

## Exhibit 1 – Demonstration with compliance of relevant subsections of 73.1690(c)

This minor modification is for request for non-commercial station KVQI reduction of ERP from 5.0 kW to 500 W, for the purpose of conforming to an ERP limit imposed by the United States Forestry Service.

### 1.0 Relevant subsections

KVQI is a noncommercial FM station operating on channel 203. Relevant subsections are listed below, with **bold items** indicating those which require compliance.

§73.1690(c)(8) FM commercial stations and **FM noncommercial educational stations may decrease ERP on a modification of license application provided that exhibits are included to demonstrate that all five of the following requirements are met:**

- (i) Commercial FM stations must continue to provide a 70 dBu principal community contour over the community of license, as required by § 73.315(a). **Noncommercial educational FM stations must continue to provide a 60 dBu contour over at least 50 percent of its community of license or reach 50 percent of the population within the community. The 60 and 70 dBu contours must be predicted by use of the standard contour prediction method in § 73.313(b), (c), and (d).**
- (ii) Nonapplicable
- (iii) Nonapplicable
- (iv) Nonapplicable
- (v) **Noncommercial educational FM stations on Channels 201 through 220 which are within the Table A distance separations of § 73.525, or Class D stations on Channel 200, may not use the license modification process to eliminate an authorized horizontally polarized component in favor of vertically polarized-only operation. In addition, noncommercial educational stations operating on Channels 201 through 220, or Class D stations on Channel 200, which employ separate horizontally and vertically polarized antennas mounted at different heights, may not use the license modification process to increase or decrease either the horizontal ERP or vertical ERP without a construction permit.**

## 2.0 Relevant subsection compliance

### 2.1 Compliance verification for subsection §73.1690(c)(8)(i)

The 60dBu contours for KVQI are below, showing both the current 5.0 kW ERP case (Figure 1.0) and the modified 500 W ERP case (Figure 2.0). The major population centers of Vail, Colorado are highlighted and the projected number of persons covered is also listed.

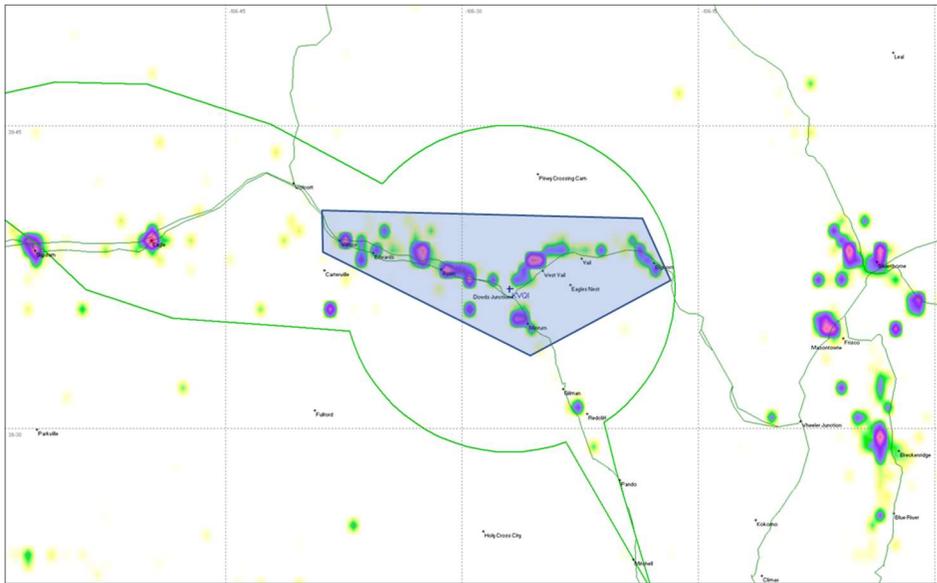


Figure 1.0 – KVQI operating at 5.0 kW ERP 60dBu contour -- 36,700 persons covered

