TECHNICAL EXHIBIT
MINOR CHANGE TV TRANSLATOR DTV FLASH-CUT
APPLICATION FOR CONSTRUCTION PERMIT
STATION K25CG (FACILITY ID 33898)
ABERDEEN, WASHINGTON

FEBRUARY 24, 2006

CH 25 15 KW-ND

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Technical Narrative

This technical exhibit supports a minor change digital television (DTV) flash-cut application from TV translator station K25CG at Aberdeen, Washington (Facility ID 33898).

According to the Federal Communications Commission (FCC) database, station K25CG is licensed for an analog (NTSC) operation on channel 25 with a plus (+) carrier offset (BLTT-19890801IB). A Scala model 4DR-16-2HN directional antenna (DA) system is employed. The antenna pattern is a narrow beam shape with the major lobe oriented toward 300 degrees True. The maximum visual effective radiated power (ERP) is 4.07 kilowatts (kW). The antenna center of radiation is 24 meters above ground level (AGL), and 195 meters above mean sea level (AMSL). The transmitter site coordinates are 46-55-53, 123-44-02 (NAD-27). There is no FCC antenna structure registration number.

Station K25CG proposes a flash-cut application to operate DTV on its in-core channel 25. No change in city of assignment (Aberdeen, WA) is proposed. It is proposed to use a Dielectric model TLP-8A non-directional antenna system. The antenna will be mounted on an existing supporting pole having an overall height of 21.3 meters (70 feet) AGL. The ground elevation at the supporting structure is 157.6 meters (517 feet) AMSL. The site coordinates for the supporting structure are 46-55-41, 123-44-11 (NAD-27). The antenna will be fed by a DTV transmitter having a power output of 2.1 kW (average). The transmitter will be fed through approximately 24.4 meters (80 feet) of 1-5/8 inch air dielectric coaxial transmission line (efficiency=89.9%). The proposed ERP is 15 kW-ND. Since there is no

proposed change in the overall height of the existing structure, the Federal Aviation Administration (FAA) is not being notified of the proposed K25CG DTV operation.

There are no known AM broadcast stations within 5 kilometers (3.1 miles) of the K25CG site. There are no other known FM or TV stations within 0.4 kilometer of the K25CG site. Although no adverse electromagnetic interaction is expected, the applicant recognizes its responsibility to correct problems that its proposed TV translator DTV operation may cause.

Allocation Considerations

A study has been conducted using the provisions of Section 74 Subpart G of the FCC rules to assure that the proposal will not create prohibited interference with other authorized or pending analog (NTSC) and digital (DTV) full-power TV, low power television (LPTV), TV translator, and Class A TV stations. The proposed K25CG channel 25 TV translator DTV operation was studied using the FCC's recently adopted LPTV-DTV rules and the interference procedures outlined in the FCC's OET-69 Bulletin. In accordance with current FCC processing policy, a 1 kilometer grid and the 1990 US Census was employed. Except for the recently filed LPTV-DTV application for the commonly owned station K25CH (Ch.25, Centralia, WA, Facility ID 69575), the proposed K25CG channel 25 TV translator DTV operation complies with the FCC's allocation standards (ie, less than 0.5% new interference caused to other pertinent assignments), to all known domestic assignments. The proposed K25CG DTV operation causes the proposed K25CH DTV operation 1.2% new interference. The proposed K25CG DTV operation would receive 2.9% new interference from the proposed K25CH DTV operation. Commonly owned stations K25CG and K25CH have entered an agreement whereby the stations consent to the calculated new interference caused by the respective proposed DTV operations.

The K25CG site is 144 kilometers from the nearest point of the US/Canada border. Consideration has been given to Canadian TV and DTV assignments. The only Canadian TV/DTV allotment on channel 25 within 400 kilometers of the K25CG site is the analog (NTSC) Class A TV allotment at Duncan, British Columbia (206.3 km to the north).

The proposed K25CG co-channel interfering contour (30.2 dBu, F(50,10)) does not extend into Canadian territory (see Figure 2). There are no known Canadian DTV allotments on channel 25 within 400 kilometers of the K25CG site. It is believed the proposed K25CG channel 25 TV translator DTV operation complies with the US/Canada TV/DTV Agreements. The applicant recognizes that it is a secondary service and must protect full service TV and DTV facilities if it should cause prohibited interference.

The closest point of the Mexican border is more than 1600 kilometers to the south-southeast. The closest FCC monitoring station is at Ferndale, Washington, approximately 242 kilometers to the northeast. The closest point of the National Radio Quiet Zone (VA/WV) is more than 3500 kilometers to the east. The Table Mountain Radio Quiet Zone (CO) is more than 1600 kilometers to the southeast. The closest radio astronomy site using channel 37 is at Brewster, Washington, approximately 332 kilometers to the northeast. These separations are considered sufficient to not be a coordination concern.

As noted above, interference calculations have been made using the procedures outlined in the FCC's OET-69 Bulletin.[1] The proposed K25CG channel 25 TV translator DTV operation complies with the FCC's "de minimis" (0.5%) interference policy, except with respect to the proposed K25CH DTV operation where an agreement applies. 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. 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 and the agreement with K25CH.

