

Comprehensive Technical Exhibit
Application for License
KYMA-DT - Yuma, Arizona
Yuma Broadcasting Company
September, 2010

Application for License

The following engineering statement and attached exhibits have been prepared for **Yuma Broadcasting Company** ("Yuma"), permittee of digital television station KYMA-DT at Yuma, Arizona, and are in support of their application for license to cover post-transition DTV facilities.¹

On August 19, 2008 Yuma was granted construction permit BPCDT-20080618ABN for post-transition DTV facilities. A modification of this authorization was sought in 2009 under BMPCDT-20090219ABV. The modified authorization, which was requested due to the availability of additional transmitter power, specifies a maximum effective radiated power of 22.3 kW at a center of radiation of 493 meters above average terrain. A non-directional antenna is utilized by the facility.²

Construction on the facility, which required only the installation of a digital transmitter on channel 11, was completed prior to the sunset of NTSC operations, and KYMA-DT commenced operation as a digital facility at the revised NTSC sunset date. Yuma, through no malice of forethought, failed to timely file the appropriate license application for the post-transition facility. This omission was not for any nefarious purpose, but was quite simply an oversight on the part of the applicant.

The specified transmitter power output achieves the authorized effective radiated power. The specified transmitter power output is 3.60 dBk (2.29 kW). The transmitter is connected to 600 feet of 4 3/16" rigid transmission line, which has an insertion loss of 0.512 dB, or a decimal efficiency of 88.88%. The output of this transmission line is the input to the antenna, where the

¹ The Facility ID for KYMA-DT at Yuma, Arizona is 74449.

² The facility utilizes a Harris TAB-12H antenna, which is non-directional. This antenna has 0.7 degrees of electrical beamtilt, and no mechanical beamtilt.

power is 3.09 dBk or 2.04 kW. The antenna, which is a Harris model TAB-12H, has a peak power gain of 10.4 dB.³ The result is an effective radiated power of 13.5 dBk or 22.3 kW, thus the specified transmitter power output achieves the authorized effective radiated power.

The main studio location complies with the provisions of Section 73.1125 of the Commission's Rules. The main studio is located within the corporate boundaries of Yuma, Arizona. No change in the location of the main studio has been made or is proposed.

The facility was constructed as authorized in the related construction permit. Modifications pursuant to Section 73.1690 are not applicable. The construction permit, as issued by the Commission, listed two special conditions or restrictions. The applicant is in compliance with both.

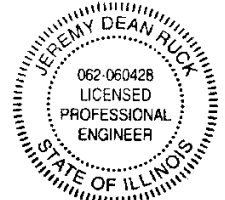
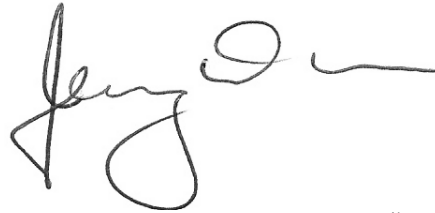
The first special condition pertains to the date on which the authorized facility may commence operation. This condition was imposed due to the fact that KYMA would flash-cut from analog to digital operations on channel 11. KYMA did not commence digital operations on channel 11 until June 12, 2009 as specified. The second special condition is the standard health-care notification requirement imposed on all DTV permittees. Yuma has complied with the terms of this special condition through the identification and notification processes as appropriate.

The transmitter in use by the facility complies with the provisions of Section 73.1660 of the Commission's Rules. The required proof of performance on the transmitter has been completed. Documentation of this proof is maintained at the main studio, and is available upon request.

³ The figure of 11.0 is the numeric power gain.

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, 2011

Jeremy D. Ruck, PE
September 14, 2010