

**STATEMENT OF CYNTHIA M. JACOBSON
IN SUPPORT OF AN APPLICATION
FOR CONSTRUCTION PERMIT
KKWQ - WARROAD, MINNESOTA
CHANNEL 223C1 - 100.0 kW ERP - 141 METERS HAAT
FACILITY ID NUMBER 16576**

Applicant: Border Broadcasting, LP

I am a Consulting Radio Engineer. My education and experience are a matter of record with the Federal Communications Commission.

I am a Registered Professional Engineer in the Commonwealth of Virginia, Registration No. 027914.

I have been authorized by Border Broadcasting, LP, ("Border"), the licensee of FM broadcast station KKWQ, Warroad, Minnesota, to prepare this statement and the associated exhibits in support of a minor change Application for Construction Permit. Radio station KKWQ is presently licensed (FCC File No BLH-19890830KB) to operate on Channel 223C1 with an Effective Radiated Power (ERP) of 100 kW at an antenna Height Above Average Terrain (HAAT) of 141 meters. It is proposed to relocate the transmitter site approximately 20.3 kilometers to the northwest.

This site is uniquely described by the NAD-27 coordinates of North Latitude 48 degrees, 59 minutes, 26 seconds and West Longitude 95 degrees, 30 minutes, 55 seconds. The proposed antenna system will be mounted on a new support structure.

This application is being filed simultaneously with an Application for Construction Permit for a one-step upgrade for KXKK, Park Rapids, Minnesota. The KKWQ change in reference allotment coordinates will provide KXKK a fully-spaced reference site¹ for a Class C2 facility.

ALLOCATION CONSIDERATIONS

The proposed KKWQ [Channel 223C1] transmitter site is fully-spaced to all current allocations, licensed broadcast facilities, outstanding construction permits, pending applications and the simultaneously filed, mutually contingent application of KXKK, Park Rapids, Minnesota to upgrade to a Class C2 facility.

CANADIAN CONCURRENCE

KKWQ is located within 320 kilometers of the Canadian border. It is respectfully requested that the Commission, on behalf of KKWQ, notify the Canadian Administration of the proposed facility change if deemed necessary.

PREDICTED COVERAGE CONTOURS

¹The KXKK Channel 223C2 allocation reference site is: 46 degrees, 58 minutes, 25 seconds N.L. and 95 degrees, 12 minutes, 12 seconds W.L (NAD-27).

The predicted coverage contours were calculated in accordance with the method described in Section 73.313 of the Rules utilizing the appropriate F(50,50) propagation curves from the Rules (Section 73.333, Figure 1), effective radiated power, and antenna height above average terrain as determined for each profile radial. Average terrain data from the proposed site was obtained from a National Geophysical Data Center Thirty Second Point Topographic Database (TGP-0050). The ground elevation was obtained from a USGS topographic map. The 3.16 mV/m (70 dBu) city-grade contour completely encompasses the principal community to be served, as required by Section 73.315(a) of the Commission's Rules.

BLANKETING AND INTERMODULATION INTERFERENCE

There are no known commercial or government receiving stations or cable head-end facilities located within the blanketing contour. There are no FM or TV stations located within 10 kilometers of the proposed FM site. Also, there are no AM stations located within 3.2 kilometers of the proposed new site. In the event that blanketing or intermodulation interference, including RITOE, occurs with any facilities or to radio receivers in use prior to grant of their application, the applicant will accept the responsibility to alleviate any interference resulting from the proposal.

In accordance with the Commission's January 2, 1991, decision (FCC 91-3, released January 14, 1991) regarding the application of WKLX, Inc., the applicant will exclude both

mobile and battery-powered receivers from Receiver Induced Third Order Intermodulation and Blanketing Interference Resolution Requirements. In the event any type of intermodulation occurs with any other facility which has not been identified, the applicant will install and maintain any traps or filters necessary to reduce or eliminate any interference. The applicant will respond to any complaints for a period of one year, in compliance with Section 73.318(b) of the Commission Rules.

FAA NOTIFICATION AND TOWER REGISTRATION

The proposed FM antenna will be mounted on a new tower support structure, with a height of 149 meters AGL and 476 meters AMSL. A Notice of Proposed Construction, FAA Form 7460-1, will be filed with the FAA.

Following FAA approval, the proposed transmitting antenna structure will be registered with the FCC. The applicant will notify the Commission of the tower registration number.

ENVIRONMENTAL IMPACT

This engineering statement only certifies compliance with human exposure to radio-frequency radiation.

The proposal described herein does not involve high-intensity lighting as specified in Section 1.1307(a)(8) of the Rules, nor will it result in human exposure to radio-frequency radiation in excess of the standards specified in Section 1.1307(b).

RADIO FREQUENCY IMPACT

Effective October 15, 1997, the FCC adopted its current guidelines and procedures for evaluating environmental effects of radiofrequency emissions. The current guidelines are generally based on recommendations by the National Council on Radiation Protection and Measurements (NCRP) in NCRP Report No. 86 (1986), and by the American National Standards Institute and the Institute of Electrical and Electronic Engineers, Inc.(IEEE) in ANSI/IEEE C95.1-1982 (IEEE C95.1-1991). The FCC guidelines provide a maximum permissible exposure (MPE) level for occupational or "controlled" situations, as well as "uncontrolled" situations that apply in cases that affect the general public. The FCC's Office of Engineering and Technology (OET) Commission issued technical bulletin (OET Bulletin No. 65) entitled, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields" (Edition 97-01, August 1997) to aid in the determination of whether FCC-regulated transmitting facilities, operations or devices comply with limits for human exposure to radiofrequency electromagnetic fields as adopted by the Commission in 1996. The OET Bulletin contains technical information for evaluating compliance with FCC policies and guidelines.

CALCULATION METHODS

The current FCC MPE level for “uncontrolled” environments is $200\mu\text{W}/\text{cm}^2$ for FM facilities. The MPE level for FM facilities in a “controlled” environment is $1000\mu\text{W}/\text{cm}^2$.

Verification of compliance with FCC-specified guidelines for human exposure to RF radiation was obtained from OET Bulletin No. 65. To obtain distance to compliance with the guidelines, Tables 5 and 6, Section 2 of Supplement A was used. The KKWQ(FM) facility proposes operation with a radiation centerline at 141.0 meters above ground level (AGL) and an ERP of 100 kW on Channel 223 operating with dual polarization. An antenna with 6 or more bays will meet the required general population/uncontrolled exposure limits. The proposed facility complies with FCC requirements regarding radiofrequency radiation. In addition, the base of the tower will be fenced and warning signs will be posted at appropriate intervals to preclude casual access.

It is submitted that KKWQ(FM) station will not constitute a potential hazard to the quality of the human environment and therefore should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Rules.

OCCUPATIONAL SAFETY

KKWQ will insure protection to station personnel working in the vicinity of the antenna. The proposed FM will reduce power or cease operation when appropriate, during times of

service or maintenance of the transmitting system and when work is being performed on the tower, to avoid potentially harmful exposure to station personnel and workers.

It is submitted that the proposed KKWQ facility station will not constitute a potential hazard to the quality of the human environment. Accordingly, the proposal, as described herein, should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Rules.

SUMMARY

It is submitted that the proposal described herein complies with the Rules and Regulations of the Federal Communications Commission. This statement, FCC Form 301, Section III-B, and the attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct.

DATED: February 10, 2006

