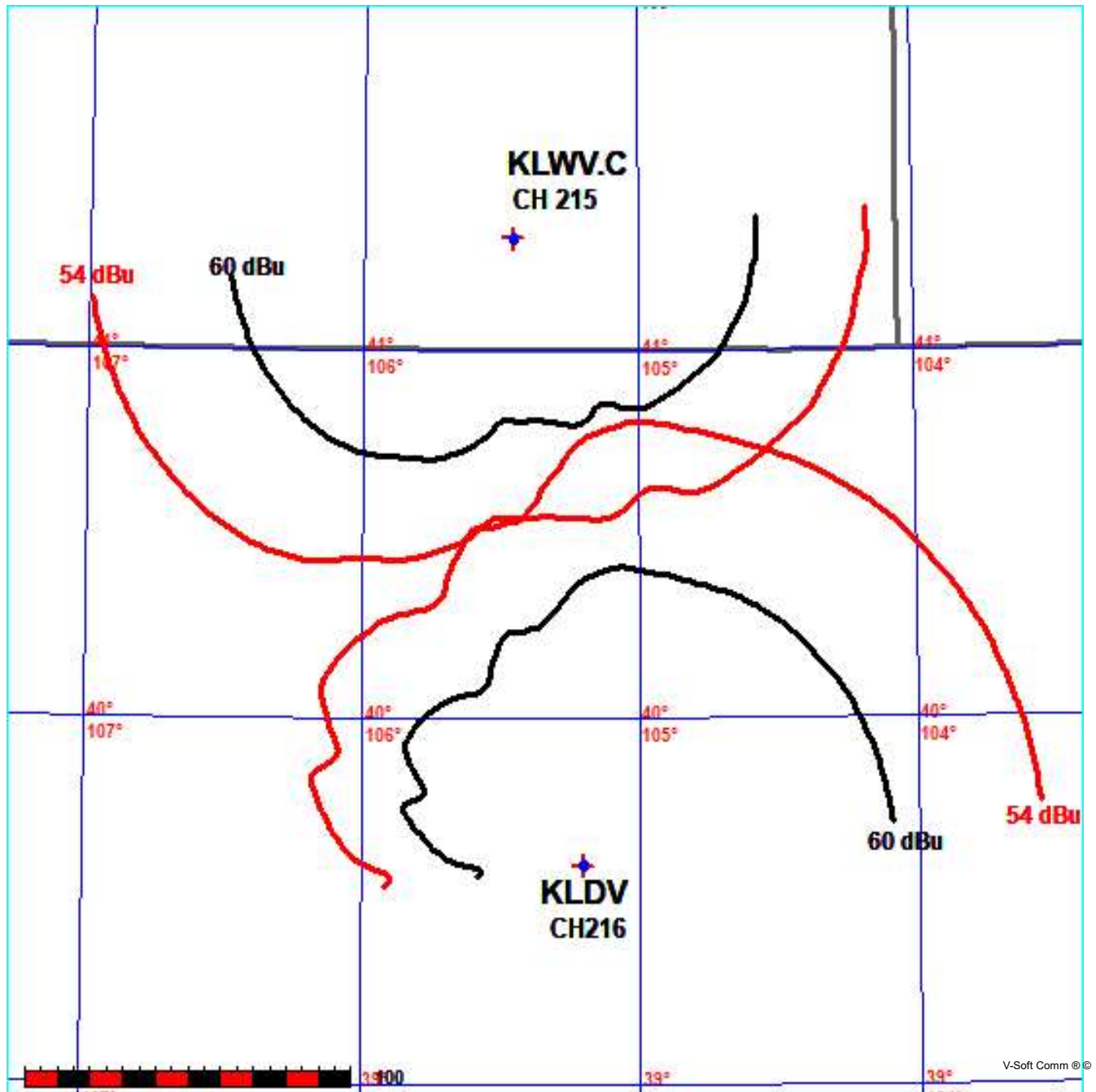
Prot.= 60 dBu, Intef.= 54 dBu

KLDV CH 216 C0 BMLED20160830ABQ

Lat= 39 35 59.90, Lng= 105 12 36.90

100.0 kW 356 m HAAT, 2448 m COR

Prot.= 60 dBu, Intef.= 54 dBu



