

NARRATIVE

This firm has been retained to prepare an AMENDMENT to the engineering showing in the instant application, BNPL-20010614ADB (Facility Number 134304). The applicant, Concho Christmas Celebration ("Concho"), is an applicant for a new LP100 facility on channel 239 at San Angelo, Texas. This engineering statement describes the proposed antenna support structure in greater detail, as follows:

Concho proposes to mount the antenna on a tower supporting a sign on top of the Cactus Hotel in downtown San Angelo, Texas (see the vertical sketch attached to this statement). This tower is approximately 7 m (23 feet) in height above a gabled roof. This structure also supports the antennas of commercial FM boosters KSCE-FM1 (BLFTB-20001018ACG, Facility Number 124901) and KKCEN-FM1 (BLFTB-20001010AHY, Facility Number 124900). Thus the support tower is an existing structure less than 200 feet in height, and does not require study by the FAA. Since it has never been studied, it is also not registered.

Due to the short height of this tower, a study was made of the existing RF radiation situation. KSCE-FM1 and KKCEN-FM1 are both mounted at the same height as the instant proposal, 620 m AMSL, which is 6 m (20 feet) above the roof line. According to Commission records, KSCE-FM1 operates with 0.63 kW from a single SCA FMC-02 panel, and KKCEN-FM1 operates with 1.90 kW utilizing a 2-bay OMB GP-series antenna. The SCA antenna is composed of crossed dipoles against a reflector. The OMB antenna is a ring-and-stub design. Concho proposes a single-bay "rototiller"-style antenna. The Commission has yet to establish the permitted ERP for the Concho proposal, but based on the height above terrain proposed (42 meters) and the class contour distance limitation of 5.6 km contained in the Rules, an ERP of 0.05 kW was estimated. These facts were put into the OET FMMODEL software and the predicted downward fields were derived (see attached exhibits labeled "ANSI Study").

Based on the FMMODEL study, KSCE-FM1 produces a radiation maximum of $1,550 \mu\text{W}/\text{cm}^2$ on the rooftop, and KKCEN-FM1 produces approximately $4,700 \mu\text{W}/\text{cm}^2$, for a total of $6,250 \mu\text{W}/\text{cm}^2$ maximum radiation, all affecting an area within 10 meters of the antennas. The Concho proposal would add $47 \mu\text{W}/\text{cm}^2$ in approximately the same area. This represents an increase of approximately 0.8% in the estimated radiation level on the roof, an insignificant amount. Due to the existence of the pitched, or gabled, roof and the difficulty of standing on it even for routine work, and the difficulty of access to the roof (through an elevator mechanical area only accessible to a few people), no public safety hazard was held to exist when the existing facilities were located there. The addition of the Concho proposal does not materially change the existing situation.



Concho affirms that it will cooperate with other site users to reduce power or discontinue operation to enable workers to climb on the roof for necessary maintenance without being subjected to radiation in excess of the limits established in 47 CFR 1.1310 of the Commission's Rules for controlled exposure.

Thus the Concho LP100 proposal does not require an FAA airspace study of the proposed support structure, and does not occasion any new environmental or RF safety hazards, and should be granted.

