

EXHIBIT 12  
(Page 1 of 2)

NONIONIZING RADIATION COMPLIANCE

Pacific Channel Samoa  
Pago Pago, AS

The proposed K11UU digital facilities will fully comply with the current FCC Standard with regard to human exposure to nonionizing radiation. The proposed antenna will be a composite directional antenna, consisting of five Scala HDCA-5 horizontally polarized yagis, that will be mounted with a center of radiation at the 22.4 meter level on a 24.4 meter tower. Equation (2), found on Page 30 of Supplement A to FCC OET Bulletin No. 65, details the calculation technique used to determine the power density at the base of a TV broadcast tower. In this case, however, it is necessary to substitute the proposed maximum average DTV effective radiated power (0.3 kilowatts) for the expression  $[0.4ERP_V + ERP_A]$  in this equation to compensate for the fact that DTV power levels are expressed in terms of average power, rather than peak power, as is the case for the visual portion of an analog TV signal. Assuming, as a worst case, 100% downward radiation and a maximum average DTV effective radiated power of 0.3 kilowatts, this equation predicts a worst case power density level at two meters above ground level of  $24.1 \mu\text{W}/\text{cm}^2$ . Since the permitted power density for uncontrolled exposure to nonionizing radiation on Channel 11 is  $200 \mu\text{W}/\text{cm}^2$ , this amounts to only 12.0% of the permitted level. Thus, since there are no other nonexcluded RF sources in the vicinity of this site, the proposed digital facilities fully comply with this standard with regard to uncontrolled exposure, even assuming 100% downward radiation.

The applicant will also take appropriate steps to insure that workers that must climb 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

EXHIBIT 12  
(Page 2 of 2)

operation or a reduction in power, as appropriate, when work becomes necessary on this tower in the areas where the power density levels will be in excess of the permitted level for controlled exposure.