

American Christian Radio, Inc.

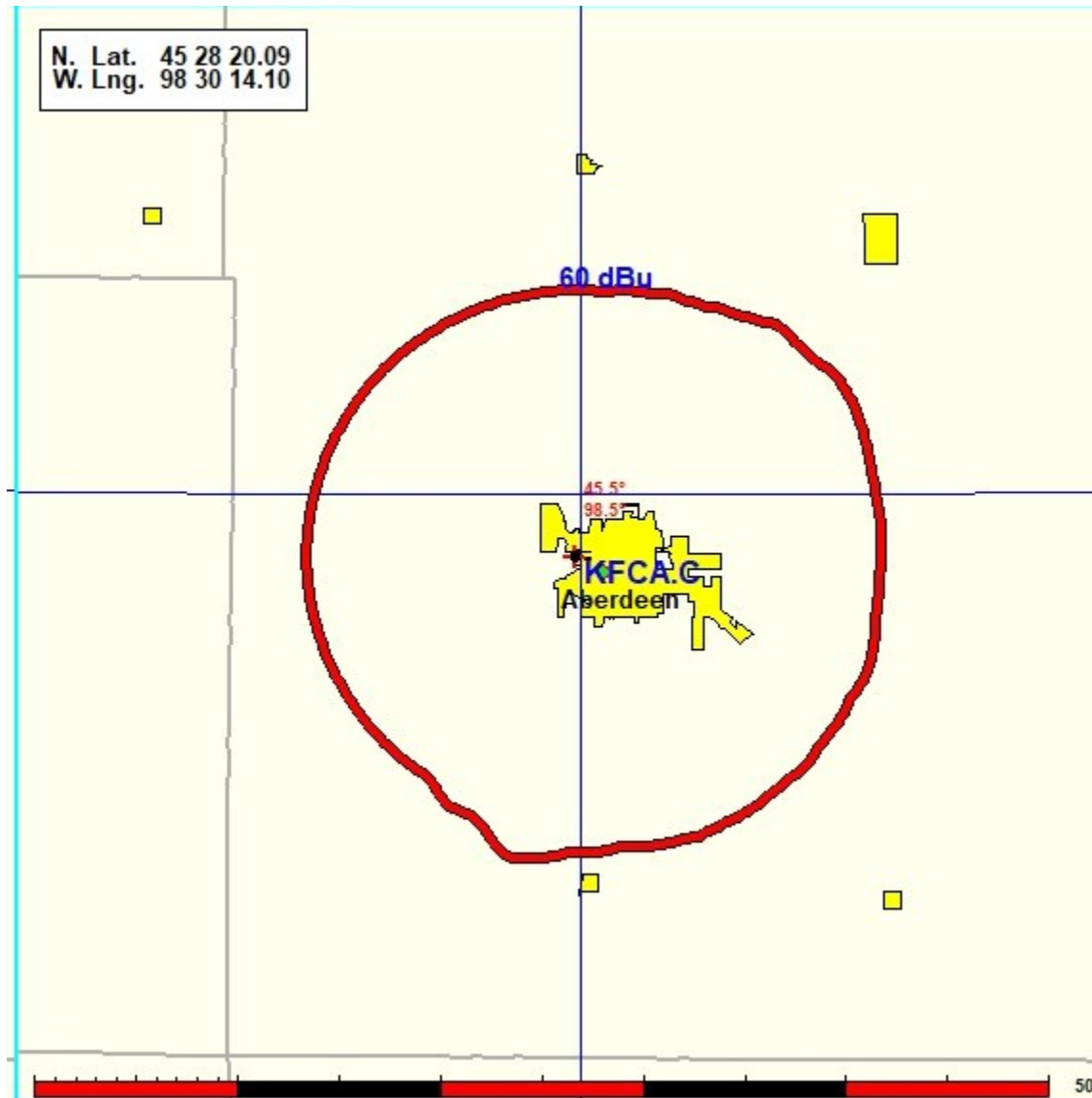
Aberdeen, SD

Technical Certifications

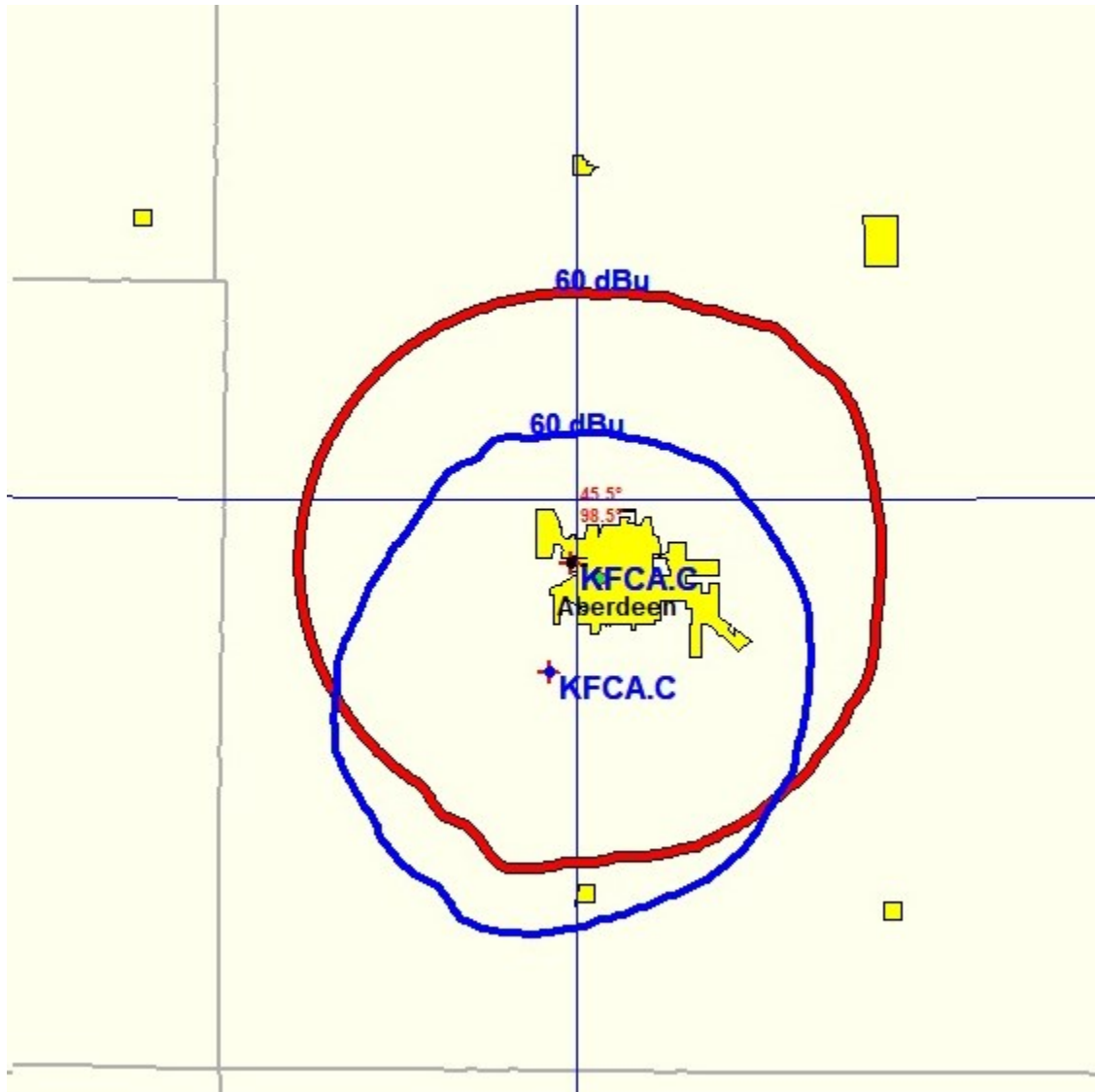
As shown below, the proposed facility meets the applicable engineering standards and assignment requirements of 47 CFR §73.203, §73.207, §73.213, §73.215, §73.509, and §73.515.

