

Engineering Statement
in support of
COMMENTS in MB DOCKET 87-268
prepared for
Ellis Communications KDOC Licensee, LLC
KDOC-TV Anaheim, California
Facility ID 24518

This engineering statement has been prepared on behalf of *Ellis Communications KDOC Licensee, LLC* (“*Ellis*”), in support of *Comments* being filed in the Seventh Further Notice of Proposed Rulemaking (“FNPRM”), Media Bureau Docket 87-268.¹ The subject docket sets forth a proposed new digital television (“DTV”) allotment table for the post-transition period. A Tentative Channel Designation (“TCD”) is listed in Appendix B of the FNPRM for each eligible television station. *Ellis* requests herein that alternative technical parameters be employed for the KDOC-TV TCD.

The FNPRM (§ 28-29) allows qualifying licensees to propose a change in their certified technical parameters. *Ellis* herein proposes that the maximization parameters for the authorized KDOC-DT facility (Construction Permit BMPCDT-20040302ATA and pending license application BLCDDT-20060626ACV) be employed in place of maximized parameters obtained from an earlier version of the same construction permit application (which was subsequently amended) for KDOC-DT’s TCD.

Discussion - Background

The licensed KDOC-TV analog facility is on Channel 56 (BLCT-20060302ACB) and its constructed digital operation is authorized on Channel 32 (a license application BLCDDT-20060626ACV is currently pending). *Ellis* successfully elected KDOC-TV’s assigned digital allotment on Channel 32 in the first round of channel elections (see BFRECT-20050118AGY).

The technical parameters for the current Channel 32 TCD are based upon *Ellis*’s pre-election certification on Form 381 (BCERCT-20041104AJH). The certification specifies that the post-transition DTV facility will be operated at maximized facilities pending authorization of the construction permit (BMPCDT-20040302ATA) on file at the time the certification was tendered.

¹*Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*, MB Docket No. 87-268, FCC 06-150, released October 20, 2006.

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That construction permit application was subsequently amended multiple times since the time of the certification filing due to complications in obtaining Mexican concurrence. The final facility as authorized under BMPCDT-20040302ATA involves an effective radiated power (“ERP”) of 1000 kW with a directional antenna at 949 meters height above average terrain (“HAAT”). The parameters at the time of the pre-election certification provided for 1000 kW ERP at 937 meters antenna HAAT using a slightly different directional antenna pattern.

The attached **Figure 1** provides a contour comparison map of the authorized “maximization” (1000 kW / 949 meter) and the certified “maximization” (1000 kW / 937 meter) facilities. The authorized “maximization” facility contour extends beyond the certified “maximization” contour over a portion of the service area (to the southeast and to the north). Plots inset on the map depict the directional antenna patterns.

Proposed Change in Certified Facilities

The FNPRM states that a change in certified facilities may be sought by those stations who have received authorization to extend their service beyond their certified areas. Here, a “maximized” facility has been constructed for KDOC-DT that does extend service beyond the originally certified service area. As demonstrated in **Figure 1**, the “maximization” parameters of the currently authorized KDOC-DT facility extend service beyond the area which was originally certified. Thus KDOC-DT qualifies for the change in certification facility.

Technical parameters sought herein are summarized in the construction permit (BMPCDT-20040302ATA) granted on June 5, 2006. In compliance with the FNPRM, the proposed change in certification does not result in interference in excess of 0.1 percent to any other licensee’s TCD. The results of an engineering interference analysis per OET Bulletin 69² are supplied in **Table 1**, and demonstrate that interference does not exceed the 0.1 percent limit.

² FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 (“OET-69”). The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. A standard cell size of 2 km was employed with 2000 Census data. Comparisons of various results of this computer program (run on a Sun processor) to the Commission’s implementation of OET-69 show excellent correlation.

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The engineering analysis was conducted using the same methodology that the Commission's staff employed to identify conflicts during the three election rounds, as described in the following text from the FNPRM (§ 21):

“New interference to post-transition DTV operations was defined as interference beyond that caused by existing analog and DTV operations, as set forth in the certification database information. . . . In performing conflict analyses, the staff applied the standard that an interference conflict exists when it was predicted that more than 0.1 percent new interference would be caused to another station.”

