

**Comprehensive Technical Exhibit**  
*Application for License*  
KENV-DT - Elko, Nevada  
Ruby Mountain Broadcasting Company  
September, 2010

**Application for License**

The following engineering statement and attached exhibits have been prepared for **Ruby Mountain Broadcasting Company** ("Ruby"), permittee of digital television station KENV-DT at Elko, Nevada, and are in support of their application for license to cover post-transition DTV facilities.<sup>1</sup>

On July 3, 2008, Ruby was granted construction permit BPCDT-20080618ACE for the KENV-DT post-transition DTV facilities. A modification of this authorization was sought later that year under BMPCDT-20081021AAM. The modification to the authorization proposed a reduction in the effective radiated power from 3.2 kW to 1.5 kW. All other parameters, including the associated elevation figures and directional pattern remained unchanged. This construction permit was granted on October 22, 2008.

Construction of the facility, which required only the installation of a digital transmitter on channel 10, was completed prior to the sunset of NTSC operations, and KENV-DT commenced operation as a digital facility at the revised NTSC sunset date. Ruby, however, failed to file the associated license application immediately after the commencement of operation. The omission on the part of Ruby for the timely submission of the license application was simply an oversight on the part of the licensee.

The specified transmitter power output achieves the authorized effective radiated power. The specified transmitter power output is -6.29 dBk or 0.235 kW. The transmitter is connected to 152 feet of RCA MI-19313 3 1/8" rigid transmission line. Data from RCA indicates that this transmission line has an insertion loss of 0.136 dB per 100 feet. The length of line in use has a

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<sup>1</sup> The Facility ID for KENV-DT at Elko, Nevada is 63845.

total insertion loss of 0.207 dB, which translates into an efficiency of 95.34 percent. The output of this transmission line is the input to the antenna, where the power is -6.50 dBk or 0.224 kW. The antenna, which is an RCA model TF-6AH, has a peak power gain of 8.26 dB. The result is an effective radiated power of 1.76 dBk or 1.50 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 Elko, Nevada. No change in the location of the main studio has been made or is proposed.

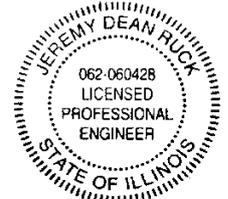
The facility was constructed as authorized in the related construction permit. Modifications pursuant to Section 73.1690 are not applicable. The construction permit, as issued by the Commission, listed two special conditions or restrictions. The applicant is in compliance with both.

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 KENV would flash-cut from analog to digital operations on channel 10. KENV did not commence digital operations on channel 10 until June 12, 2009, although the special condition specified February 17, 2009. The second special condition is the standard health-care notification requirement imposed on all DTV permittees. Ruby 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.

**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 15, 2010**