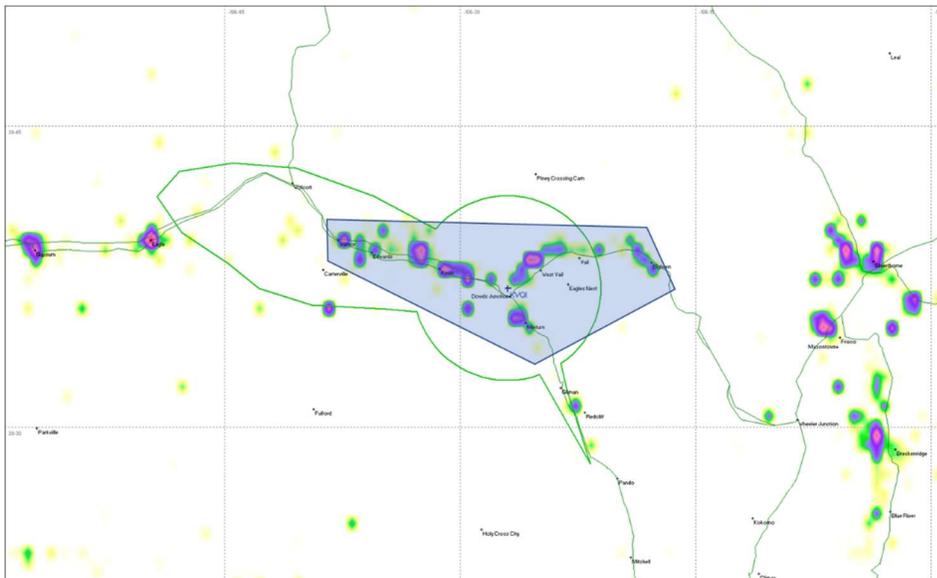


Figure 2.0 – KVQI Operating at 500 W ERP 60dBu contour -- 26,000 persons covered

As illustrated by the coverage plot, and the calculated population coverage, **this modification does meet the requirement that at least 50% of the targeted community (Vail, Co) be covered by the 60dBu contour.**

The below Figure 3.0 is an illustration of the modified 60dBu and 70dBu contours as generated by the standard prediction method listed in section 3.0 of this document.

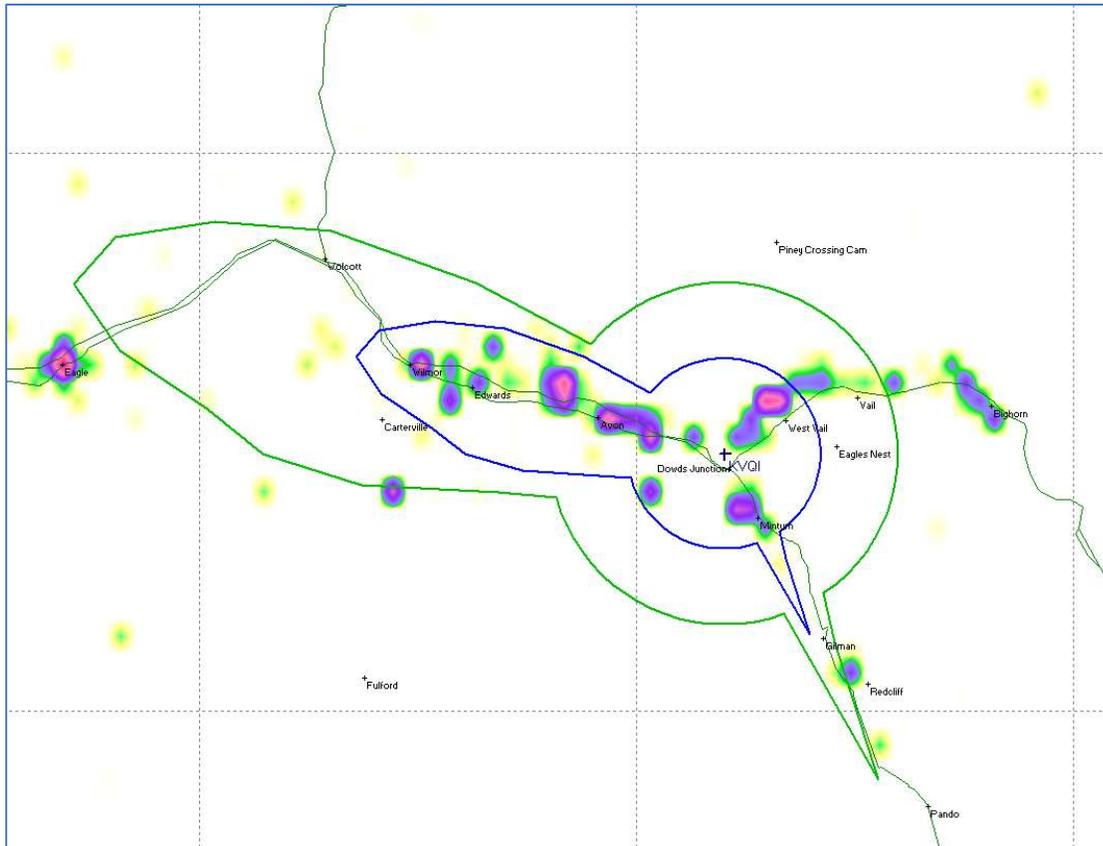


Figure 3.0 – KVQI operating at 500W ERP 60dBu (green), 70dBu (blue) contours

## 2.1 Compliance verification for subsection §73.1690(c)(8)(v)

**This modification is compliant with this requirement, as the antenna elements are circularly polarized and do not have separable H and V components. The antenna is a two-bay Shivley 6810 model.**

## 3.0 Methods and certifications

Calculations of contours and population coverage were performed using industry-standard software, ComStudy 2.2. The calculations were performed by CPR Senior RF Engineer, David Dieter, who holds a BS and MS Degree in Electromagnetics granted by the Ohio State University.