Engineering Statement
KTVT(TV)(Aux) Fort Worth, Texas
CBS Stations Group of Texas LLC
Facility ID 23422
Ch. 19 713 kW 535.4 m

CBS Stations Group of Texas LLC, licensee of KTVT(TV), is wholly owned by Paramount Global, which also owns the licensee of KTXA(TV). Both stations are licensed to Fort Worth TX. Paramount Global recently installed two, dual channel, stacked antennas capable of operation on both stations' channels, the *upper* of which is the KTVT main antenna.[1]

This application seeks approval for KTVT to utilize the *upper* antenna for emergency, maintenance and test purposes at the reduced ERP needed to safely combine two station signals into a single transmission line. Separately, Paramount Global intends to simultaneously file for two other KTVT auxiliary configurations using the new antennas in various modes.[2]

The proposed facility will operate with a directional antenna height 535.4 meters above average terrain (HAAT) and an effective radiated power (ERP) of 713.0 kW. This Statement addresses allocations, environmental, and radiofrequency factors related to this proposal.

The attached coverage map Figure 1 demonstrates that the proposed service contour does not extend beyond that of the main KTVT antenna as required by FCC Rule §73.1675.[3] Because there are no AM transmitter sites within 3.2 kilometers of the proposed facility, FCC Rule §1.30002 will not be triggered. The nearest FCC monitoring station at Kingsville, Texas is 573 km from the proposed facility, well beyond the protection radius specified in §73.1690(c). It is therefore believed that the proposed facility satisfies all allocation matters.

[1] Please *see* KTVT main antenna license file number 0000203476.
[2] Paramount also wishes to retain the present KTVT auxiliary antenna license. Please *see* file number 0000152300.
[3] §73.1675 specifies an analysis of Grade B contours. Because "Grade B" is not defined in a digital television context, Figure 1 provides 41 dBμ (dipole corrected) noise limited service contours instead. Paramount has recently filed a license application (FCC file 0000203476) for a new KTVT antenna.

The proposed facility uses an existing tower with no change in authorized overall height, marking specifications, or lighting specifications. Consequently, this application is believed to be categorically excluded from environmental processing.[4]

The existing antenna is located 490.7 meters above ground level with proposed ERPs of 713.0 kW (horizontally polarized) and 213.9 kW (vertically polarized). According to the antenna manufacturer, the antenna relative field elevation pattern is 10 percent or less from 15 to 90 degrees below the horizon. Thus, a relative field value of 10 percent is used for this calculation.

The proposed operation was evaluated for human exposure to radiofrequency energy using equation ten (10) from the Commission's OET Bulletin No. 65. Calculations show that the proposed facility would contribute a power density of 1.3 μW/cm² at two meters above ground level near antenna support structure, or 0.4 percent of the FCC's 335.3 μW/cm² "uncontrolled/general population" exposure limit for channel 19 (503 MHz). RF power density is expected to be even lower at ground level locations away from the base of the tower, due to the increasing distance from the transmitting antenna.

According to §1.1307(b)(3), facilities at locations with multiple emitters are categorically excluded from responsibility for taking corrective action in areas where their contribution is less than five percent of the limit. Since the calculated exposure is less than five percent at all ground level areas, the impact of other possible contributors should not be a factor.

Tower access will continue to be controlled and appropriate RF exposure warning signs will continue to be posted. A site exposure policy is in effect that includes restriction of access, power reduction, or the complete shutdown of facilities when work must be performed where predicted RF levels would otherwise exceed FCC guidelines. On-site RF exposure measurements may also be undertaken to establish the bounds of safe working areas. The applicant will coordinate exposure procedures with all pertinent stations.

[4] Please *see* Antenna Structure Registration 1059733.

