

TECHNICAL EXHIBIT
MINOR CHANGE APPLICATION
STATION K29ED (FACILITY ID 69574)
EVERETT, WASHINGTON
CH 29 8.7 KW (MAX-DA)

JULY 17, 2006

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Table of Contents

Technical Narrative

Figure 1 Predicted FCC Coverage Contours

Appendix Canadian Allocation Study

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Technical Narrative

This Technical Exhibit supports a minor change application for TV translator station K29ED at Everett, Washington. Station K29ED is licensed to operate on channel 29 with a directional antenna maximum effective radiated power (ERP) of 10.9 kW and an antenna height above mean sea level (RCAMSL) of 115 meters (BLTT-20021016AAF).

Proposed Facilities

This application proposes to employ the parameters in the previous STA for K29ED (BSTA-20060524AAG), except for a reduction in ERP. The changes to the licensed operation include a change in transmitter site, employing a directional antenna and reducing ERP and antenna height. The proposed transmitter site coordinates are: 47-58-27 N, 122-07-24 W (NAD 27). A SCA SL-8, directional antenna oriented at 270 degrees True, with a maximum ERP of 8.7 kW and antenna RCAMSL of 112 meters is proposed.

The existing 21 meter structure (69 feet) does not require registration as the FCC's TOWAIR program indicates that it passes the slope by 39 meters to the nearest airport 7.4 kilometers away.

Figure 1 is a map showing the authorized and proposed 74 dBu coverage contours. As can be seen on the map, there will be contour overlap with both contours.

Domestic Allocation Considerations

A study has been conducted to assure that the proposal will not create prohibited interference with other licensed, authorized or pending analog or digital TV, LPTV/translator and Class A TV stations. No prohibited contour overlap is predicted to occur to any station. Using the procedures outlined in the FCC's OET-69 Bulletin, a standard 1 km cell size and 1990 Census, there is no prohibited interference caused to any station. If necessary, a waiver of the FCC rules is respectfully requested based on use of the procedures outlined in the FCC's OET-69 Bulletin to the remaining LPTV/translator stations.

The applicant recognizes the proposal is secondary to authorized full-service analog and DTV operations. The applicant understands that it must correct and/or eliminate prohibited interference that may result from its proposed operation.

Radiofrequency Electromagnetic Field Exposure

The proposed K29ED facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the proposed antenna is located 18 meters above ground level with a maximum ERP of 8.7 kW. A conservative relative field value of 0.3 was assumed for the calculation (see Figure 2). The calculated power density at a point 2 meters above ground level will be 0.0634 mW/cm^2 . This is 17% of the FCC's recommended limit of 0.38 mW/cm^2 for channel 29 for an "uncontrolled" environment. Since there are no other known broadcast operations within 1 km of the K29ED site, the total RF contribution (17%) is in compliance.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by

spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down. It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure.



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APPENDIX – CANADIAN ALLOCATION STUDY

Canadian Allocation Analysis

As described previously, low power television station K29ED, on channel 29 at Everett, Washington, hereby proposes operation at a new transmitter site with a maximum visual effective radiated power (ERP) of 8.7 kW (directional antenna) and the proposed antenna radiation center height above mean sea level (RCAMSL) of 112 meters. The proposed transmitter site is described by the following NAD27 coordinates: 47-58-27 North Latitude, 122-07-24 West Longitude.

As the proposal is located only 88 kilometers from the U.S./Canadian border, a Canadian allocation study was conducted to confirm compliance with the U.S./Canadian TV Agreement (herein “Agreement”) and the Canadian Letter of Understanding (herein “LOU”). The Canadian database was studied to determine which Canadian stations may be impacted by the proposal.

Table 2 of the Agreement was used to determine the applicable field strengths to be used in conjunction with the Canadian station’s applicable Class protected circle. The Table indicates that the worst-case field strength for adjacent or “taboo” channels is 77 dBu.¹ The proposed 77 dBu F(50,10) contour is shown on the map in Figure A-1. As the proposed K29ED contour does not extend into Canada at any azimuth, the proposal is not expected to impact any adjacent or “taboo”-channel Canadian stations. The pertinent interfering contour to protect adjacent digital stations is the 87 dBu. Since the proposed 77 dBu does not enter Canada as stated above, the 87 dBu will not either.