Channel Report American Christian Radio, Inc.										
REFERENCE 45 28 20.09 N. 98 30 14.10 W.		CH# 201A	- 88.1 MHz, Pwr= 2.3 kw, HAAT= 31.7 M, COR= 435 M Average Protected F(50-50)= 12.7 km omni-directional						DISPLAY DATES DATA 09-05-23 SEARCH 09-05-23	
CH CITY	CALL	TYPE ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (overlap in km)	*OUT*
201A Aberdeen	KFCA	CP _CN SD	190.9 10.9	5.47 0000195497	45 25 26.00 98 31 02.00	0.800 47	448	---Reference---		American Christian Radio,
201D Aberdeen	K201HB	LIC _VN SD	241.8 61.8	3.86 BLFT20110624AAJ	45 27 20.90 98 32 51.30	0.250 51	35.5 458	10.5	-44.1*	-54.6*
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= - ZN2, Co to 3rd adjacent. All separation margins (if shown) include rounding. Call signs with strikeout 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.										

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



The map below demonstrates community coverage requirements for the city of license (in red), fulfilling the requirement of 47 CFR §73.515, NCE FM transmitter location. In addition, the 60 dBμ contour of the original proposed facility is shown in blue, demonstrating that the proposed amended facility meets the requirements of a minor change as required by 47 CFR § 73.3573.



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.

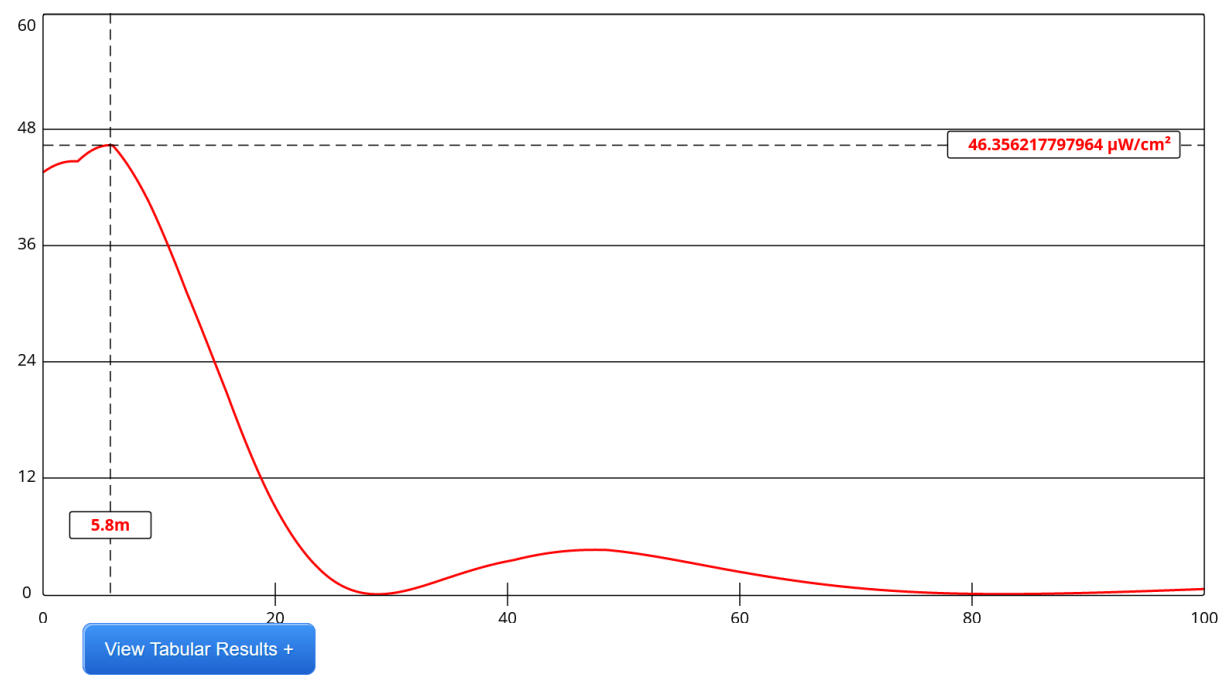
The proposed facility is located on an existing tower, which has fencing with a locked gate preventing public access. The applicant proposes a 3 bay 7/8-wave spaced circularly polarized antenna. Also located on the tower is KEEA-FM, Facility Id: 122026.

