

New NCE FM Construction Permit Application

This application complies with all engineering standards and assignment requirements specified in the applicable FCC rules and regulations. The technical parameters for the new NCE FM facility are as indicated below:

	New NCE FM
Channel / Class	214A
Geographical Coordinates (NAD 83)	40 25 45.1 109 29 55.9
ASRN	1228993
Site AMSL	1592.9 m
Tower AGL	35.0 m
COR AGL	17.0 m
COR AMSL	1609.9 m
HAAT	-26.8 m
ERP	0.860 kW (H&V, non-DA)

Tabulation of HAAT / ERP / distance to 1 mV/m contour

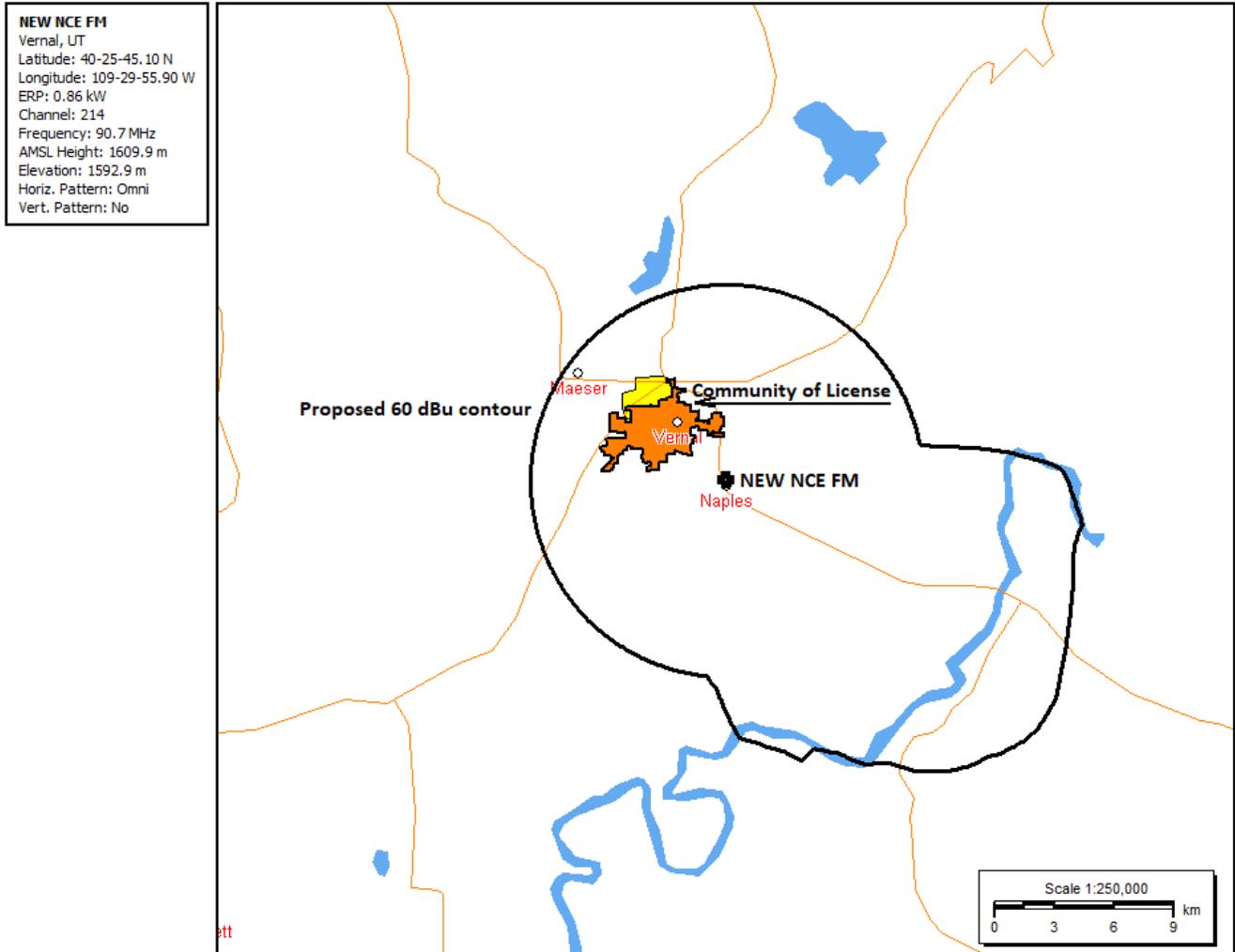
CH 214 40 25 45.1 / 109 29 55.9 0.860 kW ERP (H&V, non-DA) 1609.9 m COR AMSL -26.8 m HAAT

Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5
000	1704.6	-94.7	0.8600	-0.66	1.000	9.79
010	1750.4	-140.5	0.8600	-0.66	1.000	9.79
020	1765.2	-155.3	0.8600	-0.66	1.000	9.79
030	1698.7	-88.8	0.8600	-0.66	1.000	9.79
040	1653.7	-43.8	0.8600	-0.66	1.000	9.79
045	1638.3	-28.4	0.8600	-0.66	1.000	9.79
050	1624.7	-14.8	0.8600	-0.66	1.000	9.79
060	1609.5	0.4	0.8600	-0.66	1.000	9.79
070	1622.7	-12.8	0.8600	-0.66	1.000	9.79
080	1576.3	33.6	0.8600	-0.66	1.000	10.29
090	1519.1	90.8	0.8600	-0.66	1.000	16.90
100	1512.6	97.3	0.8600	-0.66	1.000	17.60
110	1506.7	103.2	0.8600	-0.66	1.000	18.18
120	1496.2	113.7	0.8600	-0.66	1.000	19.15
130	1489.4	120.5	0.8600	-0.66	1.000	19.70
135	1496.5	113.4	0.8600	-0.66	1.000	19.12
140	1503.4	106.5	0.8600	-0.66	1.000	18.50
150	1526.3	83.6	0.8600	-0.66	1.000	16.09
160	1544.1	65.8	0.8600	-0.66	1.000	14.22
170	1551.4	58.5	0.8600	-0.66	1.000	13.50
180	1568.5	41.4	0.8600	-0.66	1.000	11.37
190	1612.5	-2.6	0.8600	-0.66	1.000	9.79
200	1653.9	-44.0	0.8600	-0.66	1.000	9.79
210	1668.7	-58.8	0.8600	-0.66	1.000	9.79
220	1658.7	-48.8	0.8600	-0.66	1.000	9.79
225	1662.8	-52.9	0.8600	-0.66	1.000	9.79
230	1652.3	-42.4	0.8600	-0.66	1.000	9.79
240	1652.5	-42.6	0.8600	-0.66	1.000	9.79
250	1677.6	-67.7	0.8600	-0.66	1.000	9.79
260	1715.3	-105.4	0.8600	-0.66	1.000	9.79
270	1756.4	-146.5	0.8600	-0.66	1.000	9.79
280	1792.4	-182.5	0.8600	-0.66	1.000	9.79
290	1773.6	-163.7	0.8600	-0.66	1.000	9.79
300	1758.2	-148.3	0.8600	-0.66	1.000	9.79
310	1755.5	-145.6	0.8600	-0.66	1.000	9.79
315	1747.3	-137.4	0.8600	-0.66	1.000	9.79
320	1725.7	-115.8	0.8600	-0.66	1.000	9.79
330	1738.1	-128.2	0.8600	-0.66	1.000	9.79
340	1718.2	-108.3	0.8600	-0.66	1.000	9.79
350	1685.3	-75.4	0.8600	-0.66	1.000	9.79

FCC 30 second terrain database
(yellow highlighted values establish average HAAT)

Community of License Coverage Compliance with Section 73.515

The proposed 60 dBu contour will provide full coverage over the community of license of Vernal, UT.



FCC 30 second terrain database

The 60 dBu contour population and area were determined by the V-Soft Communications Probe 5 software program using the 2010 Census data as is indicated below:

Population Database: 2010 US Census (PL)

		Population	Housing Units	Area (sq. km)
NEW NCE FM (214)	[Vernal, 1]			
F(50-50)	60.00 dBu	24,927	9,088	467.6

Allocation Study

CH 214 40 25 45.1 / 109 29 55.9 0.860 kW ERP (H&V, non-DA) 1609.9 m COR AMSL -26.8 m HAAT

CH	CALL	TYPE	AZI.	DIST	LAT.	Pwr (kW)	INT (km)	PRO (km)	*IN*	*OUT*
CITY		STATE	<--	FILE #	LNG.	HAAT (M)	COR (M)	LICENSEE	(Overlap in km)	

Co-channel, 1st, 2nd, & 3rd adjacent channel relationships:

213C	KBJF	CP	247.9	192.23	39 45	36.90	75.000	142.5	97.3	39.9	81.0
Saratoga Springs		UT	66.5	BPED20180308AAB	111 34	40.70	657	2789	CSN International		
213C	KBJF	LIC	247.9	192.23	39 45	36.90	75.000	142.5	97.3	39.9	81.0
Nephi		UT	66.5	BLED20111215ABI	111 34	40.70657		2789	CSN International		
213C0	KUWZ	LIC	15.8	115.31	41 25	38.80	35.000	98.6	67.3	7.0	34.1
Rock Springs		WY	196.0	BLED20060213ADF	109 07	19.40	512	2680	University of Wyoming		

I.F. relationships:

N/A

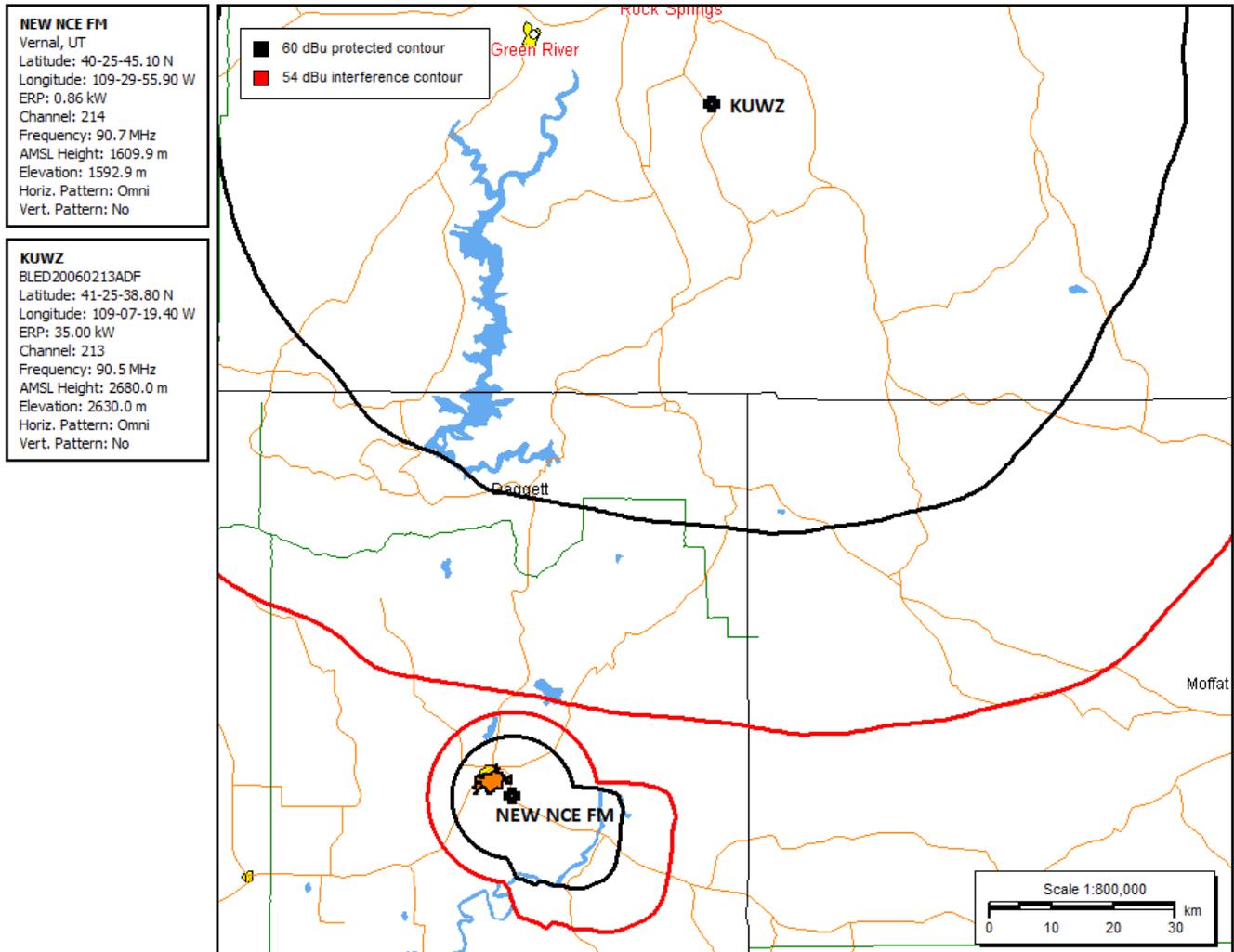
Channel 6 TV Protection

Per Section 73.525(a)(1), NCE-FM stations operating on CH 214 must provide protection to TV Channel 6 broadcast stations located within a distance of 187 km. There are no TV Channel 6 broadcast stations within 187 km of the proposed location of the new NCE FM, therefore it is in full compliance with all provisions of Section 73.525 with regard to Channel 6 TV protection.

 FCC 30 second terrain database

Allocation Study

Below is a map demonstrating the lack of prohibited overlap between the proposed new NCE FM and KUWZ (licensed), CH 213, Rock Springs, WY.



Environmental Impact & RFR Compliance Statement

The proposed new NCE FM will be located at an established communications site that is in compliance with all environmental impact requirements.

The new NCE FM will operate with 0.860 kW ERP (H&V, non-DA) at an antenna height AGL of 17.0 meters utilizing a Nicom BKG77 1 bay antenna (EPA Type 2). Per the V-Soft RFHAZ software program, at two meters above ground the RFR is no more than 35.1% of the general population/uncontrolled MPE limit occurring at 15 meters from the base of the tower. K214AV is also located on the tower and operates with 0.205 kW ERP (H&V, non-DA) at an antenna height AGL of 17.0 meters. For a worst-case estimation at 2 meters above ground level the RFR is no more than 15.2% of the general population/uncontrolled MPE limit. The combined facilities will be no more than 50.3% of the general population/uncontrolled MPE limit, therefore the proposed new NCE FM will be in compliance with all RFR requirements.

The applicant certifies that in cooperation with other users of the site all authorized personnel will be protected from RFR exposure in excess of FCC guidelines while accessing any controlled exposure area, including the tower, by either reducing power or ceasing operations.