Educational Media Foundation

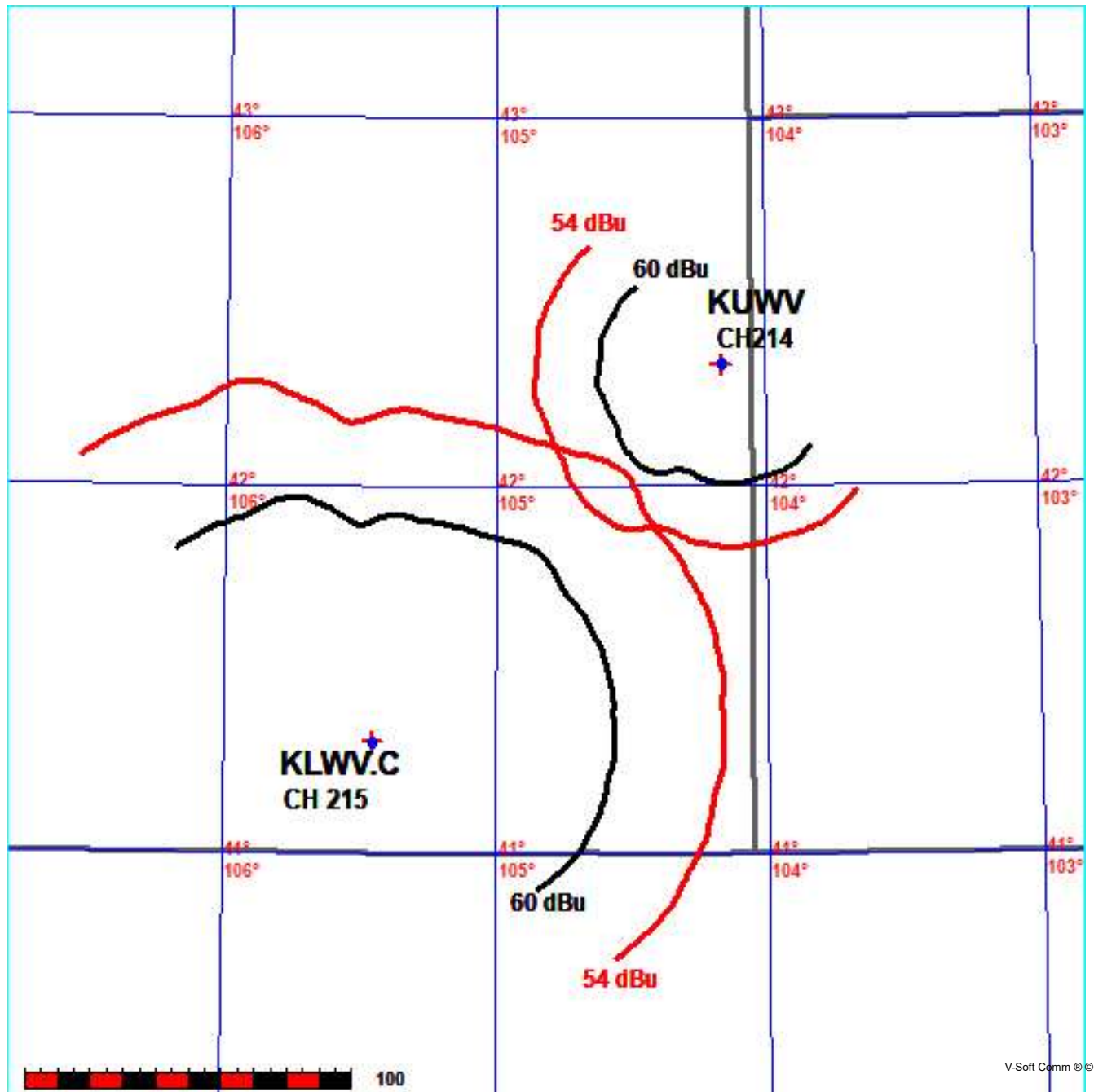
FMCommander Single Allocation Study - 07-27-2021 - FCC NGDC 30 Sec
KLWV.C's Overlaps (In= 20.79 km, Out= 4.88 km)

