

Engineering Statement
CBS Broadcasting Inc.
KCBS-TV(Aux) Los Angeles, California
Facility ID 9628
Ch. 31 209 kW(Max-DA) 951.8 m

CBS Broadcasting Inc. ("CBS") proposes to utilize the presently licensed KCBS-TV Los Angeles, California main antenna as a post-transition auxiliary antenna.¹ The proposed facility will operate with a directional antenna height of 951.8 meters above average terrain (HAAT) and an effective radiated power (ERP) of 209 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 KCBS-TV antenna² as required by FCC Rule §73.1675.³ Because there are no AM transmitter sites within 3 kilometers of the proposed facility, FCC Rule §1.30002 will not be triggered. The nearest FCC monitoring station is 511 kilometers from the proposed facility at Livermore, California, well beyond the protection radius specified in §73.1690(c). Thus, it is believed that the proposed facility satisfies all allocation matters.

The proposed facility uses an existing tower⁴ with no change in overall height, marking specifications, or lighting specifications. No outdoor construction is proposed. Consequently, this application is categorically excluded from environmental processing. The existing antenna will operate with an ERP of 209 kilowatts, less than 40 percent of the presently licensed ERP.⁵ The elevation pattern is provided as Figure 2. Since this antenna will only be utilized when the main antenna is inoperative, radiofrequency ("RF") fields from the proposed facility will be less than present values.

¹ §73.1675(c)(1) does not permit converting a formerly licensed main antenna to an auxiliary antenna in cases like this where a change in channel is proposed.

² CBS presently holds a construction permit (FCC file 0000034593) for a KCBS-TV post-transition facility on Channel 31.

³ §73.1675 specifies an analysis of Grade B contours. Because "Grade B" is not defined in a digital television context, Figure 1 provides dipole-corrected 41 dBμ contours instead.

⁴ See Antenna Structure Registration 1007719.

⁵ See BLCDDT-20090612AIQ.

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CBS participates in a site RF exposure program with other Mount Wilson broadcasters. Following construction of the proposed facility, *CBS* will conduct measurements or calculations to evaluate the level of RF exposure resulting from this as well as other emitters. Appropriate RF exposure abatement procedures will be established and followed to comply with the FCC's exposure limits to both the general public and workers. Possible measures include restriction of access, power reduction, modification of facilities, or the complete shutdown of facilities when work must be performed in any locations where predicted RF levels may otherwise exceed the appropriate guidelines. Tower access will continue to be controlled and appropriate RF exposure warning signs will continue to be posted.

KCBS-TV(CP) Post Transition Main
FCC File 0000034593
41 dBμ F(50, 90) Service Contour

Figure 1
Proposed Facility Coverage Contours

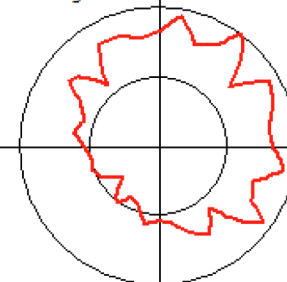
KCBS-TV(Aux) Los Angeles, California
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San Bernardino

KCBS-TV Proposed Auxiliary Facility
41 dBμ F(50, 90) Service Contour

Auxiliary Antenna Pattern

Rotation Angle = 0



Scale 1:1,500,000

0 20 40 60 km

 COMMUNICATIONS
SERVICES INC.