It is acknowledged that in seeking the modified parameters, *Ellis* will accept interference from any other TCD already approved. The service and interference statistics for the present and proposed KDOC-DT Channel 32 TCD are summarized below.

	<u>Present TCD</u>	<u>Proposed TCD</u>
Service Area (sq. km)	38,216.3	37,118.7
Service Population (2000 census)	15,487,708	15,339,157
Interference	0.1 %	0.1 %

Conclusion

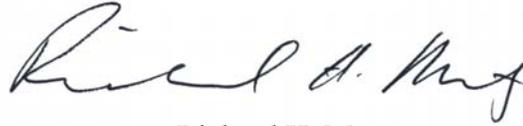
KDOC-DT's "maximization" technical parameters are proposed to be substituted in lieu of original "maximization" parameters. Interference to other stations does not exceed 0.1 percent.

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Certification

The undersigned hereby certifies that the foregoing statement was prepared by him or under his direction, and that it is true and correct to the best of his knowledge and belief.



Richard H. Mertz

January 2, 2007

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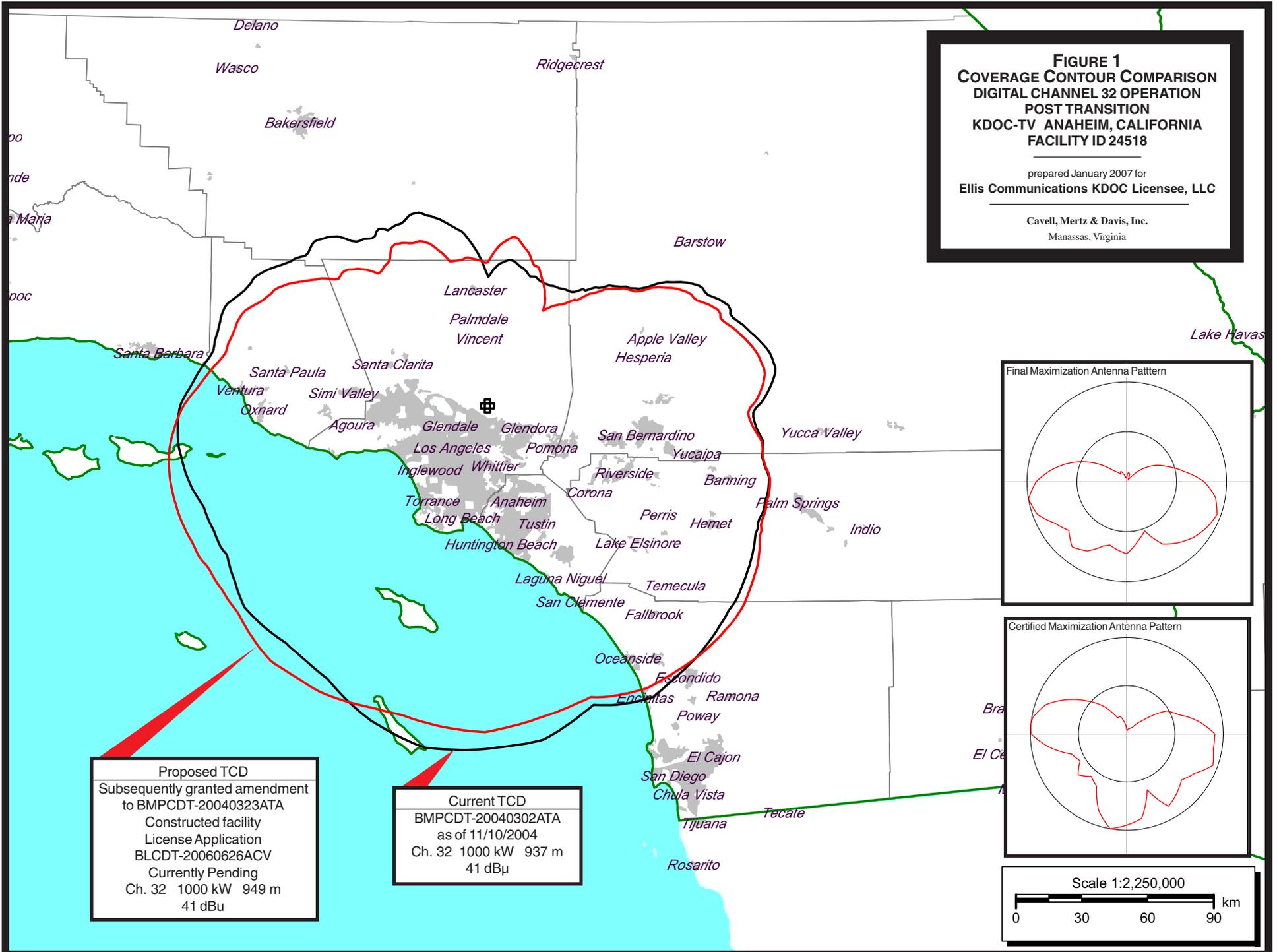
List of Attachments