Shown below is the output of the Commission's FM Model program, with a maximum calculated exposure of $46.36 \mu\text{W}/\text{cm}^2$. Combining the output of KEEA-FM, $38.96 \mu\text{W}/\text{cm}^2$, the exposure is well below the maximum permissible exposure for the general public, or 42.66% of the limit of $200 \mu\text{W}/\text{cm}^2$.

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.

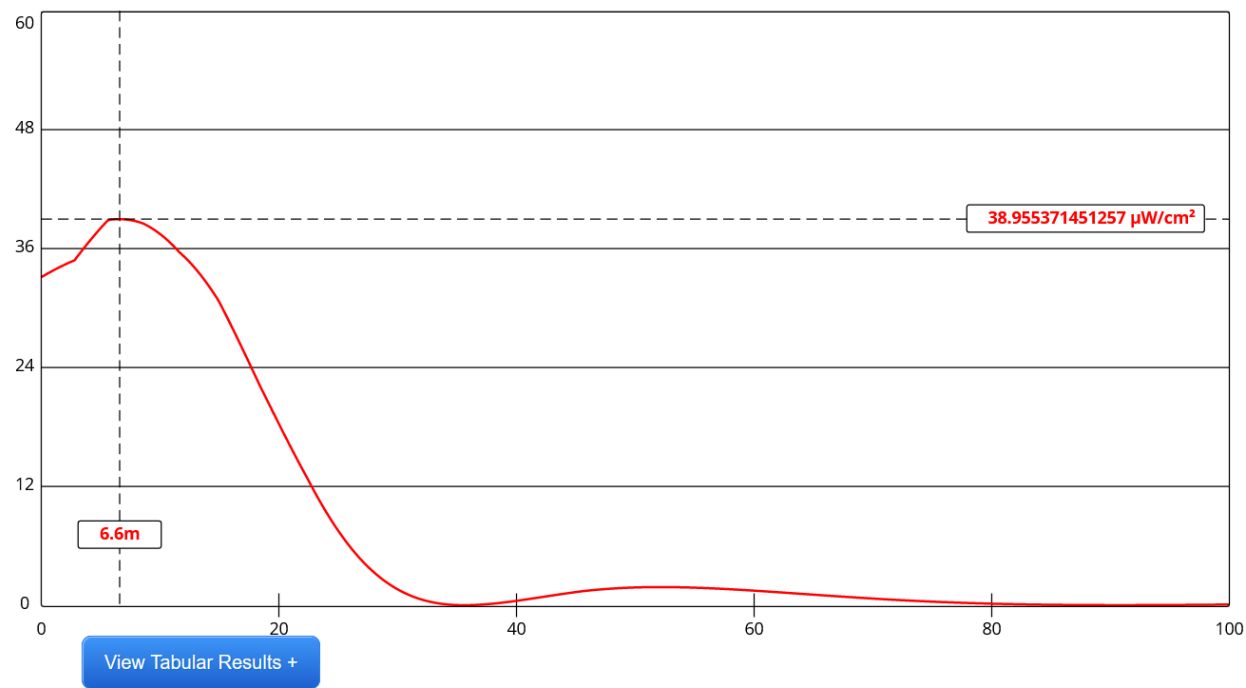
For these reasons, the applicant believes that a Commission grant of this application would not have a significant environmental impact.

FM Model for Proposed Facility:



Channel Selection	Channel 201 (88.1 MHz) ▾		
Antenna Type +	EPA Type 1: Ring-and-Stub or "Other" ▾		
Height (m)	36	Distance (m)	100
ERP-H (W)	2300	ERP-V (W)	2300
Num of Elements	3	λ	0.875
Num of Points	500	Apply	

FM Model for KEEA-FM Facility:



Channel Selection	Channel 211 (90.1 MHz) ▾		
Antenna Type +	EPA Type 1: Ring-and-Stub or "Other" ▾		
Height (m)	<input type="text" value="34"/>	Distance (m)	<input type="text" value="100"/>
ERP-H (W)	<input type="text" value="1000"/>	ERP-V (W)	<input type="text" value="1000"/>
Num of Elements	<input type="text" value="3"/>	λ	<input type="text" value="1"/>
Num of Points	<input type="text" value="500"/>	<input type="button" value="Apply"/>	