

ENGINEERING EXHIBIT

Digital Television Translator Station Application for Minor Modification of Licensed Facility Correction of Geographic Coordinates and Site Elevation prepared for

Oregon TV License Company LLC
K11BX-D Sutherlin, OR
Facility ID 34403
Ch. 11 0.3 kW Directional

Oregon TV License Company LLC ("Oregon") is the licensee of digital Television Translator station K11BX-D, Channel 11, Facility ID 34403, Sutherlin OR. K11BX-D is licensed to operate (file# BLDTV-20100115AAA) with 0.3 kW effective radiated power ("ERP"), directional. *Oregon* herein seeks a Construction Permit to indicate corrected geographic coordinates and ground elevation for the K11BX-D transmitter site. No change in the actual location, antenna height above ground, directional antenna, or ERP is proposed.

It has been determined that the antenna structure's licensed geographic coordinates and ground elevation require correction. The licensed and corrected coordinates and elevation data for K11BX-D are listed below.

	<u>Licensed K11BX-D</u>	<u>Corrected K11BX-D</u>
Latitude N (NAD-83)	43° 21' 22.4"	43° 22' 19.0"
Longitude W	123° 03' 54.2"	123° 03' 52.4"
Site Elevation (m AMSL)	1308.0	1293.9
Antenna C/R (m AGL)	11.0	11.0
Antenna C/R (m AMSL)	1319.0	1304.9

Thus, corrections of 1 minute 3.4 seconds geographic latitude, 2.0 seconds geographic longitude, and 14.1 meters ground elevation are necessary. The change in lateral distance is 1.8 km. The antenna radiation center height above ground level is unchanged at 11.0 meters. Due to the corrected ground elevation, there is a 14.1 meter reduction of antenna height above mean sea level.

The proposed K11BX-D facility will continue to utilize its licensed directional antenna at 0.3 kW ERP. The K11BX-D antenna supporting structure does not require an Antenna Structure Registration as the overall structure height is less than 61 meters above ground and passes the FCC's TOWAIR program for the site location.

Figure 1 depicts the 51 dB μ coverage contour of the corrected facility as well as that of the licensed K11BX-D, demonstrating compliance with §73.3572 for a minor change.

Interference study per OET Bulletin 69¹ shows that the proposal complies with the FCC's interference protection requirements toward all digital television, television translator, LPTV, and Class A stations. FCC processing of this proposal is requested using a **1.0 km cell size and 0.1 km terrain profile increment**. The results, summarized in Table 1, show that any new interference does not exceed the FCC's interference limits (0.5 percent to full power and Class A stations, and 2.0 percent to secondary stations) to any facility except with respect to K11VI-D and KDRV which do not present a conflict for the proposal.

The licensed K11VI-D facility (file# BLDTV-20100618ARR, Ch. 11, Facility ID 50579, Elkton OR) would receive 3.37 percent interference from the corrected K11BX-D facility, which exceeds the 2.0 percent limit towards television translator stations. This is unchanged from the 3.37 percent interference caused to K11VI-D by K11BX-D as presently licensed. Thus, interference to K11VI-D is not increased as a result of the correction to K11BX-D. Table 2 supplies interference study details regarding the impact to K11VI-D from the licensed and corrected K11BX-D.

KDRV (Ch. 12, Fac ID 60736, Medford OR, file# BLCDDT-20090303ACL) would receive 1.01 percent interference, which exceeds the 0.5 percent limit towards full-service television stations. *Oregon* is also the licensee of KDRV and consents to interference exceeding 0.5 percent

¹FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 ("OET-69"). This analysis employed the FCC's current "TVStudy" software with the default application processing template settings, 1 km cell size, and 0.1 km terrain increment. Comparisons of various results of this computer program (run on a Mac processor) to the FCC's implementation of TVStudy show excellent correlation.

from the corrected K11BX-D. KDRV has previously accepted 1.37 percent interference from K11BX-D, in order for the currently licensed K11BX-D facility to achieve authorization as a digital flashcut facility in 2009 (see BDFCDTV-20090820ADM).

