

Exhibit B-17
KMJR-FM Channel 288A Portland, Texas
NIER Analysis

Facilities Proposed

The proposed operation will be on Channel 288A (105.5 MHz) with an effective radiated power of 2.8 kilowatts. Operation is proposed with a 3-element circularly-polarized omni-directional antenna. The antenna will be side-mounted on a tower located atop a 230 foot building in downtown Corpus Christi. The FCC Antenna Structure Registration Number for the structure is 1047400.

NIER Calculations

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.

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

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

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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 3 element pattern, which is the element pattern for the ERI “rototiller” antenna proposed for use. The highest calculated ground level power density occurs at a distance of 49 meters from the base of the antenna support structure. At this point the power density is calculated to be 2.1 FW/cm², which is just 1.05% of 200 FW/cm² (the FCC standard for uncontrolled environments). Since this figure is less than 5% of the applicable FCC standard, no further analysis of ground-level exposure is required.

The proposed antenna radiation center is 29 meters above the building rooftop. The highest calculated rooftop level power density occurs at a distance of 14 meters from the base of the antenna support structure. At this point the power density is calculated to be 26.8 FW/cm², which is 2.7% of 1000 FW/cm² (the FCC standard for controlled environments), and 13.4% of 200 FW/cm² (the FCC standard for uncontrolled environments).

The only other broadcast facility operating from this structure is TV translator K57FC, which holds a license for 47.2 kW ERP and a construction permit for 94.4 kW ERP, both

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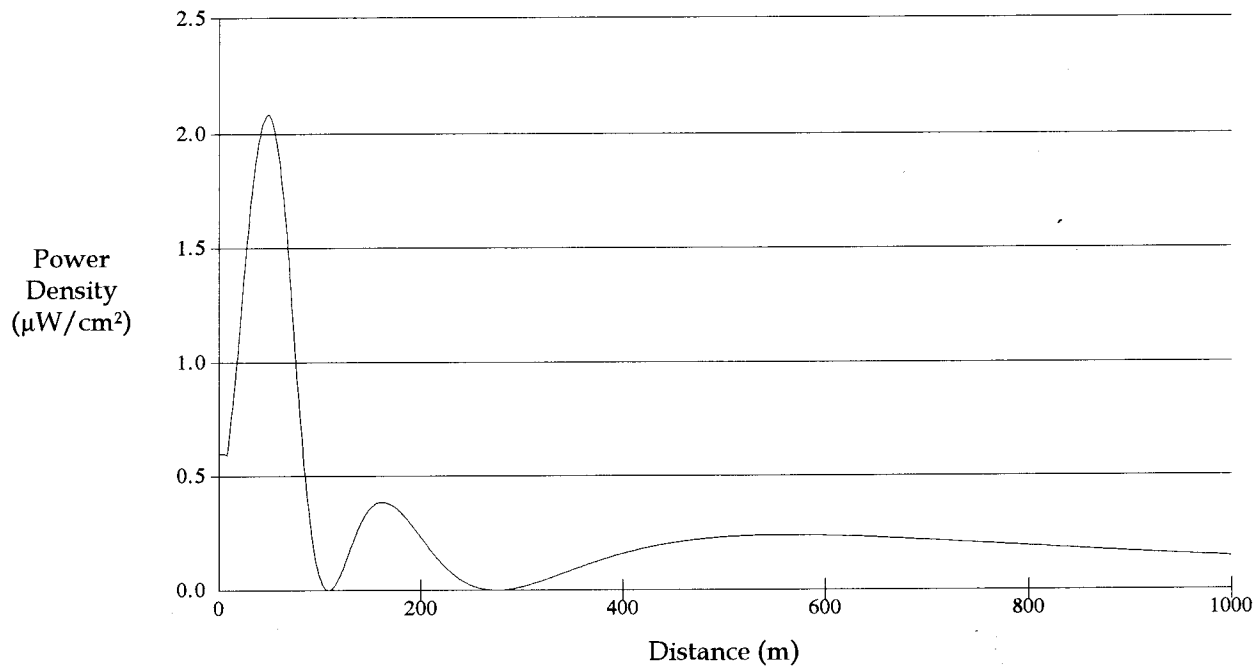
with the same antenna, a Bogner B16UG, with a radiation center 14 meters above the building's roof. By applying the vertical plane pattern of the Bogner B16UG antenna, the maximum rooftop power density from K57FC is calculated to be 154.7 FW/cm², 6.4% of 2430.8 FW/cm² (the FCC standard for controlled environments at the Channel 57 visual carrier frequency), and 31.8% of 486.2 FW/cm² (the FCC standard for uncontrolled environments at the Channel 57 visual carrier frequency).

