

FIGURE 18.1

RADIOFREQUENCY RADIATION GUIDELINES COMPLIANCE STUDY

This instant application has been evaluated for potential of human exposure to non-ionizing radiofrequency radiation. The guidelines set forth in OET Bulletin No. 65 (Edition 97-01) and the companion Supplement A (Edition 97-01) were used as the standard for this evaluation.

The KTIS(AM) facility will operate on 900 kHz with a four tower directional daytime power of 50.0 kW and four tower nighttime directional power of 0.5 kW. All four towers will be common between day and night arrays. The array will use vertical elements which are 90.0° in electrical length or 0.250 λ (wavelengths). For purposes of this study, the greater daytime power of 50.0 kW has been assumed to be present in each tower without regard for time of operation.

Table 2 of Supplement A specifies for 0.21 - 0.4 wavelength AM towers operating on 900 kHz with a total input power of 50.0 kW or less, the non-ionizing radiation will fall to safe levels at distances of 4 meters (13.2 feet) or more.

Current fencing either exists to this level of protection or will be increased to this level of protection to ensure compliance with the Rules. Access to areas within the fences is limited by means of locked gates. In addition to these measures, signs are also posted warning of the potential for exposure to excessive levels of non-ionizing radiofrequency radiation.

In the event maintenance personnel are required to work within the restricted areas, they will be advised to limit their work in the high RF field areas to specified periods of time appropriate for compliance with the FCC guidelines set forth in OET Bulletin No. 65 (Edition 97-01). If their work cannot be completed within the specified period of time, it is proposed to reduce power appropriately or shut down the operation of the station to permit completion of the assignment. There are no additional sources of radiofrequency radiation subject to the guidelines of OET Bulletin No. 65 (Edition 97-01) at this location.