[1] The duTreil, Lundin & Rackley, Inc. DTV interference analysis program is based on the program and procedures outlined by the FCC in the Sixth Report and Order; subsequent Memorandum Opinion and Order; and FCC OET Bulletin No. 69. A nominal grid size resolution of 1 km was employed. A Sun based processor computer system was employed. The results have been found to be in very close agreement with the results of the FCC implementation of OET Bulletin No. 69.

Radiofrequency Electromagnetic Field Exposure

The proposed K25CG facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. An ERP of 15 kW was assumed. A relative field value of 0.23 was assumed for the proposed antenna's downward radiation (see Figure 1). The calculated power density at a point 2 meters (6.6 feet) above ground level is 0.09978 mW/cm^2. This is approximately 28% of the FCC's recommended limit of 0.36 mW/cm^2 for channel 25 for an "uncontrolled" environment. It is about 5.5% of the FCC's recommended limit for a "controlled" environment.

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.

Figure 3 is a map showing the predicted 74 dBu F(50,50) contour for the present K25CG analog operation on channel 25 (4.07 kW-DA). The map also shows the predicted 51 dBu F(50,90) contour for the proposed K25CG TV translator DTV operation on channel 25 (15 kW-ND). As shown, there is overlap between the present and proposed K25CG contours.

If there are questions concerning this technical statement or the technical portion of this application, please communicate with the office of the undersigned.

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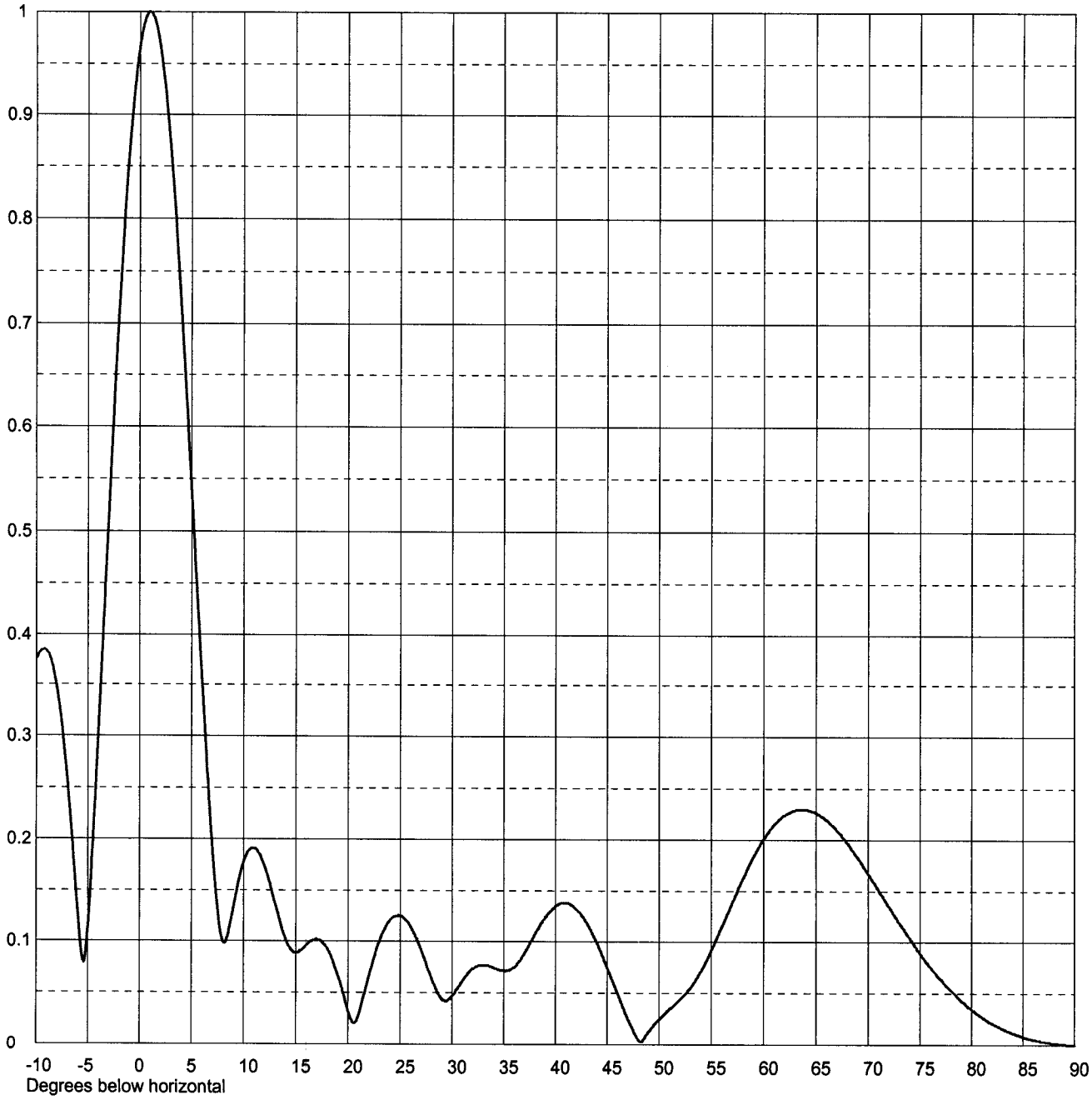
Exhibit No.
Figure 1

