FM Translator K252EN
Rockford, OR Channel 252D
Minor Modification of CP
Allocation Study
August 2007

The attached spacing study shows the spacing between the proposed fill-in translator site and the location of cochannel and adjacent channel stations and proposals. This study was made with the Commission's Class A spacing requirements, and individual situations were examined to determine the lack of prohibited contour overlap per the requirements of §74.1204 of the Rules. There are no stations close enough to require detailed allocation study maps.

It should be noted that the proposed fill-in translator operation is on a third-adjacent channel to the proposed parent station KACI-FM.

The attached spacing study demonstrates compliance with §73.207 of the Commission's Rules regarding spacing restrictions to stations which are 53 or 54 channels removed from the proposed operation.

FMSTUDY.EXE Copyright 2006, Hatfield & Dawson, LLC Version 1.80

SEARCH PARAMETERS FM Database Date: 070817

Channel: 252A 98.3 MHz

Latitude: 45 42 6

Longitude: 121 32 5

Safety Zone: 32 km

Job Title: K252EN ROCKFORD

Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
	THE DALLES		249C2	0.000	45-38-56	106.0	21.28	55
DEL	OR	RM-11279	97.7	0.0	121-16-20		-33.72	SHORT
KACI-FM	THE DALLES		249C2	5.100	45-38-56	106.0	21.28	55
LIC	OR	BMLH-040610AAJ	97.7	272.0	121-16-20		-33.72	SHORT
KACI-FM	THE DALLES		249C2	9.600 DA	45-24-36	170.8	32.84	55
CP	OR	BPH-070118AEL	97.7	328.0	121-28-03	SS	-22.16	SHORT
NEW-T	BEAVERTON		251D	0.010	45-31-21	258.5	96.55	0
APP	OR	BNPFT-030317AHR	98.1	710.0	122-44-45		0.00	TRANS
	MADRAS		251C1	0.000	44-50-02	147.8	113.79	133
VAC	OR	RM-9961	98.1	0.0	120-45-55		-19.21	SHORT
	DALLAS		252C3	0.000	44-55-06	238.6	164.64	142
DEL	OR	RM-ajr10	98.3	0.0	123-19-00		22.64	CLEAR
	DALLAS		252C3	0.000	44-55-06	238.6	164.64	142
VAC	OR	-	98.3	0.0	123-19-00		22.64	CLEAR
	MONMOUTH		252C3	0.000	44-53-08	233.9	152.23	142
ADD	OR	RM-ajr10	98.3	0.0	123-05-36		10.23	CLEAR
KPPK	RAINIER		252A	1.600	46-10-59	296.4	122.66	115
LIC	OR	BLH-060802AFY	98.3	195.0	122-57-29		7.66	CLOSE
K252EN	ROCKFORD		252D	0.250	45-42-08	340.8	0.07	0
CP	OR	BNPFT-030825AIY	98.3	120.0	121-32-05		0.00	TRANS
KEYW	PASCO		252C2	12.500	46-04-58	76.2	189.06	166
LIC	WA	BLH-000818ACI	98.3	304.0	119-09-39		23.06	CLEAR
KUPLaux	PORTLAND		254C1	16.000	45-27-13	251.0	83.60	0
LIC	OR	BXMLH-000316ABX	98.7	337.0	122-32-45		0.00	AUX
KUPL-FM	PORTLAND		254C1	37.000	45-30-58	257.9	95.73	75
LIC	OR	BLH-970915KD	98.7	440.0	122-43-59		20.73	CLEAR
KUPLaux	PORTLAND		254C1	11.000	45-30-57	257.9	95.59	0
LIC	OR	BXLH-031107AAG	98.7	362.0	122-43-52		0.00	AUX

44444 END OF FM SPACING STUDY FOR CHANNEL 252 44444

FM Translator K252EN
Rockford, OR Channel 252D
Minor Modification of CP
NIER Study
August 2007

Facilities Proposed

The proposed operation will be on Channel 252D (98.3 MHz) with an effective radiated power of 250 Watts. Operation is proposed utilizing an existing antenna installed on the KIHR(AM) tower in Hood River, Oregon.