KLWV.C CH 215 C0

Lat= 41 18 35.90, Lng= 105 27 18.90
100.0 kW 329.3 m HAAT, 2736 m COR
Prot.= 60 dBu, Intef.= 54 dBu

KUWV CH 214 C3 BLED20110316AAQ

Lat= 42 20 02.60, Lng= 104 09 58.00
14.0 kW 96.1 m HAAT, 1510 m COR
Prot.= 60 dBu, Intef.= 54 dBu



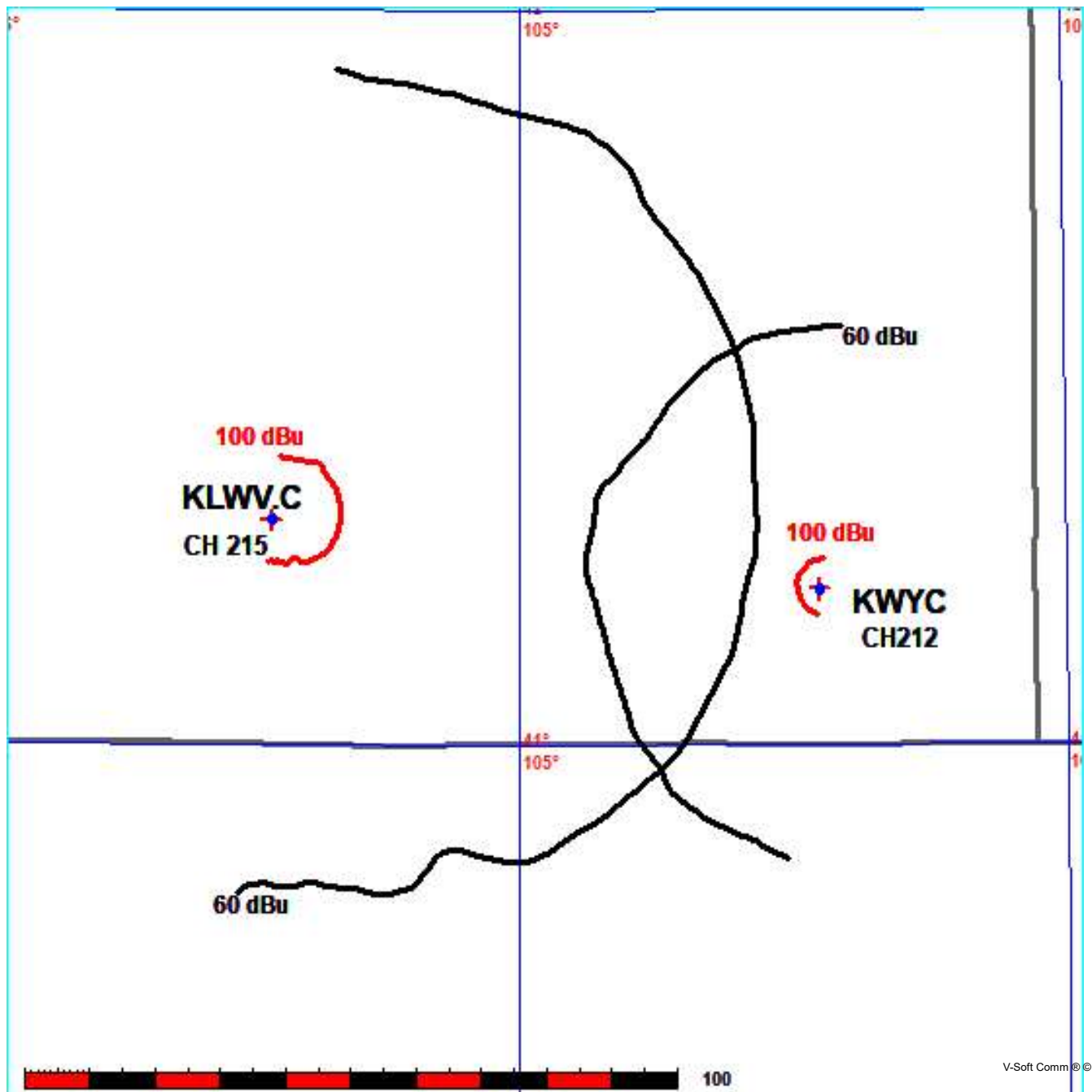
FMCommander Single Allocation Study - 07-27-2021 - FCC NGDC 30 Sec
KLWV.C's Overlaps (In= 7.22 km, Out= 38.11 km)