Dielectric

Date	**23 Feb 2006**		
Call Letters	**K25CG**	Channel	**25**
Location	**Aberdeen, WA**		
Customer			
Antenna Type	**TLP-8A**		

ELEVATION PATTERN

RMS Gain at Main Lobe	**8.0 (9.03 dB)**	Beam Tilt	**1.00 Degrees**
RMS Gain at Horizontal	**7.5 (8.75 dB)**	Frequency	**539.00 MHz**
Calculated / Measured	**Calculated**	Drawing #	**08L080100-90**



Remarks:

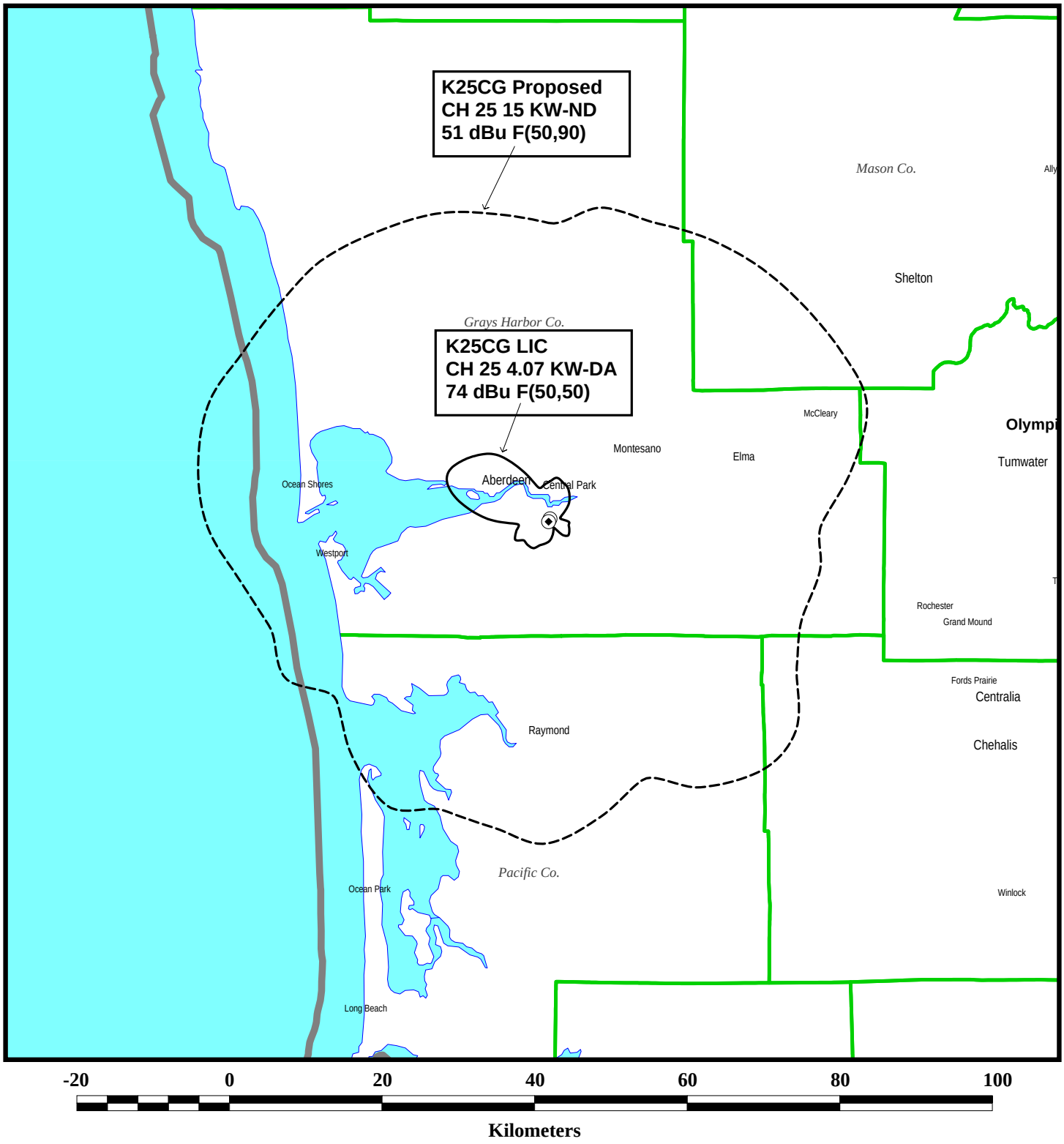
Figure 2

PREDICTED COVERAGE CONTOURS

STATIONK25CG
ABERDEEN, WASHINGTON
CH 25 15 KW-ND

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 3



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