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**Engineering Statement  
STA Application for K40AM  
Channel 34+ at Hood River, OR  
August 2007**

This Engineering Statement has been prepared on behalf of Columbia Gorge TV, Inc., licensee of TV translator station K40AM at Hood River, Oregon. This material has been prepared in connection with an application for Special Temporary Authority.

**Allocation Study**

Study has been made of all cochannel and adjacent-channel facilities in the vicinity of the proposed operation, including a detailed Longley-Rice interference study to demonstrate that the proposed operation will not cause interference to any facilities with which contour overlap exists. This study was performed using the SunDTV program from V-Soft Communications and a 1 km grid spacing. The SunDTV program identically duplicates the FCC's OET-69 processing program.

The results of this study indicate that the proposed facility is predicted to cause zero additional interference to any of the listed stations. Based on the foregoing allocation and interference study, it is believed that the proposed facility can operate without risk of interference to other stations.

# Summary Study

1990 Census data selected  
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 08-09-2007 Time: 20:15:52

Record Selected for Analysis

K40AM USERRECORD-01 HOOD RIVER, ETC. OR US  
Channel 34 ERP 0.642 kW HAAT 598. m RCAMSL 00836 m  
Latitude 045-44-45 Longitude 0121-34-51  
Status APP Zone 2 Border Offset +  
Dir Antenna Make usr Model USRPAT01 Beam tilt N Ref Azimuth 0.  
Last update Cutoff date Docket  
Comments  
Applicant

Cell Size for Service Analysis 1.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Not full service station

Facility meets maximum power limit

Azimuth (Deg)	ERP (kW)	HAAT (m)	74.0 dBu F(50,50) (km)
0.0	0.000	70.8	1.0
45.0	0.018	598.0	5.1
90.0	0.304	416.7	11.7
135.0	0.019	580.1	5.2
180.0	0.026	537.6	5.8
225.0	0.437	296.6	11.1
270.0	0.005	317.2	2.7
315.0	0.000	262.4	0.7

Contour Overlap Evaluation from LPTV Station to Full Service TV & DTV

Station inside contour of station  
KRCW-TV 33 SALEM OR BLCDDT 20030902ABR

Contour Overlap Evaluation from LPTV to Full Service TV & DTV Complete

Contour Overlap Evaluation from LPTV Station to LPTV Stations

No Spacing violations or contour overlap from LPTV station

Contour Overlap Evaluation from LPTV to LPTV Stations Complete

Contour Overlap to Proposed Station

Contour Overlap Evaluation to Proposed Station Complete

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountain

Proposed facility is within the Canadian coordination distance  
Distance to border = 308.5km

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

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Start of Interference Analysis

Channel	Call	Proposed Station City/State	ARN
34	K40AM	HOOD RIVER, ETC. OR	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	KRCW-TV	SALEM OR	93.1	LIC	BLCDT	-20030902ABR

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Study of this proposal found the following interference problem(s):

NONE.