Human Exposure to Radiofrequency Electromagnetic Field (Environmental)

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the FCC's OET Bulletin Number 65. Based on OET-65 equation (10), and considering the antenna relative field in downward elevations, the graph in Figure 2 depicts calculated power density levels attributable to the proposed facility at locations near the site at a height of two meters above ground level. The maximum calculated RF electromagnetic field attributable to the proposed facility is 8.4 percent of the general population / uncontrolled MPE limit at any location two meters above ground level, occurring within 15 meters of the base of the tower.

Other television translator and FM translator station facilities are authorized at nearby site locations. The following table supplies a summary of RF signal density calculations for the proposed K11BX-D and the other broadcast facilities near this site, for maximum exposure at 2 meters above ground near each emitter's site.

**Summary of Radiofrequency Electromagnetic Field Calculations
 For Area in Vicinity of K11BX-D Tower**

Facility	Channel	ERP (kW)	Polarization	Relative Field	Height (meters)	S - Calculated ($\mu\text{W}/\text{cm}^2$)	S - Limit ($\mu\text{W}/\text{cm}^2$)	Percent of Limit
K11BX-D Sutherlin OR Proposed Facility	11	0.3	H	See Graph Figure 2	11	16.9	200	8.4%
K24FH-D Glide OR BLDTT-20091125AAS	24	1.1	H	0.15	23	1.9	355	0.5%
K26HO-D Glide OR BLDTT-20101008ABC	26	2.0	H	0.26	7.6	144.0	363	39.6%
K31AE-D Sutherlin OR BLDTT-20121203BGY	31	3.8	H	0.22	13	50.8	383	13.2%
K34IC-D Glide OR BLDTL-20120605ABA	34	1.03	H	0.22	22	4.2	395	1.1%
K205DM Glide OR BMLFT-20090804AAW	205	0.008	V	FMModel at Worst case	30	0.4	200	0.2%
K287BF Glide OR 0000177304	287	0.01	C	FMModel at Worst case	24	1.0	200	0.5%
Total Calculated Signal Density:								63.5%

ERP: Effective Radiated Power
 Polarization: H – Horizontal; V – Vertical; E – Elliptical; C – Circular

Field: Elevation Pattern Relative Field Value
Height: Height of radiation center above ground level
S-Calc: OET Bulletin 65 calculated value of signal density at two meters above ground level
S-Limit §1.1310 uncontrolled/general population limit for signal density

FCC license on-file or manufacturer's elevation pattern for each TV antenna was employed with computations per OET-65 equation (10). For FM stations the FCC's "FMModel" computer analysis² was utilized, utilizing the worst-case setting for antenna type and number of elements. Individual station contributions were determined as a percentage of their respective exposure limit based on operating frequency and then all individual percentages were summed to determine the total RF exposure level. For simplicity in summing the individual RF contributions, these computations assume all stations are located at a single tower location.

Based on this analysis and considering all broadcast facilities, the summary table shows that the total maximum calculated RF density at two meters above ground level is 63.5 percent of the FCC's uncontrolled / general population MPE limit. Further analysis that considers the actual lateral separation between the various stations would show a lower total maximum RF density.

The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower, or antenna from RF electromagnetic field exposure in excess of FCC guidelines. This exhibit is limited to the evaluation of exposure to RF electromagnetic field.

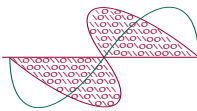
²Public Notice "Office of Engineering and Technology Announces Updates to FMModel Software"
DA 16-340, released March 31, 2016.

List of Attachments

Figure 1	Coverage Contour Comparison
Figure 2	Calculated RF Electromagnetic Field
Table 1	TVStudy Analysis of Proposal
Table 2	Interference Study Details Regarding K11VI-D
Form 2100	Saved Version of Engineering Sections from FCC Form at Time of Upload