NIER Calculations

OET Bulletin 65 Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields (Edition 97-01) states in part that:

> When performing an evaluation for compliance with the FCC's RF guidelines all significant contributors to the ambient RF environment should be considered. . .For purposes of such consideration, significance can be taken to mean any transmitter producing more than 5% of the applicable exposure limit (in terms of power density or the square of the electric or magnetic field strength) at accessible locations.

As will be demonstrated below, the proposed operation of K252EN will produce less than 5% of the applicable exposure limit for both controlled and uncontrolled environments. Thus, the proposed facility is categorically excluded from the requirement of further study. Therefore, pursuant to §1.1307(b)(3) of the Commission's Rules no calculations are required for the other FM and TV facilities in the vicinity, and precise calculations are made only with regard to the levels from this proposal.

The power density calculations shown below were made using the techniques outlined in OET Bulletin No. 65. "Ground level" calculations in this report have been made at a reference height

of 2 meters above ground to provide a worst-case estimate of exposure for persons standing on the ground in the vicinity of the tower. The equation shown below was used to calculate the ground level power density figures from each antenna.

$$S(\mu W / cm^2) = \frac{33.40981 \times AdjERP(Watts)}{D^2}$$

Where: *AdjERP(Watts)* is the maximum lobe effective radiated power times the element pattern factor times the array pattern factor.

D is the distance in meters from the center of radiation to the calculation point.

Calculations of the power density produced by the K252EN antenna system assume a Type 1 element pattern, which is the appropriate element pattern for the Phelps-Dodge CFM-LP-3 antenna to be used by K252EN. Ground level power densities have been calculated for locations extending from the base of the tower to a distance of 1000 meters. Values past this point are increasingly negligible.

The highest calculated ground level power density from K252EN occurs at a distance of 9 meters from the base of the antenna support structure. At this point the power density is calculated to be 5.9 μW/cm², which is 0.6% of 1000 μW/cm^2 (the FCC standard for controlled environments) and 3.0% of 200 μW/cm^2 (the FCC standard for uncontrolled environments).

These calculations show that the maximum calculated power density produced at two meters above ground level by the proposed operation of K252EN alone is less than 5% of the applicable FCC exposure limit at all locations between 1 and 1000 meters from the base of the antenna support structure. Section 1.1307(b)(3) of the Commission's Rules excludes applications for new facilities or modifications to existing facilities from the requirement of preparing an environmental

assessment when the calculated emissions from the applicants proposed facility are predicted to be less than 5% of the applicable FCC exposure limit. Therefore, the proposed facility is in compliance with Section 1.1301 et seq and no further analysis of non-ionizing radiation at this site is required in this application.

