

DELAWDER COMMUNICATIONS, INC.

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

ENGINEERING REPORT

WLHY-LD, Lebanon-Harrisburg-York-Lancaster, PA LPTV (Channel 31) STA

ENGINEERING STATEMENT

This STA request is for a reduction in ERP only—to 3 kW ERP. This reduction is deemed necessary while the licensee investigates complaints of interference.

ENVIRONMENTAL STATEMENT

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

The proposed LPTV produces an ERP that is equal to or less than 3 kilowatts. Assuming: (a) a maximum ERP of 3 kilowatts; (b) a relative field of less than 0.2 in the critical downward angles; and (c) a distance of 250 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
 ERP equals the effective radiate power in watts
 R equals the distance in meters

$$= 33.4 (0.2)(0.2)(3,000) / [(250)(250)]$$

$$= 0.1 \text{ uW/cm}^2$$

0.1 uW/cm² represents less than the uncontrolled power density limit (315.3 uW/cm² for channel 14—channel 14 being the worst-case UHF channel or 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.