Exhibit B-17
KMJY-FM Auxiliary Channel 283C1 Newport, Washington
NIER Analysis

Facilities Proposed

The proposed operation will be on Channel 283C1 (104.5 MHz) with a maximum lobe effective radiated power of 4 kilowatts. Operation is proposed with a 2-element vertically-polarized Scala HDCA-10V antenna array. The antenna will be side-mounted on an existing tower located 1.3 km north-northeast of the intersection of Euclid and Dowdy roads, near Airway Heights, Washington. The FCC Antenna Structure Registration Number for this tower is 1216657.

The only other broadcast user of this site is FM booster KKRS-FM1, which operates from this same tower.

NIER Calculations

Study of the area within 1000 meters of the proposed site reveals no likely sources of non-ionizing radiation other than the KMJY-FM auxiliary and KKRS-FM1. Thus, the ground level NIER values near the base of the proposed structure are believed to be negligible. Precise calculations are made only with regard to the levels from this proposal and KKRS-FM1.

The power density calculations shown below were made using the techniques outlined in OET Bulletin No. 65. "Ground level" calculations in this report have been made at a reference height of 2 meters above ground to provide a worst-case estimate of exposure for persons standing on the ground in the vicinity of the tower. The equation shown below was used to calculate the ground level power density figures from each antenna.

$$S(\mu W/cm^2) = \frac{33.40981 \times AdjERP(Watts)}{D^2}$$

Where: *AdjERP(Watts)* is the maximum lobe effective radiated power times the element pattern factor times the array pattern factor.

D is the distance in meters from the center of radiation to the calculation point.

"Worst case" calculations of the power density produced by the KMJY-FM auxiliary antenna system have been made using the above formula, presuming that the antenna will radiate 4000 Watts straight down. The results indicate a maximum ground level power density of 28.1 FW/cm², which is 2.8% of 1000 FW/cm² (the FCC standard for controlled environments) and 14.1% of 200 FW/cm² (the FCC standard for uncontrolled environments). This is a worst-case figure. The actual ground level power densities from the antenna to be used will likely be lower.

"Worst case" calculations of the power density produced by the KKRS-FM1 auxiliary antenna system have been made using the above formula, presuming that the antenna radiates 50 Watts straight down. The results indicate a maximum ground level power density of 0.3 FW/cm². This is a worst-case figure. The actual ground level power densities from the antenna used by KKRS-FM are likely lower.

These calculations show that the maximum calculated power density produced at two meters above ground level by the proposed operation of the KMJY-FM auxiliary and the present operation of KKRS-FM1 is 28.4 FW/cm², which is 2.8% of 1000 FW/cm² (the FCC

standard for controlled environments) and 14.2% of 200 FW/cm^2 (the FCC standard for uncontrolled environments).

Public access to the site is restricted and the antenna tower is posted with warning signs. Pursuant to OET Bulletin No. 65, all station personnel and contractors are required to follow appropriate safety procedures before any work is commenced on the antenna tower, including reduction in power or discontinuance of operation before any maintenance work is undertaken.

The permittee/licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency radiation in excess of FCC guidelines.