Chesapeake RF Consultants, LLC

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Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Figure 1
Coverage Contour Comparison
K11BX-D Sutherlin, OR
Facility ID 34403
Ch. 11 0.3 kW Directional

prepared for
Oregon TV License Company LLC

February, 2022

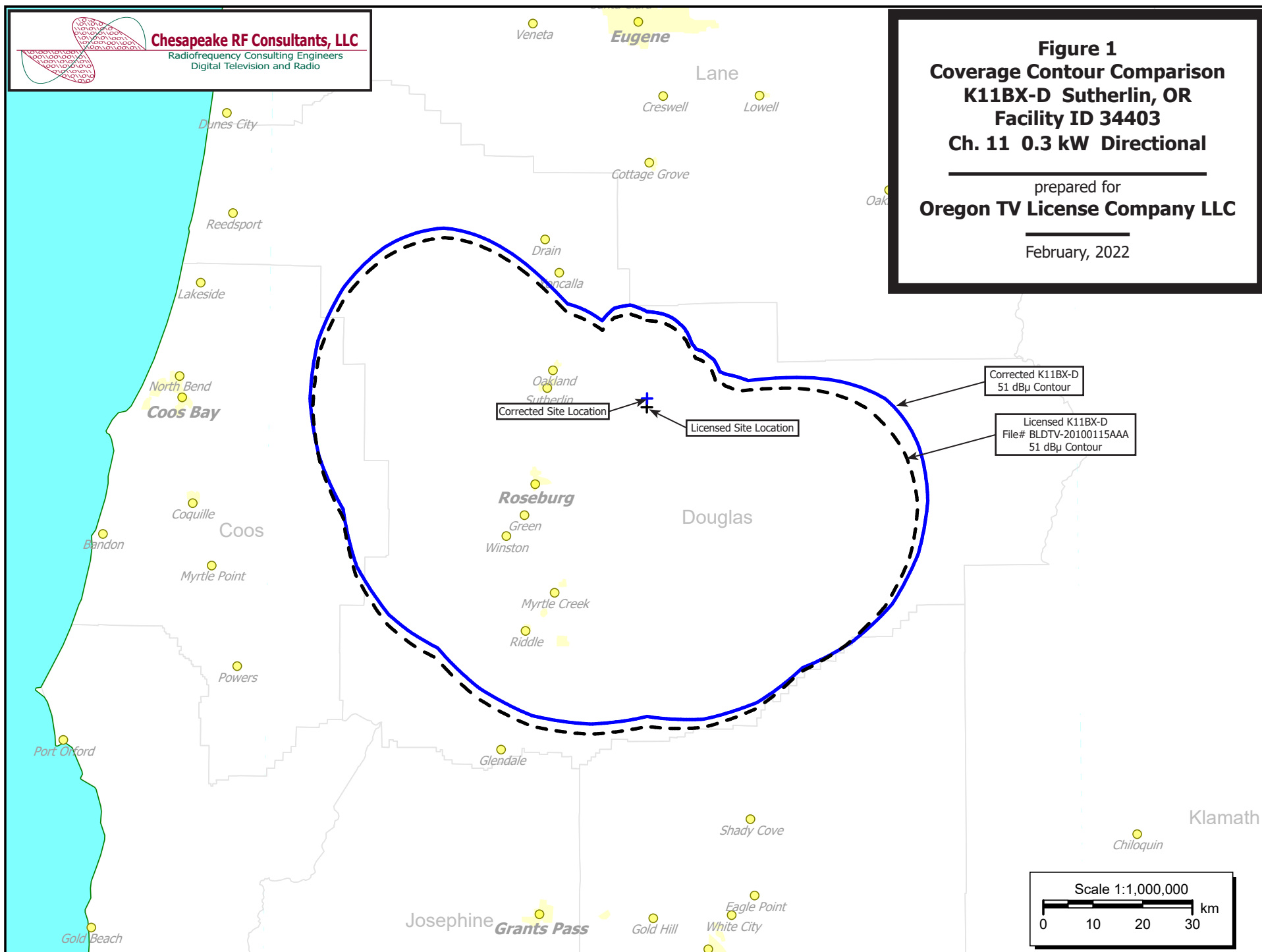


Figure 2
Calculated RF Electromagnetic Field
K11BX-D Sutherlin, OR
Facility ID 34403
Ch. 11 0.3 kW Directional