KLWV.C CH 215 C0

Lat= 41 18 35.90, Lng= 105 27 18.90
100.0 kW 329.3 m HAAT, 2736 m COR
Prot.= 60 dBu, Intef.= 100 dBu

KWYC CH 212 C2 BLED20100511ABH

Lat= 41 13 00.90, Lng= 104 26 54.90
20.5 kW 129.7 m HAAT, 1848 m COR
Prot.= 60 dBu, Intef.= 100 dBu



Overlap Population Report
KLWV.P (215) / Chugwater, WY

Overlap Area Type: Intersection
Areas Included:
KLWV.P (215): FCC F(50-50) 60.00 dBu (FCC HAAT)
PGON: Chugwater, WY

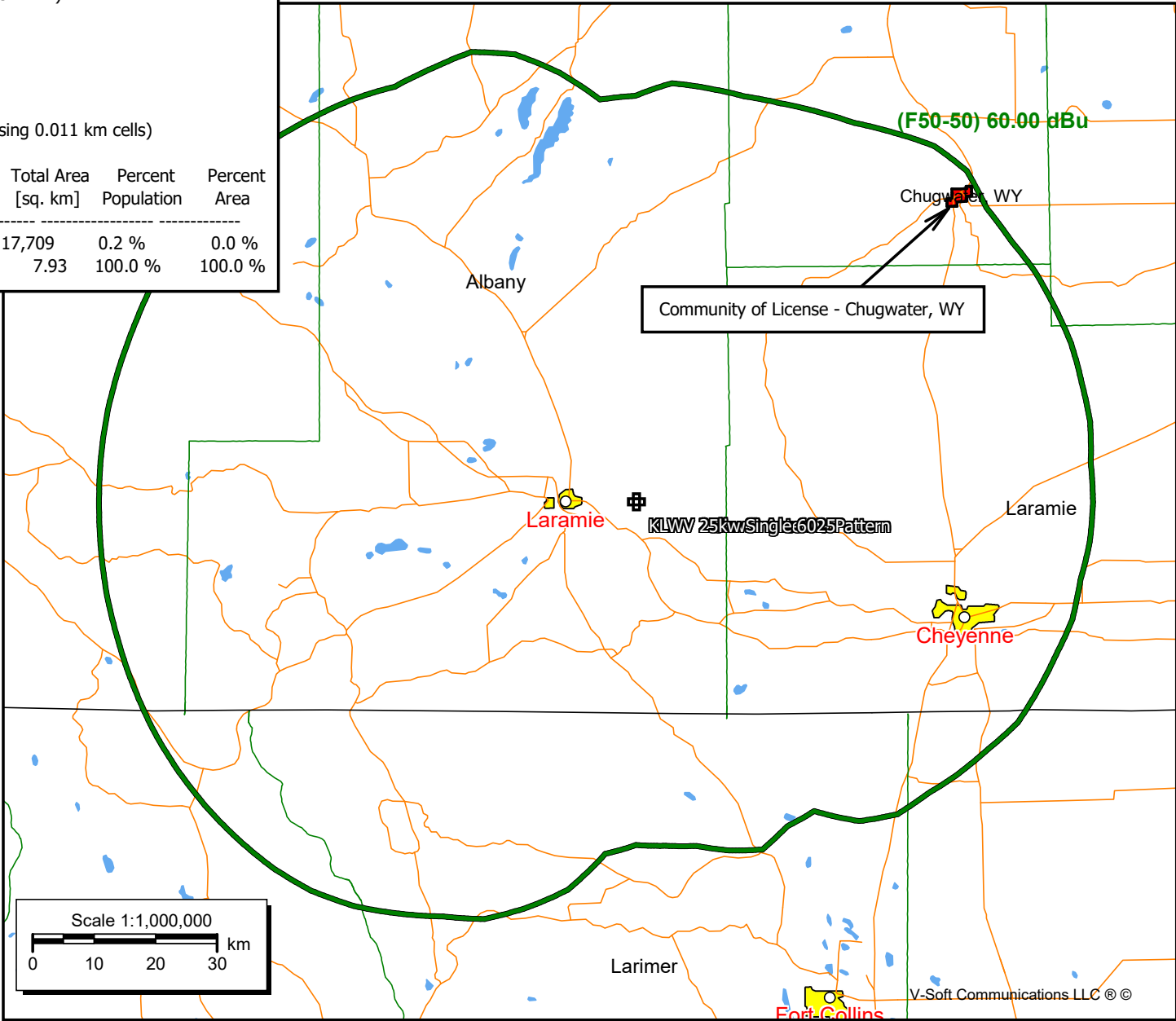
Population Database: 2010 US Census (PL)