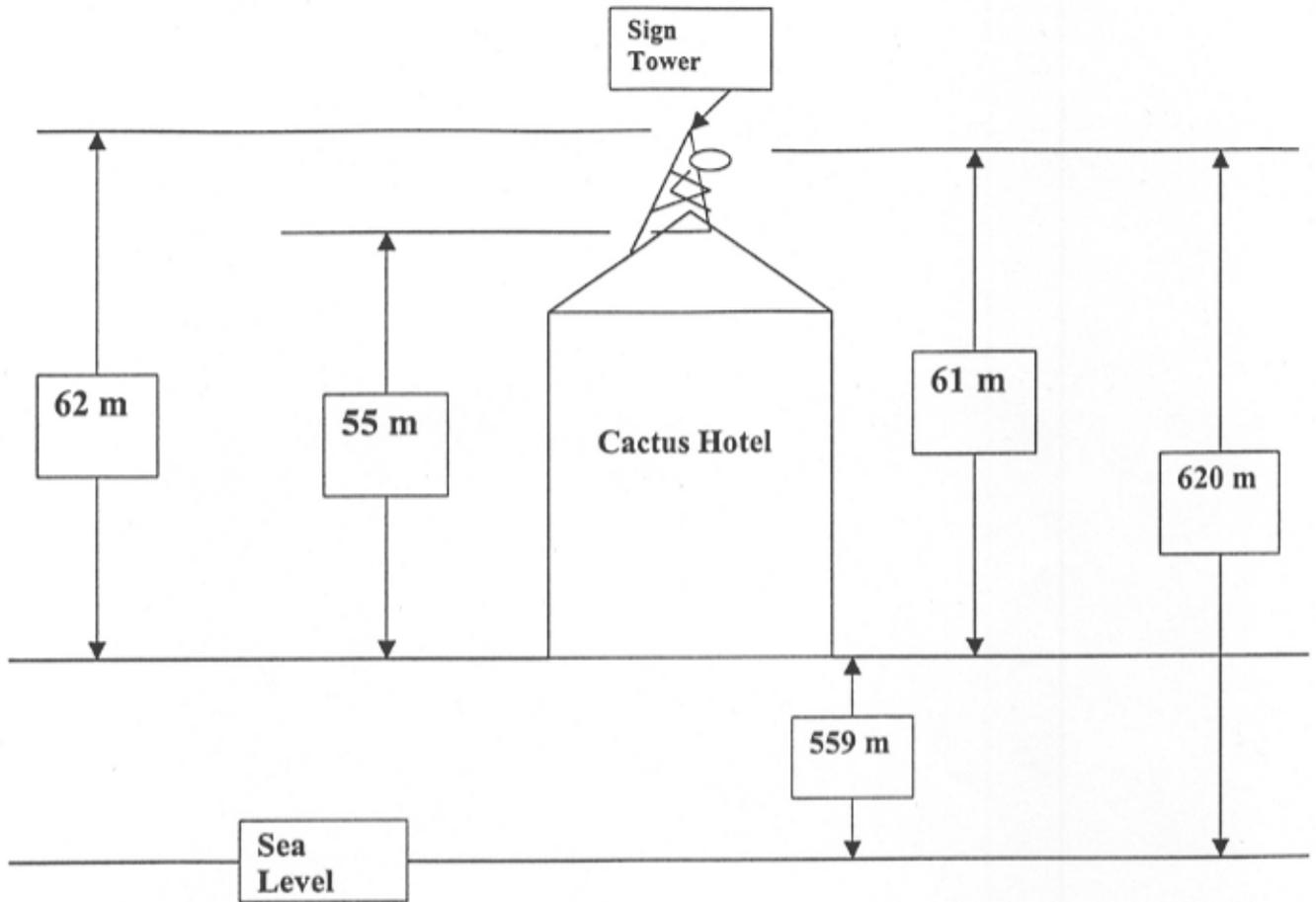
The above and attached information is true and correct as to my knowledge and belief.

August 13, 2002



Gary O. Keener



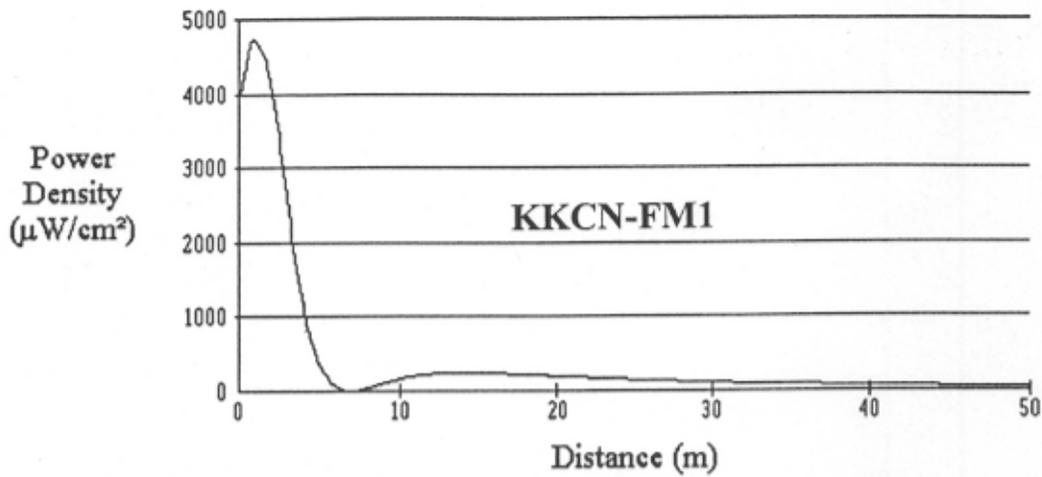


Paradigm Associates, Inc.

