



ENGINEERING STATEMENT

OF

JOHN F.X. BROWNE, P.E.

IN SUPPORT OF

APPLICATION FOR MINOR MODIFICATION TO A CONSTRUCTION PERMIT

IOWA PUBLIC BROADCASTING BOARD

KSIN-DT CH 28

SIoux CITY, IOWA

Background

The Iowa Public Broadcasting Board (IPBB) currently holds a construction permit for KSIN-DT, Sioux City, Iowa CH 28 (BPEDT19980825KE, Facility ID 29096). IPBB now seeks to move that facility to the site of its NTSC facility. This is also the allotment site.

Facilities Proposed

The new proposal specifies an omni-directional antenna (Andrew ATW25H3H) and an ERP of 475 kW. This is not a "checklist" application as the power exceeds that of the allotment. The proposed antenna will be placed atop the tower, replacing the one now being abandoned by KMEG-TV. The proposed antenna is 7.5 meters shorter than the one that will be replaced, reducing the overall height of the structure. A modification to the antenna structure registration (ASR# 1051813) and notification to the FAA of the reduced height will be made.



Antenna System

An Andrew ATW25H3H omni-directional antenna with an electrical beam tilt of 0.75 degrees is proposed.

The radiation center height of the proposed antenna (723.5 AMSL) results in an HAAT of 351.5 meters.

Effective Radiated Power

The power authorized by the construction permit is 200 kW; the proposed power is 475 kW.

Interference

Studies were made using software that emulates the software in use by the Commission. Those studies did not identify any NTSC or DTV station which would receive more than the de minimis interference as outlined in OET-69. A Class A-eligible station (K28EN) was identified as having contour overlap with the proposed facility but investigation shows K28EN, in fact, did not become a Class A station, but rather has remained in translator/LPTV status. Also, it now has a construction permit for operation on Channel 50.

Environment/RFR

The proposed construction does not require preparation of an environmental assessment, as it does not involve any of the factors listed in section 1.130b.

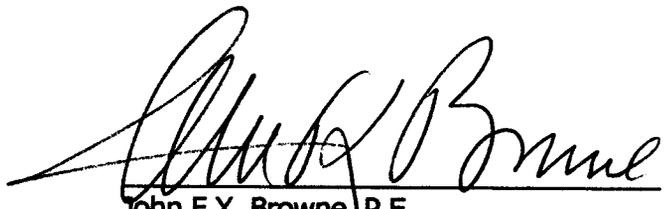
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The additional ground level RFR contributed to the site by the proposal is calculated to be 0.000485 mW/cm² in public areas which is significantly less than 1% of the MPE (0.372 mW/cm²) for public exposure at this frequency. Further consideration is thus not required.

A master plan is in-place which governs all users of the tower relative to worker access. KSIN-DT is the owner of this tower and agrees to comply with the Commission's requirements regarding power adjustments or cessation of operation as may be necessary to ensure a compliant environment for worker access and will cooperate with other users in this regard. The tower is enclosed within a locked security fence and appropriate signage is in-place to warn of the RFR hazards on the structure.

Certification

I hereby certify that the foregoing report or statement was prepared by me but may include work performed by others under my supervision or direction. The statements of fact contained therein are believed to be true and correct based on personal knowledge, information and belief unless otherwise stated; with respect to facts not known of my own personal knowledge, I believe them to be true and correct based on their origin from sources known to me to be generally reliable and accurate. I have prepared this document with due care and in accordance with applicable standards of professional practice.



John F.X. Browne, P.E.
July 29, 2002