

TV Station KTEH • D50 (V54) • San Jose, California

Supplemental Statement

Statement of Hammett & Edison, Inc., Consulting Engineers

Hammett & Edison, Inc., Consulting Engineers, has been retained by Northern California Public Broadcasting, Inc., licensee of noncommercial TV Station KTEH, D50 (V54), San Jose, California, to prepare this application for modification of its existing construction permit.

Background

KTEH is currently licensed to transmit from Monument Peak, with an effective radiated power (ERP) of 290 kW using an Antenna Concepts Model ATS 8/4/8 directional antenna (DA) with a center-of-radiation (C.O.R.) height of 888.4 m AMSL (FCC File Number BLEDT-20040826AAR). KTEH holds a construction permit (CP) to increase power to 1,000 kW ERP (DA), using the same Antenna Concepts antenna (FCC File Number BPEDT-20080620AKJ).

Proposed Modifications to CP

It is proposed to substitute a Dielectric Model TFU-30DSC/VP-R C170 antenna, and reduced the main beam ERP to 310 kW. The C.O.R. would change slightly, to 888.2 m AMSL, the polarization would be modified from horizontal to elliptical with a 25% vertically polarized component, the main beam azimuth pattern would be changed to provide maximas at 148°T and 302°T rather than 180°T and 280°T, the electric beam tilt would be modified from 1.25° to 1.00°, and the mechanical beam tilt would be changed from 1.00° at 280°T to 1.00° at 225°T. The attached Exhibit 37A shows the DTV Threshold contours for the licensed, permitted, and proposed KTEH operation.

When studied on an OET-69 basis using 1 km by 1 km cells and 1 point per km of terrain extraction, the proposed modifications would not cause more than 0.5% incremental interference to any other TV station or Class A TV station. Processing of this application on that basis is requested.

As shown by the attached Exhibit 37B, the proposed KTEH operation would place a DTV City Grade contour over all of its principal community of San Jose, CA.

“Largest Station in the Market” Showing

For the proposed height above average terrain of 661.8 m, Section 73.622(f)(8)(ii) of the FCC Rules would normally allow an ERP of no greater than 24.39 dBk, or 275 kW. However, Section 73.622(f)(5) provides an exception, and allows additional power if another TV station in the market has greater coverage and if the additional power would allow the applicant to match, but not exceed, that largest station in the market’s coverage. This would be the case for KTEH, since KPIX-TV, D29 (V05), San Francisco, CA, is licensed for a power of 1,000 kW ERP.



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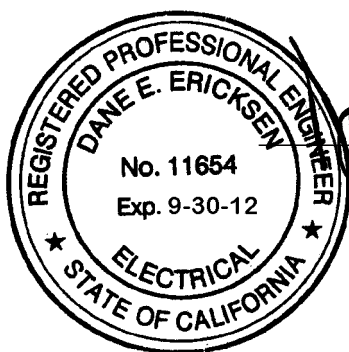
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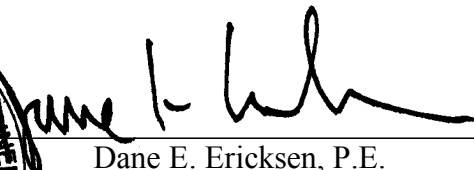
For the licensed KPIX-TV operation (FCC File Number BLCDT-20091112AIZ, granted May 20, 2011), the land area and population (2000 Census) inside the protected contour are 22,433 sq. km and 7,757,758 persons. For the proposed KTEH operation, the land area and population (2000 Census) are 18,981 sq. km and 7,366,724 persons. Thus, the proposed KTEH operation would not have a larger land or population inside its protected contour than KPIX-TV, even though it exceeds the power normally allowed for the proposed effective height. Thus, KTEH is entitled to request the higher power.

Authorship

This engineering statement and the attached figures have been prepared by me or under my direct supervision.

