

EXHIBIT 22
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NONIONIZING RADIATION COMPLIANCE

Iowa State University of
Science and Technology
Fort Dodge, IA

The proposed KTPR facilities will fully comply with the current FCC Standard with regard to human exposure to nonionizing radiation. The proposed KTPR facilities will employ an ERI SHPC-10AC, ten bay circularly polarized antenna that will be mounted at the 320 meter level on a 365.8 meter tower and will operate with a maximum effective radiated power of 100 kilowatts. This tower will also support the antenna shared by KTIN(TV) - Fort Dodge, Iowa and its paired DTV station (KTIN-DT).

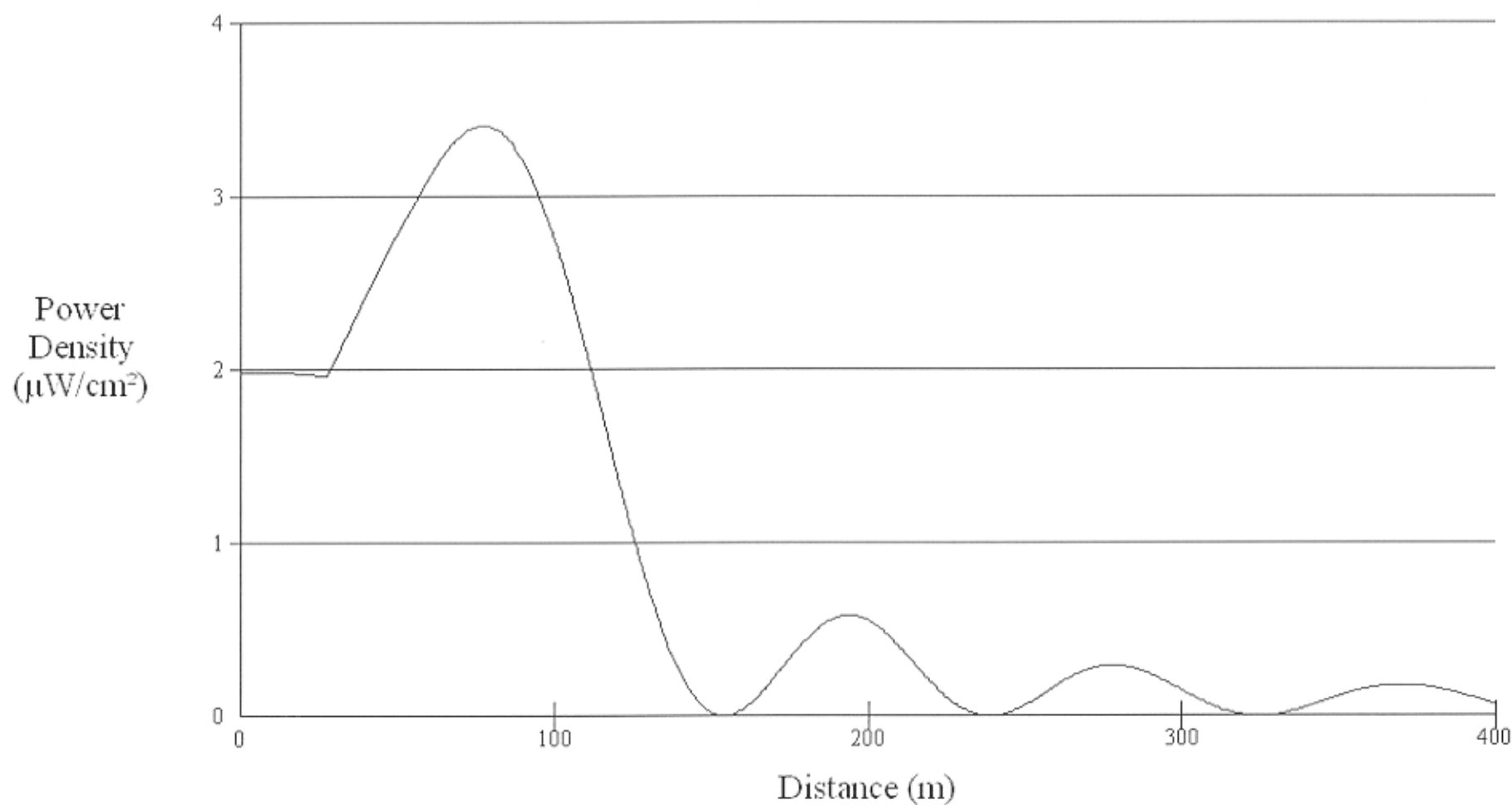
The power density levels at two meters above ground level for the proposed KTPR facilities were calculated using the FCC's "FM Model" computer program. The results of these calculations are shown in Figure 22.0. As can be seen from this figure the maximum predicted power density at two meters above ground level for the proposed KTPR facilities will be $3.4 \mu\text{W}/\text{cm}^2$, which will occur at a horizontal distance of 77.6 meters from the base of this tower. Since the permitted power density for uncontrolled exposure in the FM band is $200 \mu\text{W}/\text{cm}^2$, this amounts to only 1.7% of the permitted level. Since this value is less than 5% of the permitted level for uncontrolled exposure, the implementation of the proposed KTPR facilities need not be considered in conjunction with KTIN, KTIN-DT, or any other nearby or co-located facilities to establish compliance with the FCC exposure standard.

KTPR, in conjunction with the other co-located facilities, will continue to take appropriate steps to insure that workers that must be on this tower will not be exposed to levels of nonionizing radiation that are in excess of the permitted level for controlled exposure. These steps will include the cessation of operation or a reduction in power

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by one or more of these facilities when work becomes necessary in areas on this tower where the power density levels will be in excess of the permitted level for controlled exposure.

Power Density vs Distance



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Distance (m): Antenna Type:

Horizontal ERP (W): Number of Elements:

Vertical ERP (W): Element Spacing:

Antenna Height (m):

FIG. 22.0

KTPR NONIONIZING RADIATION CALCULATIONS

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