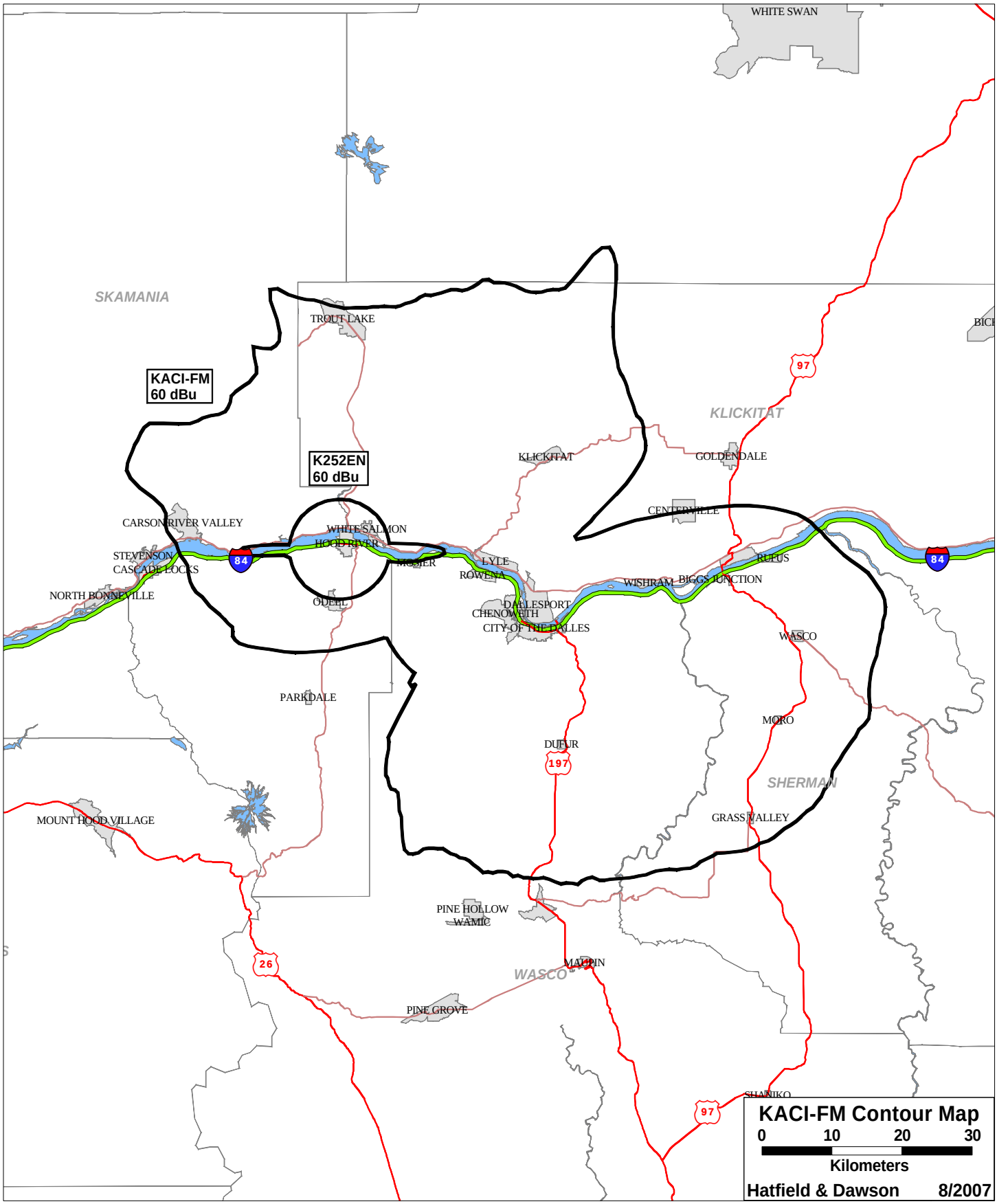
Public access to the site is restricted by a locked gate and the antenna tower is posted with warning signs. Pursuant to OET Bulletin No. 65, all station personnel and contractors are required to follow appropriate safety procedures before any work is commenced on the antenna tower, including reduction in power or discontinuance of operation before any maintenance work is undertaken.

The permittee/licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency radiation in excess of FCC guidelines.

FM Translator K252EN
Rockford, OR Channel 252D
Minor Modification of CP
Statement Regarding Installation on KIHR(AM) Tower
August 2007

The proposed K252EN facility will utilize the former main antenna of KCGB-FM, as licensed under BLH-19781124AB. That antenna is still installed on the KIHR(AM) tower in Hood River. No construction on the tower will be necessary in order to implement the K252EN facility, and it is therefore not believed necessary to place any condition on the K252EN construction permit relating to §73.1692(a) *Installations on an AM nondirectional tower*.

It is noted that the licensed KIHR(AM) coordinates do not match the coordinates in the instant application. Columbia Gorge Broadcasters is the licensee of both K252EN and KIHR, and is in the process of correcting the coordinates of these facilities.


KACI-FM
60 dBu
K252EN
60 dBu
SKAMANIA
KLICKITAT
WASCO
SHERMAN
WHITE SWAN
TROUT LAKE
KLICKITAT
GOLDENDALE
CENTERVILLE
CARSON RIVER VALLEY
WHITE SALMON
HOOD RIVER
STEVENSON
CASCADE LOCKS
NORTH BONNEVILLE
ODELL
MOSIER
LYLE
ROWENA
WISHRAM
BIGGS JUNCTION
RUFUS
DALLESPORT
CHENOWETH
CITY OF THE DALLES
WASCO
PARKDALE
MORO
DUFUR
GRASS VALLEY
MOUNT HOOD VILLAGE
PINE HOLLOW
WAMIC
MAUPIN
PINE GROVE
SHANIKO
84
97
197
26
KACI-FM Contour Map
0 10 20 30
Kilometers
Hatfield & Dawson 8/2007