Heritage Baptist Church

Burlington, IA

Technical Certifications

As shown below, the proposed facility meets the applicable engineering standards and assignment requirements of 47 CFR §73.203, §73.207, §73.213, §73.215, §73.509, and §73.515.

Grace Baptist Church, Vernal, UT
New FM NCE Station

REFERENCE CH# 201A - 88.1 MHz, Pwr= 5 kW, HAAT= 66.5 M, COR= 246.6 M DISPLAY DATES
40 45 08.94 N. Average Protected F(50-50)= 22.48 km DATA 11-04-21
91 07 34.09 W. Omni-directional SEARCH 11-06-21

CH CITY	CALL STATE	TYPE	ANT <--	AZI	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
201A Geneseo	WAXR IL	LIC	_VN	41.3 221.9	108.12 BLED20020215AAE	41 28 47.10 90 16 08.40	3.000 98	72.6 294	22.1 American Family Associatio	10.2	4.4
201C3 Ottumwa	KQLF IA	APP	_CN	286.6 105.8	112.31 0000162295	41 02 02.10 92 24 34.70	10.500 44	83.9 277	20.5 Sound In Spirit Broadcasti	8.2	15.4
202A Macomb	WIUS IL	LIC	_CN	130.5 310.8	48.97 BLED20180523AAR	40 27 56.00 90 41 09.20	0.220 34	9.8 239	6.9 Western Illinois Universit	16.7	8.7
201A Petersburg	WLWJ IL	LIC	DCN	124.1 305.1	147.04 BLED20011010AAC	40 00 05.20 89 41 49.40	6.000 100	87.5 273	28.9 Good News Radio, Inc.	37.4	41.2
203B Quincy	WGCA-FM IL	LIC	_CN	191.2 11.1	88.48 BLED19870930KA	39 58 18.10 91 19 42.50	40.000 137	5.1 325	45.9 Great Commission Broadcast	58.7	40.2
06 -- K06PT-D« Columbia	APP MO	DHN		207.3 26.5	216.69 0000163236	39 00 52.10 92 16 32.70	3.000	55.1 405	23.3	78.4R	138.3M
06 -- WDXN-LD« Dixon	CP IL	__N		48.6 229.9	211.79 BNPDVL-20090825BOQ	41 59 46.01 89 12 11.00	0.300	55.0 453	18.4	73.4R	138.4M
06 -- K06PT-D« Columbia	CP MO	__N		207.4 26.7	226.68 BNPDVL-20091020AAM	38 56 12.10 92 20 02.59	0.300	55.1 236	6.6	61.7R	165.0M

Terrain database is 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.
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.

The map below demonstrates community coverage requirements for the city of license, fulfilling the requirement of 47 CFR §73.515, NCE FM transmitter location.

Environmental Effect

The proposed facility is excluded from environmental processing under 47 CFR §1.1306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments).

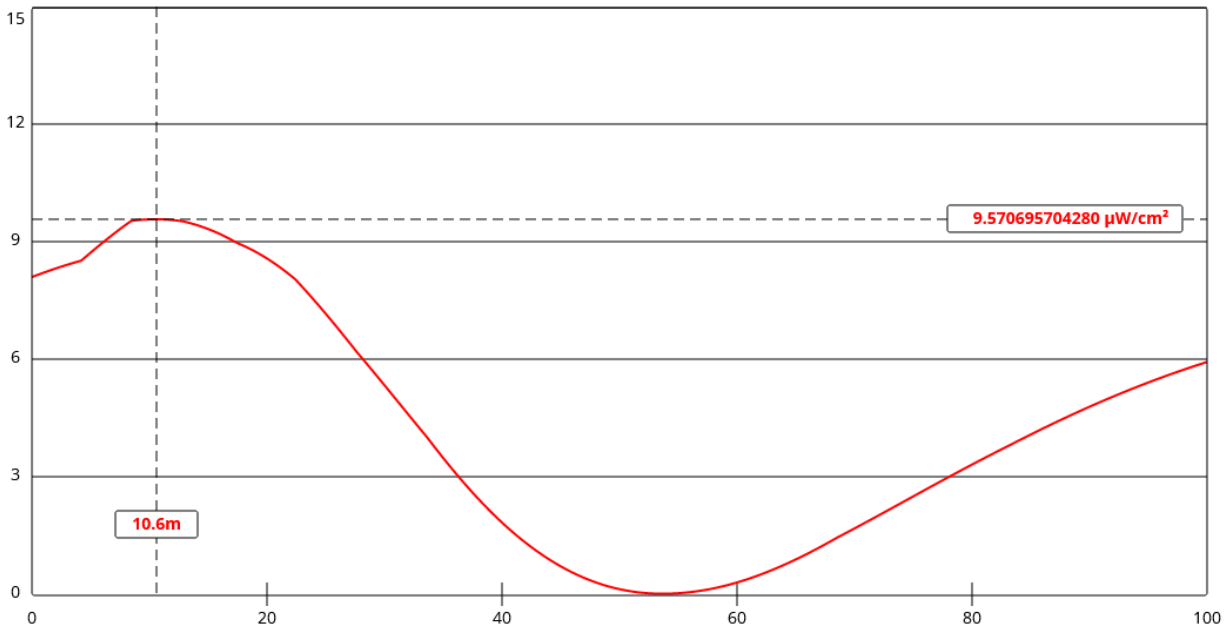
The proposed site is not in an officially designated wilderness area, wildlife preserve, flood plain, or near a site that is either listed or eligible for listing in the National Register of Historic Places. The proposed construction will not adversely affect any listed or proposed threatened or endangered species or their critical habitats, or any sites significant to Native American Religious practice, and will not involve any significant change in surface features. The applicant does not propose to light the antenna support structure with high intensity white lighting.

The proposed facility is located in a rural area. The applicant proposes a 53m self-supporting tower with a three bay, 1/2λ circularly polarized antenna mounted at 50m on the tower. There are no other emitters planned on the tower.

Shown below is the output of the Commission's FM Model program, with a maximum calculated exposure of 9.57 μW/cm^2, well below the maximum permissible exposure for the general public, or 4.79% of the limit of 200 μW/cm^2.

The applicant is cognizant of its responsibility to protect those workers whose duties require that they be in the vicinity of the antenna from exposure to radio frequency fields in excess of those outlined above. To that end, signage will be attached to the base of the antenna support structure warning all workers of the potential for harmful exposure and directing them to contact the responsible person at the broadcast station. That person will ascertain whether the worker will be in areas where there is an exposure hazard, and if so, arrange to shut down the transmitter(s). The permittee/licensee will also coordinate with other users of the site to reduce power or cease operation in order to protect persons having access to the site, tower or antenna from radiofrequency radiation in excess of Commission guidelines.

For these reasons, the applicant believes that a Commission grant of this application would not have a significant environmental impact.



View Tabular Results +

Channel Selection	Channel 201 (88.1 MHz)		
Antenna Type +	EPA Type 1: Ring-and-Stub or "Other"		
Height (m)	50	Distance (m)	100
ERP-H (W)	5000	ERP-V (W)	5000
Num of Elements	3	Element Spacing (λ)	0.5
Num of Points	500	Apply	

Site Assurance

The proposed site is owned by Michael Hall, 319-961-6120, who has given permission to construct the facility.