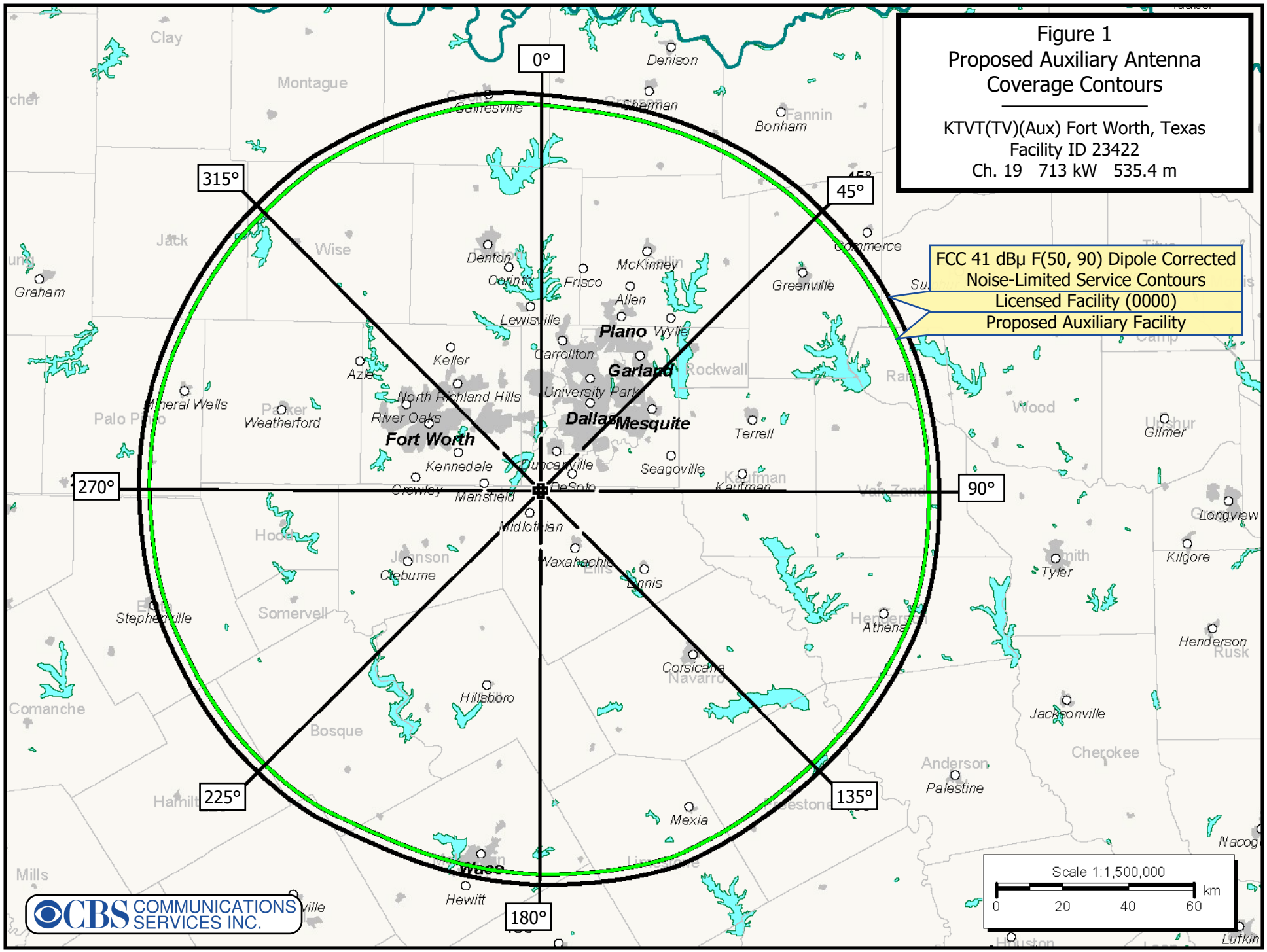
Figure 1
Proposed Auxiliary Antenna
Coverage Contours
KTVT(TV)(Aux) Fort Worth, Texas
Facility ID 23422
Ch. 19 713 kW 535.4 m
FCC 41 dBµ F(50, 90) Dipole Corrected
Noise-Limited Service Contours
Licensed Facility (0000)
Proposed Auxiliary Facility
0°
45°
90°
135°
180°
225°
270°
315°
Scale 1:1,500,000
0 20 40 60 km
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McKinney
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