Were their maxima to coincide (which they do not) the combined contributions of KMJR and K57FC would total 45.2% of the FCC standard for uncontrolled environments. Based upon this analysis, the proposed facility is believed to be in compliance with applicable FCC exposure standards.

Public access to the rooftop is restricted by a locked door and the rooftop 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.

Power Density vs Distance



Ground-Level NIER Analysis

OET FMModel

KMJR-FM Portland, Texas

Antenna Type: ERI "rototiller"
Number of Elements: 3
Element Spacing: 1.0 wavelength

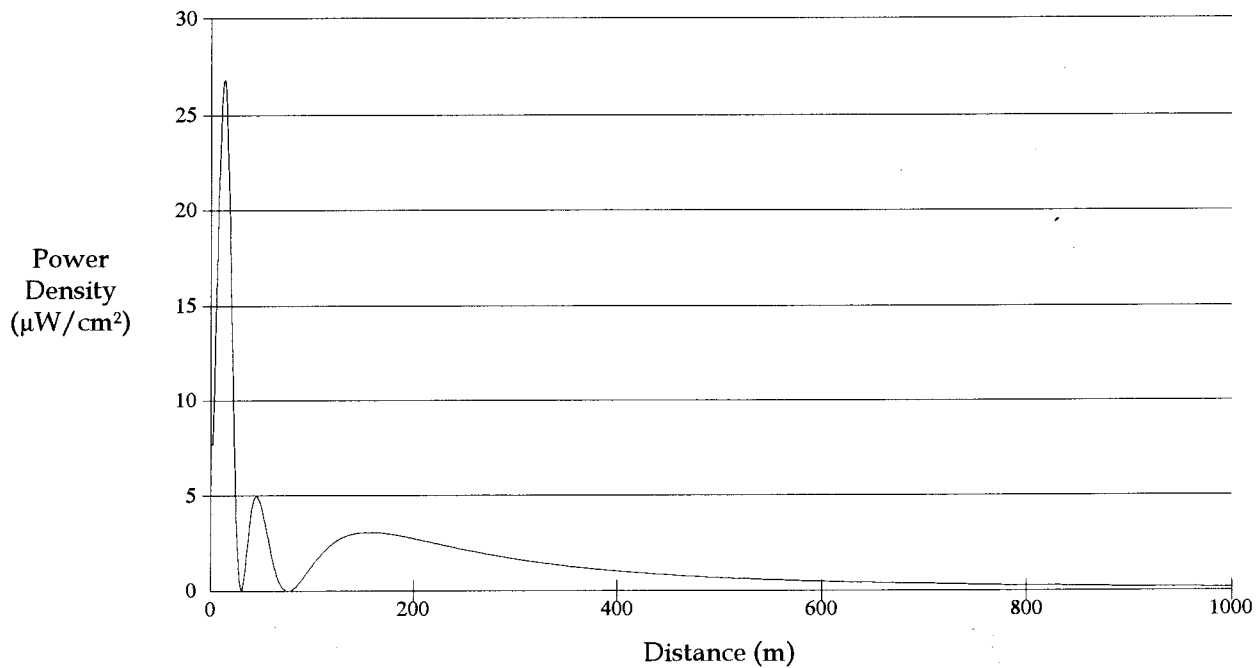
Distance: 1000 meters
Horizontal ERP: 2.8 kW
Vertical ERP: 2.8 kW

Antenna Height: 99 meters AGL

Maximum Power Density is $2.1 \mu\text{W}/\text{cm}^2$ at 49 meters from the antenna structure.

