

DELAWDER COMMUNICATIONS, INC.

P.O. Box 1095
Ashburn, Virginia 20146-1095
(703) 299-9222

ENGINEERING REPORT

K10QO-D: STA for Channel 10D

EXHIBIT 42 ENGINEERING SUPPORT

LPTV STA STATEMENT

1. Attached as Figure 1 is a map showing the 48 dBu F50,90 contour for the licensed and proposed STA facility for K10QO-D.

2. Attached as Figure 2 are the OET-69 study results for the proposed facility (as the referenced station) as determined on a Sun Computer using a Solaris (Unix-based) operating system and using the same OET-69 software as developed for use by the FCC. (According to the software developer, the program used herein provides identical results as the FCC's OET-69 processing program.) Except for those stations also licensed, authorized or proposed by the applicant, or those stations that have consented to predicted interference from this proposal, the proposed facility adequately protects all US licensed and authorized broadcast stations as required by the FCC Rules. All studies are conducted in accordance with current FCC Rules and Regulations.

3. The Applicant accepts any existing and future interference that may result from any primary or secondary TV station that is otherwise deemed to have status priority to the herein-proposed STA facility.

Environmental Statement

4. This proposal does not involve a site location specified under Section 1.1307(a) through (a)(8) of the FCC Rules.

Assuming: (a) a maximum ERP of 300 watts; (b) a relative field of less than 0.5 in the critical downward angles; and (c) a distance of 5 meters from the lowest antenna element to 2 meters above ground level, the maximum power density is calculated as follows:

$$S = 33.4 (F)(F)(ERP) / [(R)(R)]$$

Where, S equals power density in uW/cm²
F equals the relative field factor

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ERP equals the effective radiate power in watts

R equals the distance in meters

$$= 33.4 (0.5)(0.5)(300) / [(5)(5)]$$

$$= 100.2 \text{ uW/cm}^2$$

100.2 uW/cm² represents less than the uncontrolled power density limit (200 uW/cm² for VHF). The electromagnetic radiation from this proposed operation will not produce a value in excess of the radiation standard. The electromagnetic radiation from the proposed operation will not combine with other facilities on or near the structure to produce a significant change in value.

If this is a structure that may support various other operations, the applicant will cooperate with the other operators in establishing a plan for work done on the structure in close proximity to the existing antenna.