

ENGINEERING STATEMENT

Request for Special Temporary Authorization

prepared for

KRCA License LLC
KRCA-DT Riverside, CA
Facility ID 22161
Ch. 35 132 kW 863 m

KRCA License LLC (“*KLL*”) is the licensee of television station KRCA(TV), analog Channel 62 and digital Channel 68, Riverside, CA. This statement supports *KLL*’s request for Special Temporary Authority (“STA”) to initially operate the post-transition digital KRCA-DT facility at reduced parameters. This statement supplies coverage and population data as specified in the Report and Order in the Third Periodic Review¹ for a phased implementation of the KRCA-DT post-transition operation.

KRCA’s licensed pre-transition facilities are on analog Channel 62 and digital Channel 68, separate antennas which are top-mounted in a “stack” configuration on a candelabra tower structure. An application for Construction Permit (“CP”, BPCDT-20080620AIN) is pending to authorize construction of the final post-transition KRCA-DT facility with a new top-mount antenna at the same site on Channel 35. This channel was established for KRCA in MB Docket 08-30, subsequent to the Report and Order in MB Docket 87-268 (FCC 08-72). BPCDT-20080620AIN specifies that KRCA will operate post-transition at 1000 kW effective radiated power (“ERP”) using a directional antenna at a height above average terrain (“HAAT”) of 906 meters.

¹*Third Periodic Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television*, MB Docket No. 07-91, FCC 07-228, released December 31, 2007.

The top-mount Channel 35 antenna as specified in BPCDT-20080620AIN cannot be installed until after the transition date, when KRCA's existing analog Channel 62 and digital Channel 68 operations must cease and those antennas can be removed. For the interim period between the transition date and when the new top-mounted antenna can be installed and commissioned, *KLL* herein proposes to operate KRCA-DT on Channel 35 with a temporary antenna at reduced power and height. The proposed STA facility will operate with 132 kW ERP and an antenna HAAT of 863 meters.

The temporary antenna will be side-mounted on an existing pole structure located adjacent to the KRCA site at Mount Harvard, a mountaintop transmitting location. The structure has an overall height above ground level of 11 meters and is not currently registered with the FCC's Antenna Structure Registration ("ASR") program. The proposed STA antenna will be centered at 8 meters AGL and will not extend the structure's overall height. The structure passes the FCC's TOWAIR program for the transmitter location, thus FCC antenna structure registration is not necessary.

The proposed STA antenna system is an ERI model AL8W-35-PM. The directional antenna's azimuthal and elevation patterns are depicted in **Figures 1 and 2**.

A contour comparison map is supplied as **Figure 3**, showing that the STA facility's 48 dBμ (city grade) contour will encompass the principal community. **Figure 3** also supplies a comparison of the 41 dBμ digital service contour corresponding to the proposed STA facility and the allotment parameters adopted in MB Docket 08-30. As shown thereon, the STA facility's 41 dBμ contour is contained within that of MB Docket 08-30 at all azimuths over land area. A minor contour extension does occur over water (the Pacific Ocean), however such extensions over water are generally permitted without further consideration. No interference study is necessary, since no contour extension occurs over land area. **Figure 3** also shows that the proposed STA operation's contour will encompass nearly the entire KRCA analog Grade B coverage contour area.

Population counts for the various KRCA(TV/DT) facilities are summarized below as determined using OET Bulletin 69² analysis. The proposed STA facility will provide a 108.2 percent population match of the licensed analog facility, a 98.4 percent match of the digital pre-transition facility, and a 97.3 percent match of the MB Docket 08-30 (Appendix B) facility.