Figure 1	Coverage Contour Comparison
Table 1	Interference Analysis Results Summary

**FIGURE 1
 COVERAGE CONTOUR COMPARISON
 DIGITAL CHANNEL 32 OPERATION
 POST TRANSITION
 KDOC-TV ANAHEIM, CALIFORNIA
 FACILITY ID 24518**

prepared January 2007 for
Ellis Communications KDOC Licensee, LLC

Cavell, Mertz & Davis, Inc.
 Manassas, Virginia



Proposed TCD
 Subsequently granted amendment
 to BMPCDT-20040323ATA
 Constructed facility
 License Application
 BLCDT-20060626ACV
 Currently Pending
 Ch. 32 1000 kW 949 m
 41 dBu

Current TCD
 BMPCDT-20040302ATA
 as of 11/10/2004
 Ch. 32 1000 kW 937 m
 41 dBu

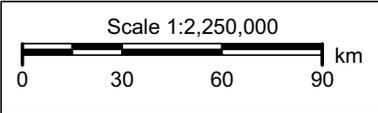
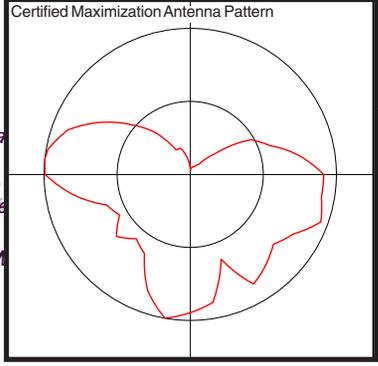
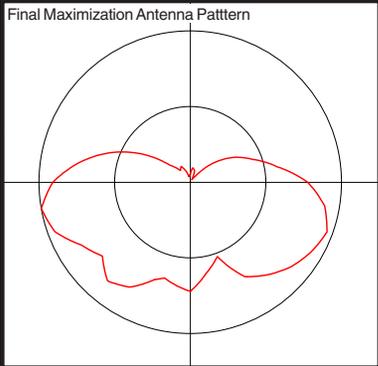


Table 1
INTERFERENCE ANALYSIS RESULTS SUMMARY
PROPOSED CHANNEL 32 PARAMETERS
 prepared for
Ellis Communications KDOC Licensee, LLC
 KDOC-TV Anaheim, California
 Facility ID 24518

Ch	Call Sign Service	City/State File Number	Fac. ID	Latitude Longitude	Power HAAT	Distance Bearing	Baseline Population	New Interference Population	Interference Percent
31	KTLA-TV DT	Los Angeles, CA BPCDT-20000425AAV	35670	34 13 36 118 03 56	1000 954	0.1 58.8	15,241,283	0	0.00
32	KMCC(TV) DT	Laughlin, NV BMPCDT-20040527ALR	41237	35 39 07 114 18 42	1000 607	377.7 64.1	780,915	0	0.00
32	KION-TV DT	Monterey, CA BLCDDT-20030604ACO	26249	36 32 05 121 37 14	46 758	412.2 309.6	760,733	0	0.00
33	KBAK-TV DT	Bakersfield, CA BPDCT-19990921AAS	4148	35 27 11 118 35 25	110 1128	144.3 340.8	992,719	0	0.00