June 1, 2011

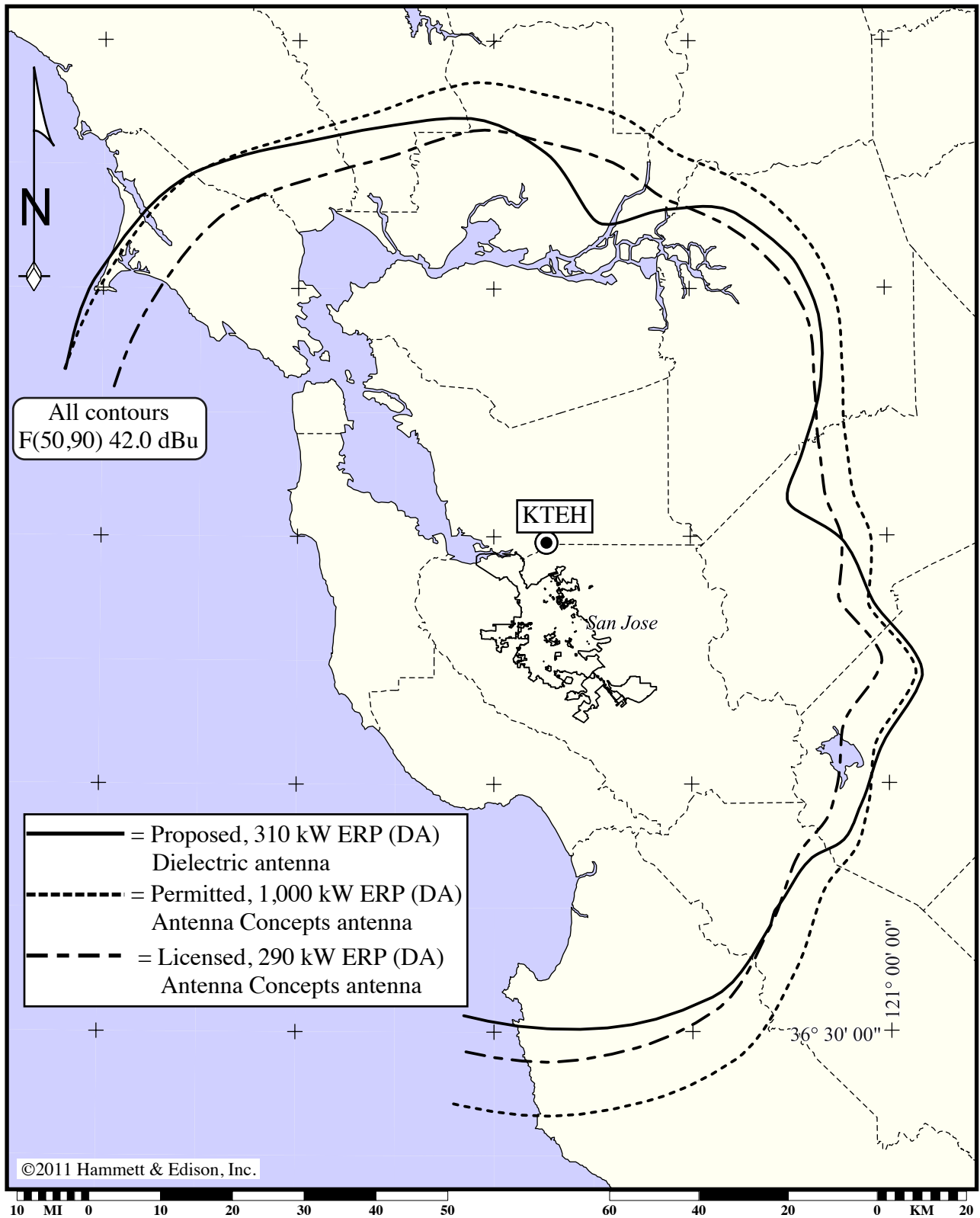



Dane E. Ericksen, P.E.



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Proposed CP Modification, Permitted, and Licensed KTEH
Threshold Contours



Lambert conformal conic map projection. Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. Geographic coordinate marks shown at 30-minute increments. City and county limits shown taken from U.S. Census Bureau TIGER/Line 2000 data.



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

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Exhibit 37A

TV Station KTEH • D50 (V54) • San Jose, California

Proposed KTEH, 310 kW ERP (DA)
C.O.R. = 144.8 m AGL/888.2 m AMSL/661.8 m HAAT
Dielectric Model TFU-30DSC/VP-R C170



Lambert conformal conic map projection. Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. Geographic coordinate marks shown at 30-minute increments. City and county limits shown taken from U.S. Census Bureau TIGER/Line 2000 data.

