KTS – SAN ANTONIO   *210-828-4555*   *gkeener@pdigm-inc.com*
NEW CH10 LPTD, LAREDO, TX   *EXHIBIT 12*
RFR STUDY

Formula (7) from Section II of OET 65:

$$S = (2.56)(EIRP)/(4)(PI)(R)^2$$

Where:
S = Highest power density (mW/cm²) at 2m above ground
R = Distance from center antenna to 2m above ground, cm,
EIRP = 1.64 times ERP relative to dipole in mW,
Power is calculated at worst case conditions
MAX S between 30 and 300 mHz = 1.0 mW/cm² for controlled,
0.2 mW/cm² for uncontrolled exposure.
ERP = (horizontal and vertical added times field factor².)

Station: NEW with antenna up 53 meters and ERP   0.3 kw

$$S = \frac{(2.56)(1.64)(1000)(\quad 600)(1.000)^2}{(4)(3.14)(5,300)^2}$$

S= 0.007 mW/cm²,   0.7 % of Controlled Exposure allowed.
S= 0.007 mW/cm²,   3.6 % of Uncontrolled Exposure allowed.

Per 47 CFR §1.1307(b)(3), power densities of less than 5%
of the maximum permitted exposure limit do not require
further study.