Population Summary

KRCA(TV/DT) Facility	Interference-Free Population (2000 Census)
Licensed Analog Ch. 62 (BLCT-20020308ABC)	13,360,295
Pre-Transition Digital Ch. 68 (BLCDT-20060726ATQ)	14,699,489
MB Docket 08-30 Digital Ch. 35 400 kW 907 m	14,860,861
Proposed STA Digital Ch. 35 132 kW 863 m	14,460,928

The transmitting location is on Mount Harvard. Several other transmitting facilities are also located at this site area. *KLL* will participate in a radiofrequency (“RF”) electromagnetic field exposure safety program, along with other broadcasters and FCC licensees that utilize the Mount Harvard antenna site area. Following construction of the proposed STA facility, *KLL* will conduct RF exposure measurements to evaluate the level of RF exposure resulting from the temporary KRCA-DT facility. As necessary, based on these results and considering all emitters, appropriate exposure abatement procedures will be established and followed, in order to comply with the Commission’s exposure limits. Such abatement procedures may involve the restriction of access to certain areas and/or facility modifications to reduce RF levels. The applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from RF electromagnetic field exposure in excess of FCC guidelines.

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

The undersigned hereby certifies that the foregoing statement and associated attachments were prepared by him or under his direction, and that they are true and correct to the best of his knowledge and belief.



Joseph M. Davis, P.E.
January 7, 2009

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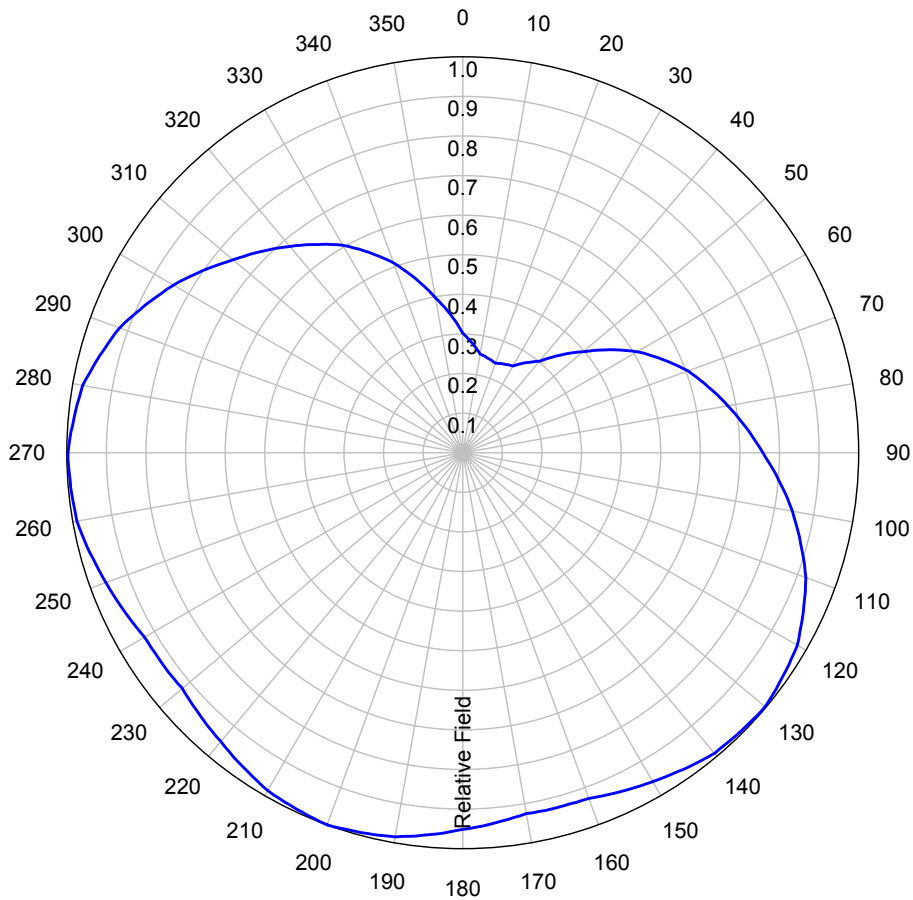
List of Attachments

Figure 1	Antenna Horizontal Plane Pattern
Figure 2	Antenna Vertical Plane (Elevation) Pattern
Figure 3	STA Coverage Contour Comparison

AZIMUTH PATTERN

Type: ALP-W
 Directivity: Numeric 1.56 dBd 1.93
 Peak(s) at: _____

Channel: 35
 Location: Riverside, CA.
 Polarization: Horizontal
 Note: Pattern shape and directivity may vary with
 channel and mouting configuration.