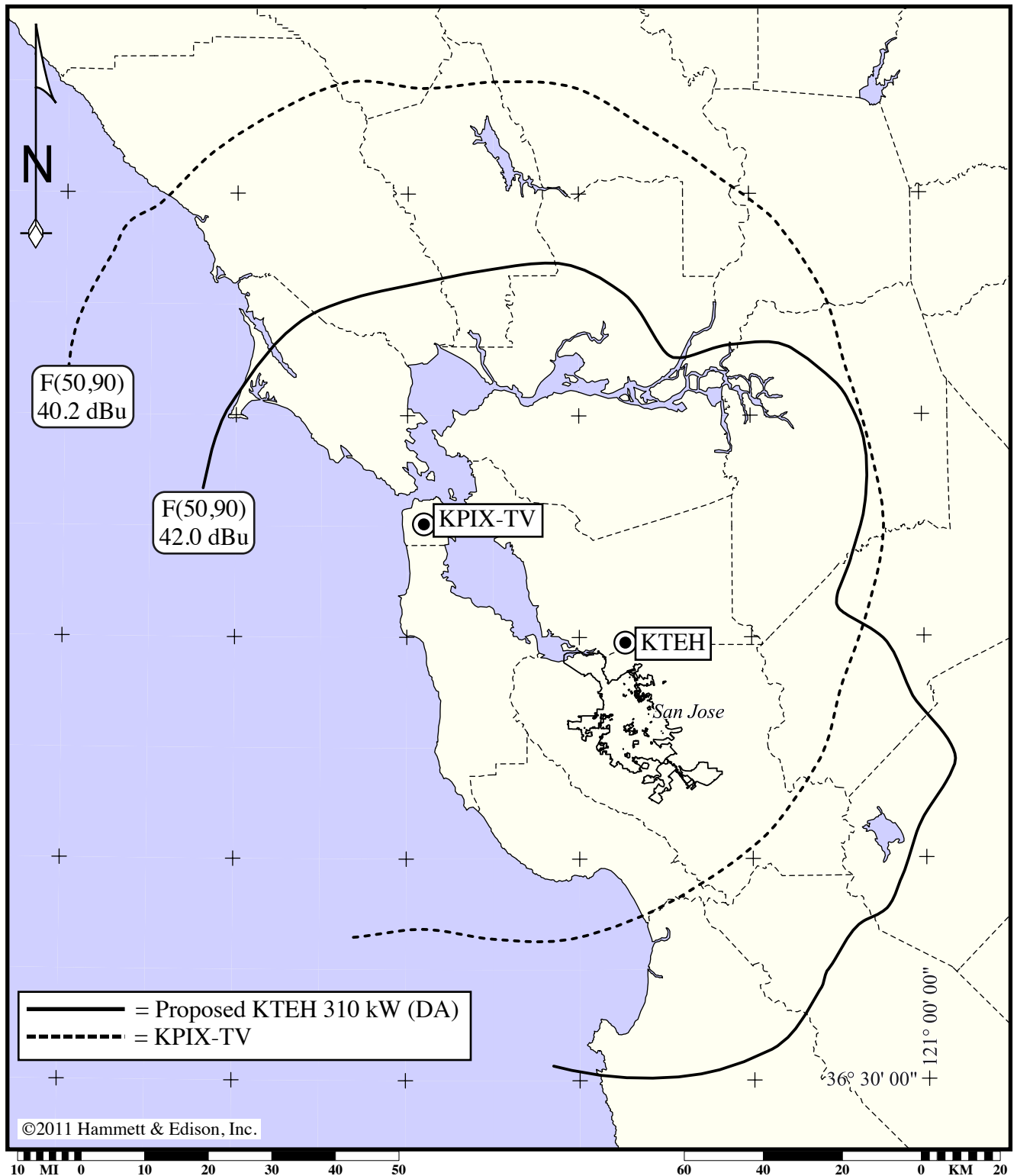


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Exhibit 37B

TV Station KTEH • D50 (V54) • San Jose, California

Proposed KTEH vs KPIX-TV, D29 (V05), San Francisco
("Largest Station in the Market" showing)



Albers equal area map projection. Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. Geographic coordinate marks shown at 30-minute increments. City and county limits shown taken from U.S. Census Bureau TIGER/Line 2000 data.



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Exhibit 37C