VERTICAL SKETCH

New 239 L1
 San Angelo, TX
 Concho
 Christmas

Power Density vs Distance



Office of Engineering and Technology

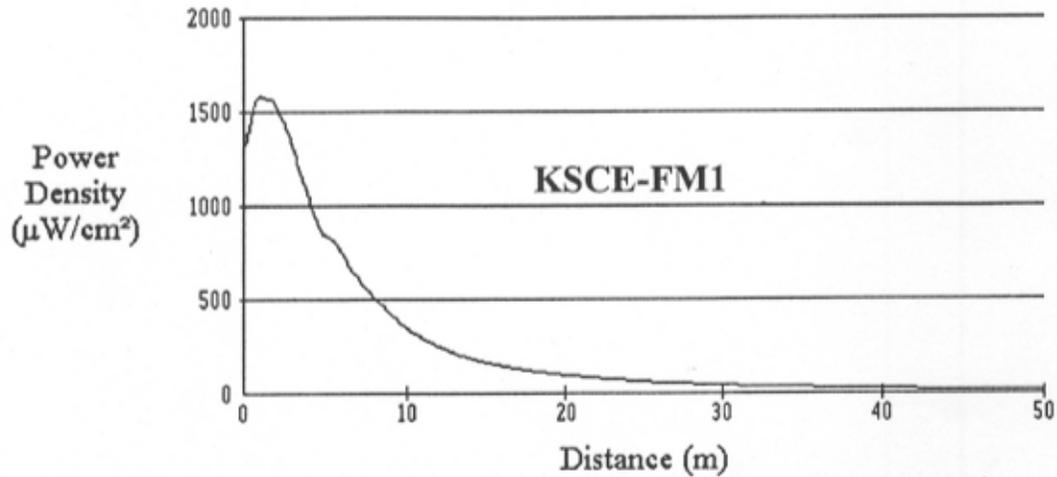
Distance (m): 50 Antenna Type: Phelps-Dodge "Ring Stub" or Dipole (EP/±)

Horizontal ERP (W): 1900 Number of Elements: 2

Vertical ERP (W): 1900

Antenna Height (m): 6 Element Spacing: 1

Power Density vs Distance



Office of Engineering and Technology

Distance (m): 50 Antenna Type: Phelps-Dodge "Ring Stub" or Dipole (EP/±)

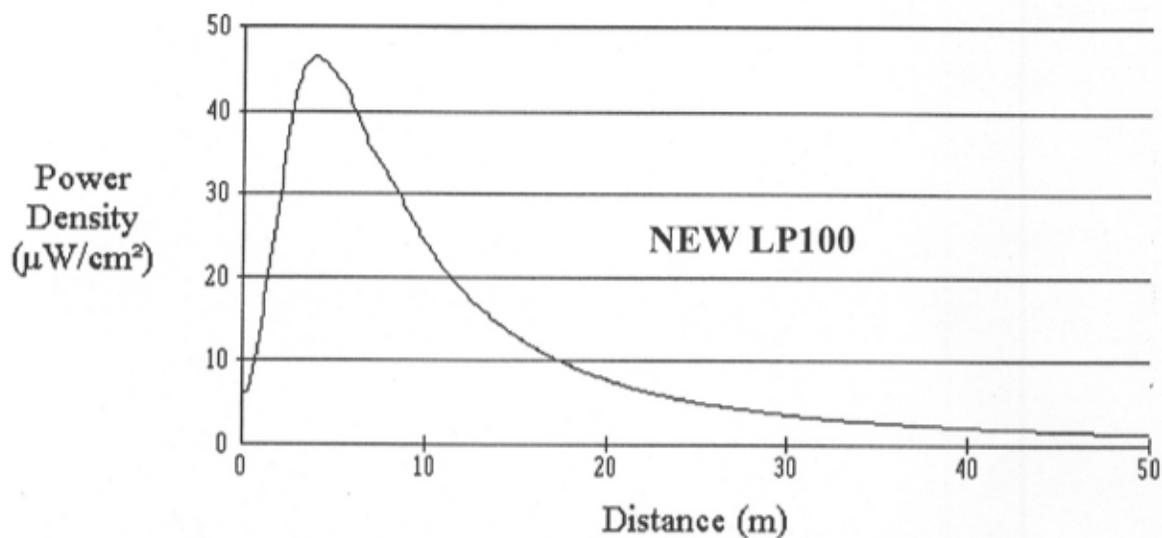
Horizontal ERP (W): 630 Number of Elements: 1

Vertical ERP (W): 630

Antenna Height (m): 6 Element Spacing: 1



Power Density vs Distance



Office of Engineering and Technology

Distance (m):	50	Antenna Type:	ERI or JAMPRO JBCP "Rototiller" (EPA)
Horizontal ERP (W):	50	Number of Elements:	1
Vertical ERP (W):	50	Element Spacing:	1
Antenna Height (m):	6		