Total Population: 212
Overlap Area: 7.93 sq. km (Area determined using 0.011 km cells)

Area Description	Total Population	Total Area [sq. km]	Percent Population	Percent Area
KLWV.P (215): FCC F(50-50)60	124,429	17,709	0.2 %	0.0 %
PGON: Chugwater, WY	212	7.93	100.0 %	100.0 %

Exhibit 2
Community of License Coverage
Note: 100% of the Area and Population Are Within the Proposed 60dbu(F50-50)

KLWV.P
Licensed
Latitude: 41-18-35.90 N
Longitude: 105-27-18.90 W
ERP: 100.00 kW
Channel: 215
Frequency: 90.9 MHz
AMSL Height: 2736.0 m
Elevation: 2688.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None



Overlap Population Report
KLWV.P (215) / Chugwater, WY

Overlap Area Type: Intersection
Areas Included:
KLWV.P (215): FCC F(50-50) 60.00 dBu (FCC HAAT)
PGON: Chugwater, WY

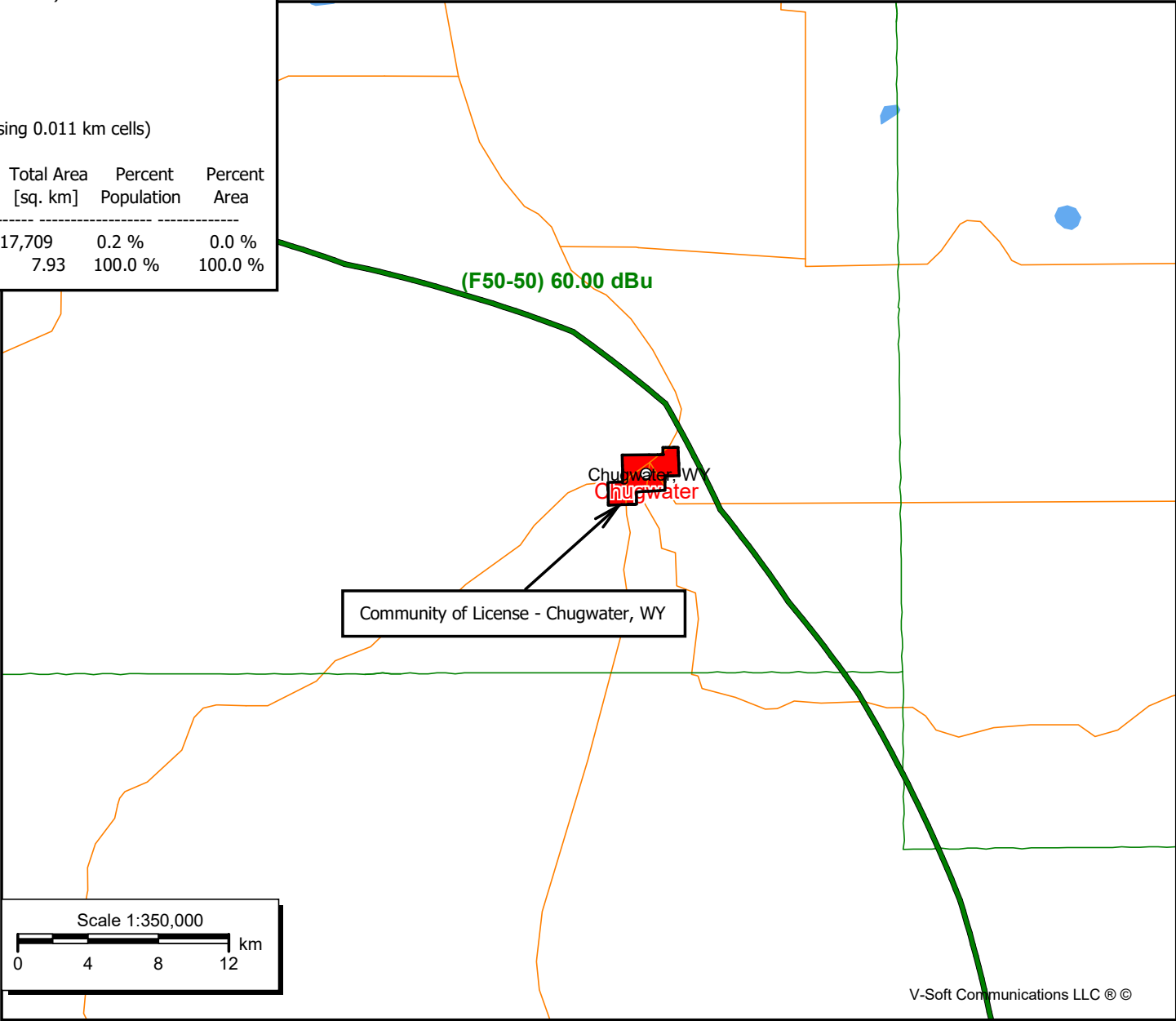
Population Database: 2010 US Census (PL)

Total Population: 212
Overlap Area: 7.93 sq. km (Area determined using 0.011 km cells)

Area Description	Total Population	Total Area [sq. km]	Percent Population	Percent Area
KLWV.P (215): FCC F(50-50)60	124,429	17,709	0.2 %	0.0 %
PGON: Chugwater, WY	212	7.93	100.0 %	100.0 %

KLWV.P
Licensed
Latitude: 41-18-35.90 N
Longitude: 105-27-18.90 W
ERP: 100.00 kW
Channel: 215
Frequency: 90.9 MHz
AMSL Height: 2736.0 m
Elevation: 2688.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

Exhibit 2-A
Community of License Coverage
Note: 100% of the Area and Population Are Within the Proposed 60dbu(F50-50)



Environmental Protection

EMF's proposed facility will be constructed on an existing tower utilizing an ERI SHPX 8 bay full waved spaced antenna and will cause no adverse effects to the surrounding environment at the site.

In order to comply with OET 65, EMF carefully investigated RF sources on the site, and learned that the site is not straightforward. There are multiple towers and multiple radiators on each tower. The proposed KLWV facility is to be built on a tower that, according to FCC records is within 200 meters of a number of broadcast facilities.

Because of this large number of facilities and the complexities of calculations with multiple radiators on multiple towers, EMF believes that theoretical calculations would give inaccurate results at best.

Accordingly, EMF respectfully requests that the Commission grant the instant Construction Permit with the condition that EMF make RF measurements prior to Commission grant of Program Test Authority.

If the results of the measurements reveal that there are areas that exceed the requirements of OET 65 for controlled or uncontrolled access, EMF will work with the site owners and other broadcasters to erect fencing and/or signage to fully comply with OET 65.

Further, after construction of the instant facility, EMF will continue to cooperate with other site users to reduce power or cease broadcasting as necessary to protect workers and others having access to the site from excessive levels of RF Radiation.