

Exhibit 15
K250AE Channel 250D Longview, Washington
NIER Analysis

Facilities Proposed

The proposed operation is on Channel 250 (97.9 MHz) with an effective radiated power of 0.25 kilowatts (-6.02 dBk). Operation is proposed with a circularly polarized omnidirectional half-wave-spaced antenna. The antenna will be mounted on the existing KEDO-AM tower located at 24th and Olive Way in Longview. The FCC Antenna Structure Registration Number for this tower is 1035302.

NIER Calculations

Study of the area within 1000 meters of the proposed site reveals no other likely sources of non-ionizing radiation. 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.

The power density calculations shown below were made using the techniques outlined in the EPA report titled: *An Engineering Assessment of the Potential Impact of Federal Radiation Protection Guidance on the AM, FM, and TV Broadcast Services* (Gailey & Tell, April, 1985). All calculations contained herein are based on the measured element patterns for the antenna, and follow the procedure shown in the Gailey and Tell report. The patterns were identified by applying the procedure outlined in the report to the measurement data contained in the report titled: *Element Pattern Measurements on FM Antennas* (EPA-520/ 6-85-107, June 1985).

"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. Equation #1, contained in the Gailey & Tell report and shown below, was used to calculate the ground level power density figures from each antenna at incremental distances from the base of its supporting tower.

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

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.

Ground level power densities have been calculated for locations extending from the base of the tower to a distance of 1000 meters. Values past this point are increasingly negligible.

Calculations of the power density produced by the proposed antenna system assume a Type 6 element pattern, which is the element pattern for the Shively antenna proposed for use. The highest calculated ground level power density occurs at a distance of 129 meters from the base of the antenna support structure. At this point the power density is calculated to be 0.3 FW/cm², less than 1% of 1000 FW/cm² (the FCC standard for controlled environments) and less than 1% of 200 FW/cm² (the FCC standard for uncontrolled environments).

The KEDO-AM tower site is fenced to a distance of at least 2 meters from the tower base.

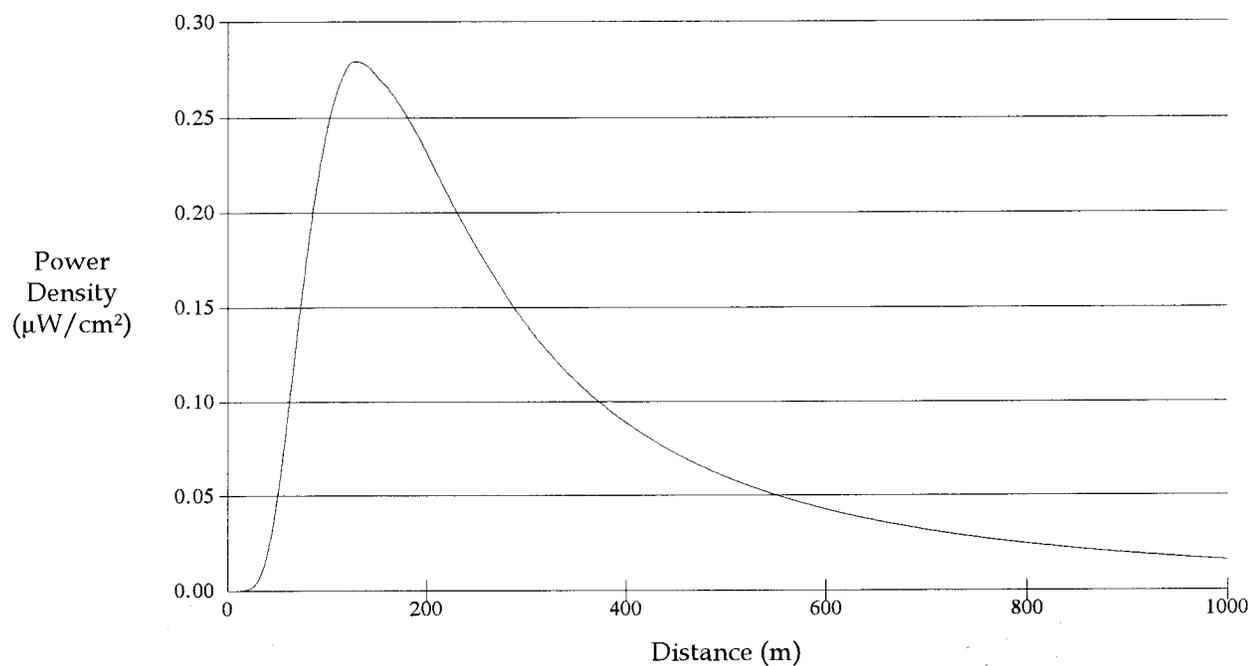
Public access to the site is restricted by a locked gate and the antenna tower is posted with warning signs. Pursuant to OST Bulletin No. 65, all station personnel and contractors are required to follow appropriate safety procedures before any work is commenced on the antenna tower, including reduction 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.

KEDO Base Impedance Measurements

Following the installation of the proposed translator transmitting and receiving antennas on the KEDO tower, KEDO will use the indirect method to determine its operating power. Measurements of the KEDO non-directional antenna base resistance and reactance will be performed. The results of these measurements will be submitted to the Commission with an application for direct power measurement on FCC Form 302-AM, as described in §73.54 of the Commission's Rules.

Power Density vs Distance



Ground-Level NIER Analysis

OET FMModel

K250AE Longview

Antenna Type: Shively 6800 Series

Number of Elements: 2

Element Spacing: 0.5 wavelength

Distance: 1000 meters

Horizontal ERP: 250 Watts

Vertical ERP: 250 Watts

Antenna Height: 73 meters AGL

Maximum Power Density is 0.3 µW/cm² at 129 meters from the antenna structure.

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