

Comprehensive Technical Exhibit
Application for License
KXMB-DT – Bismarck, North Dakota
Reiten Television, Inc.
June, 2009

Application for License

The following engineering statement and attached exhibits have been prepared for **Reiten Television, Inc.** ("Reiten"), licensee of digital television station KXMB-DT at Bismarck, North Dakota, and are in support of their application for license to cover the construction permit for post-transition DTV facilities.¹

On April 7, 2008, Reiten was granted construction permit BPCDT-20080320ABC, which modified BLCDT-20020305AAB. KXMB-DT operated on channel 23 during the pre-transition period. In the post-transition environment, KXMB-DT will operate on physical channel 12, which is the channel that was utilized for analog operations. This application seeks to license the flash-cut performed by the facility.

The main studio for the facility complies with the provisions of Section 73.1125 of the Commission's Rules. The main studio is located at 1811 N. 15th Street in Bismarck, North Dakota. This address is located within the corporate boundaries of the city of Bismarck, and also within the principal community coverage contour of several Bismarck broadcast facilities.

The facility was constructed in accordance with the terms of the construction permit. Permissible modifications pursuant to Section 73.1690 are not applicable in this case. The construction of the post-transition facility involved replacing the transmitter and associated equipment. No change in the antenna or transmission line was performed as these items were utilized for analog NTSC operations.

¹ The Facility ID for KXMB-DT at Bismarck, North Dakota is 55686.

The construction permit, as issued, listed two special conditions or restrictions. Reiten is in compliance with both of these restrictions. Each will be discussed in this technical exhibit.

The first special condition or restriction pertains to the notification requirements by Reiten to healthcare facilities in the vicinity of Bismarck. The applicant certifies that it has made a good faith effort to identify and notify health care facilities that may be impacted by its operation. Documentation pertaining to the identification and notification of these facilities has been placed in the station's public file, and is available for inspection. Should any issues arise during the twenty day period described in this special condition, all reasonable attempts to rectify the issue will be undertaken.

The second special condition notifies Reiten that operation authorized under the construction permit may not commence prior to midnight on February 17, 2009, or any other date that the Commission may establish in the future. Reiten submitted a request for a special temporary authority to commence DTV operations on channel 12 ahead of the June 12, 2009 termination date.² This STA request was granted, and Reiten performed the flash-cut to digital operations on channel 12 on May 28, 2009 as discussed in the engineering exhibit attached to that request. KXMB-DT is currently operating pursuant to the automatic program test authority provisions described in Section 73.1620(a)(1) of the Commission's Rules.

The transmitter in use by the facility complies with the provisions of Section 73.1660 of the Commission's Rules. Appropriate proof data for the facility is contained within the public file.

² See FCC File No. BDSTA-20090409ALB.

The specified transmitter power output achieves the authorized effective radiated power.

The antenna in use by the facility is a General Electric (GE) model TY54A3 antenna. This antenna has a power gain of 12.07 dB. In order to achieve the authorized effective radiated power, an antenna input power of 0.74 dBk, or 1.19 kW must be utilized. The transmission line feeding the antenna has an insertion loss of 1.60 dB for the run. Therefore, in order to achieve the authorized effective radiated power, the input power to the transmission line must be 2.34 dBk, which is equivalent to 1.71 kW, which is the specified transmitter power output.

Affidavit

The preceding statement and attached exhibits have been prepared by me, or under my direction, and are true and accurate to the best of my belief and knowledge.



Above signature is digitized copy of actual signature
License Expires November 30, 2009

Jeremy D. Ruck, PE
June 1, 2009