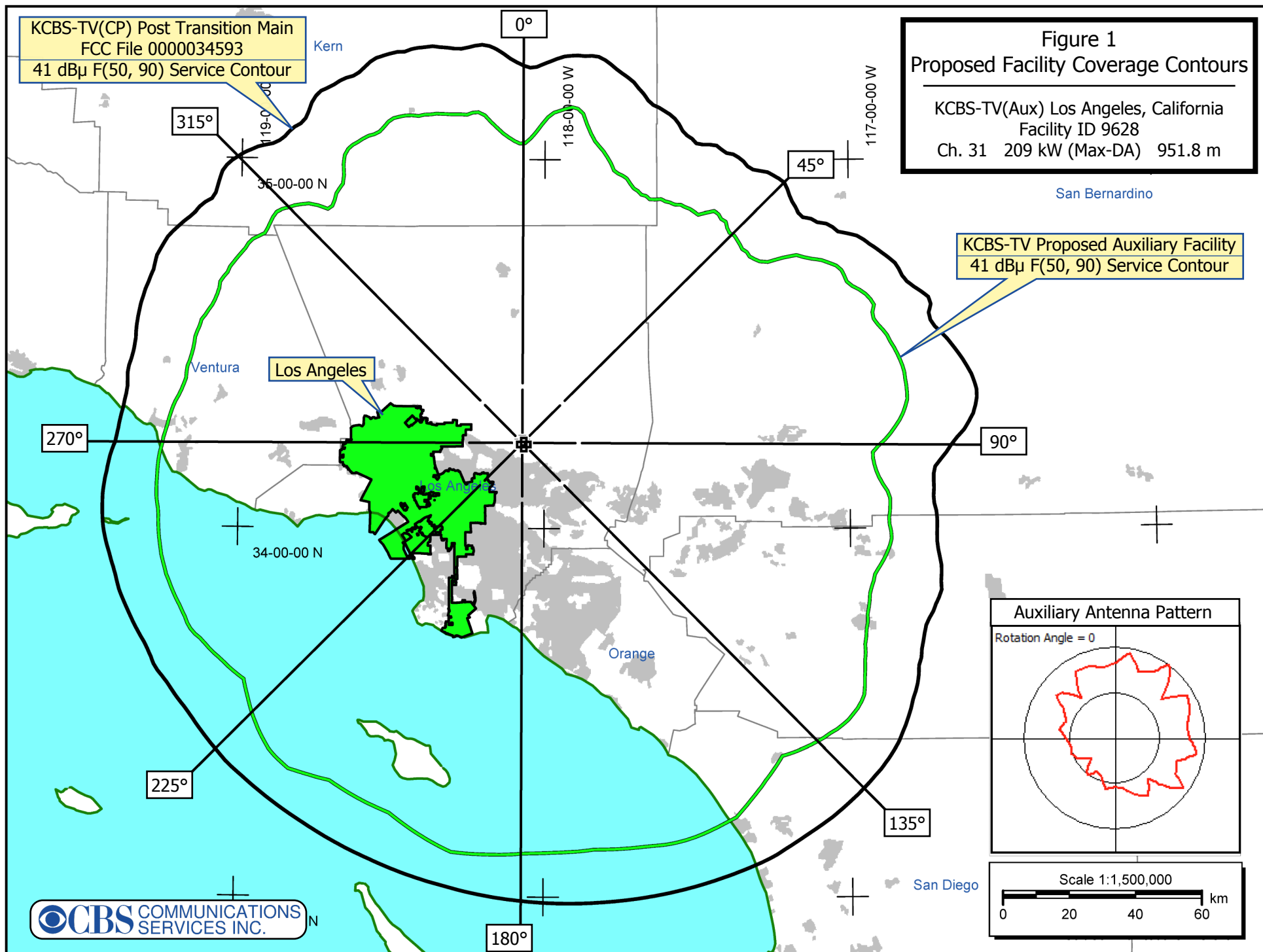


Figure 2
Proposed Antenna Elevation Pattern

KCBS-TV(Aux) Los Angeles, California
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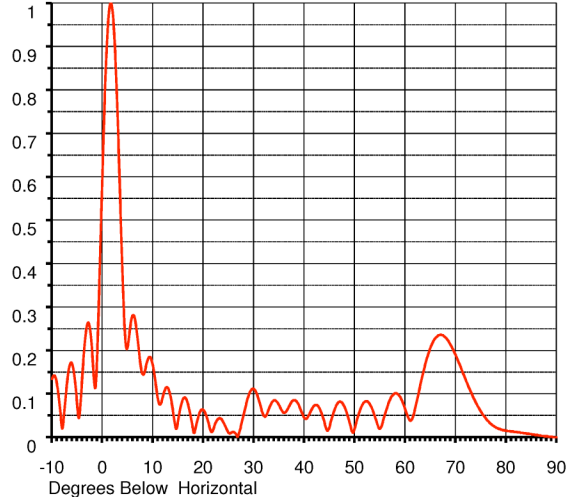
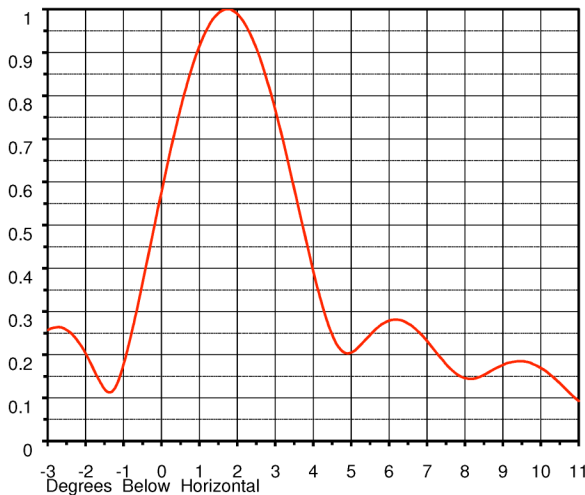


ELEVATION PATTERN

Proposal No. **C-70058**
Date **18-Mar-17**
Call Letters **KCBS**
Channel **31**
Frequency **575 MHz**
Antenna Type **TAD-16UDA-8/64**

RMS Directivity at Main Lobe **15.0 (11.76 dB)**
RMS Directivity at Horizontal **5.0 (6.99 dB)**
Calculated

Beam Tilt **1.7 deg**
Pattern Number **16P150165**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.134	10.0	0.164	30.0	0.111	50.0	0.022	70.0	0.188
-9.0	0.120	11.0	0.086	31.0	0.084	51.0	0.062	71.0	0.160
-8.0	0.020	12.0	0.095	32.0	0.049	52.0	0.082	72.0	0.131
-7.0	0.129	13.0	0.112	33.0	0.066	53.0	0.075	73.0	0.104