Preliminary, subject to final design and review.

ELECTRONICS RESEARCH, INC. ERI



Figure 1
Antenna Horizontal Plane Pattern
KRCA-DT Riverside, CA
Special Temporary Authority
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prepared for
KRCA License LLC

January, 2009

ELEVATION PATTERN

Type:

AL8

Channel:

35

Directivity:

Numeric

dBd

Location:

Riverside, CA.

Main Lobe:

8.50

9.29

Beam Tilt:

-1.75

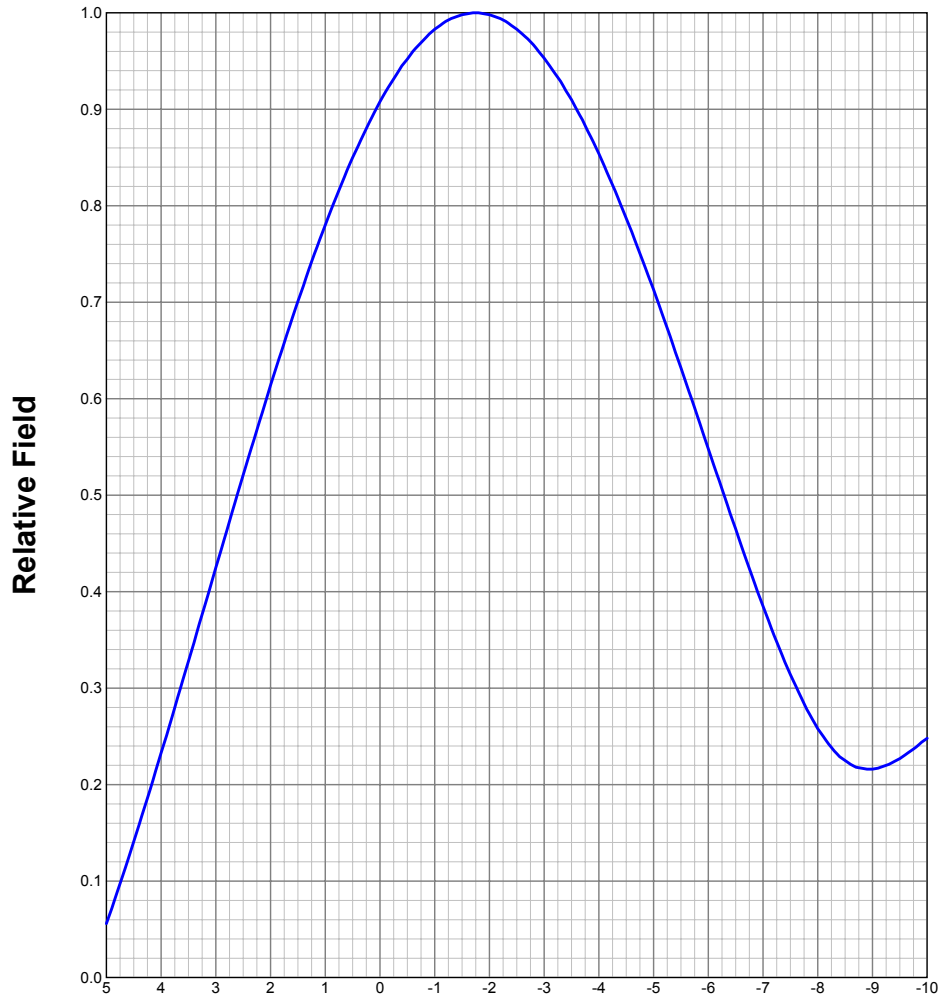
Horizontal:

7.01

8.46

Polarization:

Horizontal



Preliminary, subject to final design and review.

ELECTRONICS RESEARCH, INC. **ERI**

Figure 2
Antenna Vertical (Elevation)
Plane Pattern
KRCA-DT Riverside, CA
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Figure 3
STA Coverage Contour Comparison
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