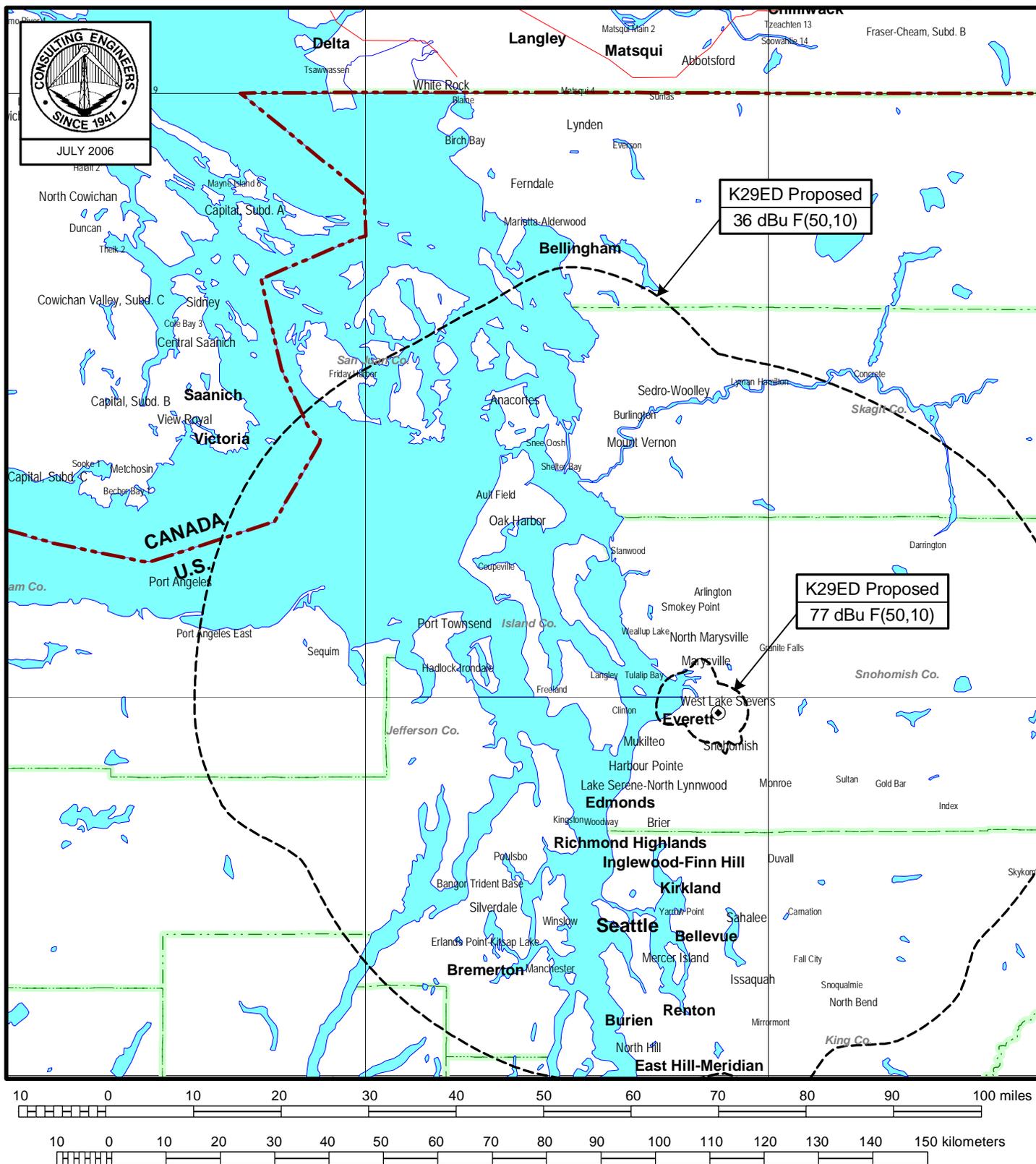
For co-channel protection, Section 5.4.1 of the Agreement was used in determining the d/u ratio. For analog co-channel stations with frequency offset, the ratio used was 28 dB while non-offset stations were protected using a 45 dB ratio. DTV stations were protected using a 7.2 dB ratio, as specified in the LOU. The only co-channel station of concern is BC-TV-202 (Victoria, BC), shown on the map in Figure A-1. Station BC-TV-202

¹ See Table 2 of the U.S./Canadian TV Agreement: Maximum Field Strength At Reference Distance for +/- 15 channel relationship.

operates with zero offset while K29ED operates with plus offset. Therefore, the pertinent d/u ratio is +28 dB. The proposed K29ED 36 dBu F(50,10) contour does not overlap the BC-TV-202 protected Class B (45 kilometer) circle on Canadian land.

It is therefore believed that the proposal is in full compliance with the U.S./Canadian TV Agreement and Letter of Understanding. If coordination with Canada is required, it is respectfully requested.

Figure A-1



PREDICTED INTERFERING CONTOUR

STATION K29ED

EVERETT, WASHINGTON

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