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**B. W. St. Clair**

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**Comprehensive Technical Exhibit**

*Application for Construction Permit*

KCEC-DT, Denver, CO

FCC Facility ID 24514

Entravision Holdings, LLC



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### **Introduction**

The following engineering statement is prepared for Entravision Holdings, LLC, licensee of KCEC and applicant for DTV post transition facility KCEC-DT as shown on the within application.

KCEC currently operates on channel 50 as a NTSC facility and is operating in DTV mode pursuant to an STA. The within application seeks a minor modification of its digital construction permit BPCDT-19991029ACN, as extended, on channel 51. The minor modification seeks a rotation of the antenna pattern to correct an error.

The antenna pattern in appendix B and the CP is centered at 160° well south of Denver, the community of license. This is due to an error which crept in at some unknown point in the digital application process.

This application provides a revised relative voltage tabulation (10e) which places the center of the antenna pattern at 90° over Denver and corrects the error.

The covered population changes very little as the result of this correction:

Population with construction permit as issued:	2,892,541
Population after correction:	2,893,795

While the change in population is not significant and is in the direction of an increase.

### **Interference Study**

An interference study was run employing the Techware, Inc. analysis program tv\_process\_pt\_d\_08 as used at the FCC. No interference beyond 0.5% was shown to be caused to any other facility.

### **Principal Community Coverage**

An attached coverage contour map identified as Appendix 1 demonstrates the relationship between the present construction permit's 48dBu F50/90 contour, the proposed 48dBu F50/90 contour and the principal community of Denver, CO. The community is entirely contained within all relevant contours.

### **Antenna**

The proposed antenna is as stated in the technical portion of the application. It is

the same antenna as specified in BPCDT-19991029ACN, but which has been rotated counterclockwise 70°. Its technical description, including azimuth and elevation radiation information is attached as Appendix 2 (pp1-9),

**Environmental Concerns; OET Bulletin 65 Compliance.** The facility proposed will use the already permitted KCEC-DT antenna and tower location; accordingly, for purposes of OET analysis, the new facility is identical in all aspects to the permitted facility with the exception that the antenna is to be rotated as 70° counter-clockwise as previously described. No change in the effective radiated power or antenna height above ground level is proposed, so no change in KCEC's contribution to the overall NIER at the site is contemplated beyond that which was described in the exhibits relating to the underlying construction permit.

As the site is a well established, securely fenced, shared area, the site owner, KWGN, Inc., has crafted and enforces well-established policies which govern activities at the site. KWGN, Inc. has taken responsibility for maintenance of radiation levels to an acceptably low amount and has provided supporting information to that effect to the FCC. Regular measurements are made using standard measuring devices such as the Narda 8718B Survey Meter at the site. Such measurements have shown that there are no areas at or near the site which receive NIER at levels greater than permissible.

As is usual at such transmitting sites, access to the site is well restricted and marked with warning signs. An agreement among site users governs workers at the site, who will be protected by appropriate measures to limit exposure. Such measures include wearing of protective garments, reduction or cessation of transmissions or limitation of time on tasks at the site.

**Protection of Table Mountain Radio Receiving Zone.** The applicant is determining the level and type of coordination with the Radio Frequency Management Coordinator, Department of Commerce, Boulder Laboratories, CO and will undertake the appropriate coordination of this application.

The foregoing statement and technical portions of the within application are true and correct to the best of my knowledge.

B. W. St. Clair  
Engineering Consultant  
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