Exhibit B. C-band Radiation Hazard Study.

D(Antenna size in m):	**4.5**
Ga (Antenna gain in dBi):	**46.4 dBi @ 6.425 GHz**
G (Numeric antenna gain):	**43651.58**
P (HPA power output in W):	**61.7**
ERP (W):	**2693302.68**
f (midband frequency in MHz):	**6205**
C(velocity of radio waves in cm/sec):	**300*10^8**

A. Antenna surface max. power density:

Ssurface: **=4*P/A**

Where: P= power fed into the antenna

A= physical area of the aperture antenna= πr^2

A(cm²)= 159043.13

Ssurface (mW/cm²)= 1.55

B. Near field calculations:

Rnf= extent of near field in cm= $D^2/(4*\lambda)$

Where: D= maximum dimension of antenna (dia. If circular)

λ= wavelength

λ (cm)= C/f

λ (cm)= 4.83

Rnf (cm): 10470.94

Max. value of the near field power density Snf= $16*\eta*P/(\pi)*D^2$

Where: η= aperture efficiency= $(G\lambda^2/4\pi)/(\pi D^2/4)$

G= power gain in the direction of interest relative to an isotropic radiator

λ= wavelength

D= antenna diameter

η= 0.51

Snf (mW/cm²): 0.79

C. Far field calculations:

Rff= distance to beginning of far field=$0.6*D^2/\lambda$

Where: D= maximum dimension of antenna (dia. If circular)

λ= wavelength

Rff (cm)= 25130.25

Sff= On-axis Power density in the far field region= $(P*G)/(4\pi R^2)$

Sff (mW/cm²)= 0.34

D. Conclusion:

The proposed C-band uplink system meets the maximum permissible exposure limits (MPE) (1 mW/cm²) for the General population/uncontrolled exposure as specified in the FCC document #OET bulletin 65 for satellite communications. The above calculations are based on on-axis power densities and are already meeting the maximum required MPE. Since the off-axis power density is referenced at ground level, it will be considerably lower than the calculated on-axis power density due to the discrimination provided by the antenna.