-6.0	0.168	14.0	0.057	34.0	0.085	54.0	0.046	74.0	0.079
-5.0	0.071	15.0	0.039	35.0	0.073	55.0	0.020	75.0	0.058
-4.0	0.142	16.0	0.089	36.0	0.056	56.0	0.054	76.0	0.042
-3.0	0.261	17.0	0.073	37.0	0.072	57.0	0.087	77.0	0.030
-2.0	0.186	18.0	0.014	38.0	0.085	58.0	0.101	78.0	0.022
-1.0	0.210	19.0	0.049	39.0	0.071	59.0	0.092	79.0	0.017
0.0	0.618	20.0	0.062	40.0	0.044	60.0	0.063	80.0	0.015
1.0	0.936	21.0	0.032	41.0	0.053	61.0	0.038	81.0	0.013
2.0	0.979	22.0	0.020	42.0	0.073	62.0	0.069	82.0	0.012
3.0	0.733	23.0	0.043	43.0	0.066	63.0	0.122	83.0	0.010
4.0	0.359	24.0	0.033	44.0	0.032	64.0	0.170	84.0	0.008
5.0	0.210	25.0	0.010	45.0	0.025	65.0	0.207	85.0	0.007
6.0	0.281	26.0	0.012	46.0	0.064	66.0	0.229	86.0	0.005
7.0	0.221	27.0	0.008	47.0	0.082	67.0	0.236	87.0	0.003
8.0	0.144	28.0	0.054	48.0	0.068	68.0	0.229	88.0	0.002
9.0	0.180	29.0	0.098	49.0	0.031	69.0	0.212	89.0	0.001
								90.0	0.000