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Power Density vs Distance



Rooftop-Level NIER Analysis

OET FMModel

KMJR-FM Portland, Texas

Antenna Type: ERI "rototiller"
Number of Elements: 3
Element Spacing: 1.0 wavelength

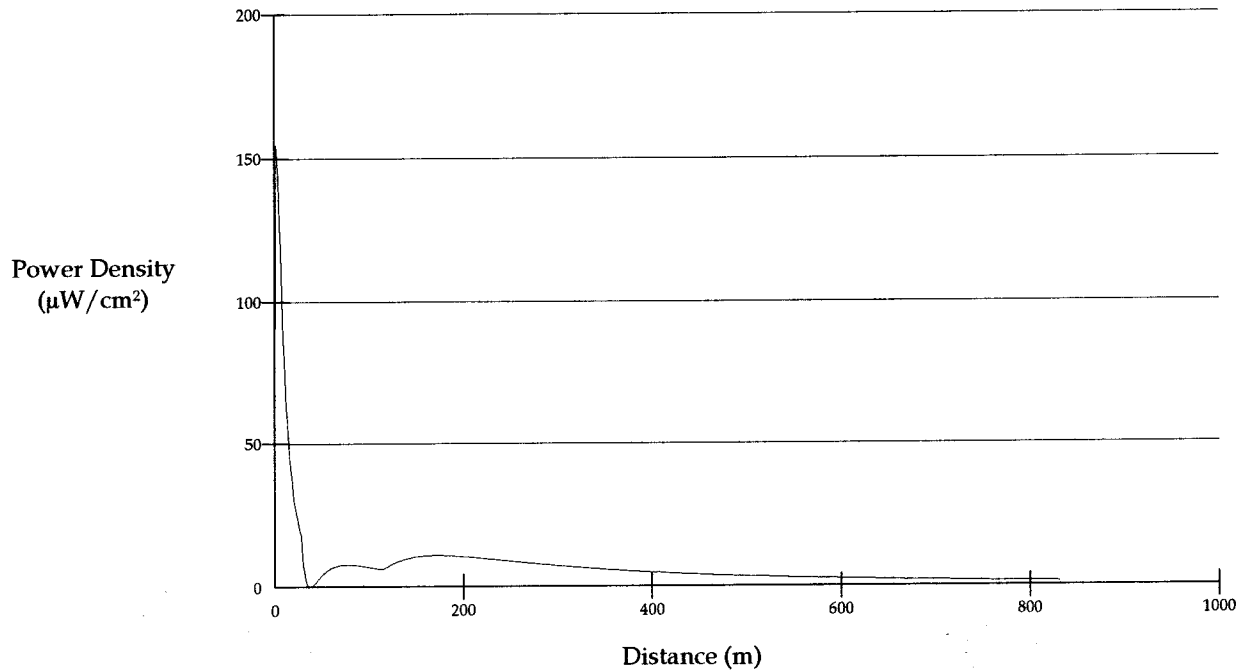
Distance: 1000 meters
Horizontal ERP: 2.8 kW
Vertical ERP: 2.8 kW

Antenna Height: 99 meters AGL

Maximum Power Density is $26.8 \mu\text{W}/\text{cm}^2$ at 14 meters from the antenna structure.

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Power Density vs Distance



Rooftop-Level NIER Analysis

K57FC Corpus Christi construction permit

Antenna Type: Bogner B16UG

Distance: 1000 meters

Horizontal ERP: 94.4 kW (peak; 20% aural assumed)

Antenna Height: 14 meters Above Roof Level

Maximum Power Density is $154.7 \mu\text{W}/\text{cm}^2$ at 2 meters from the antenna structure.

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