prepared for
Oregon TV License Company LLC

February, 2022

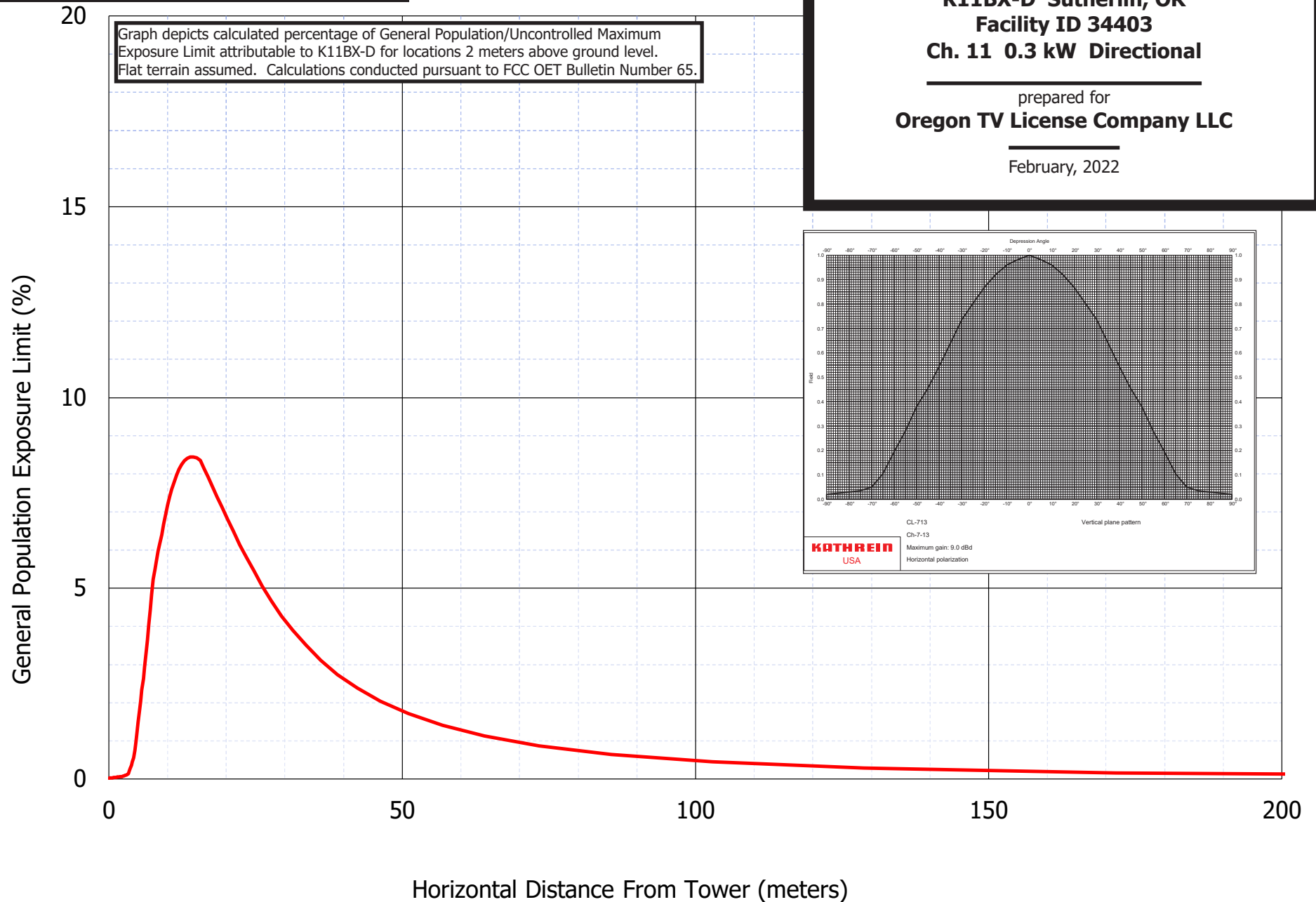


Table 1 K11BX-D TVStudy Analysis of Proposal (page 1 of 5)



tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: K11BX-D corr 1.0-0.1, Model: Longley-Rice
Start: 2022.02.25 16:30:32

Study created: 2022.02.25 16:22:38

Study build station data: LMS TV 2022-02-24

Proposal: K11BX-D D11 LD APP SUTHERLIN, OR
File number: K11BX-D corr
Facility ID: 34403
Station data: User record
Record ID: 4223
Country: U.S.

Build options:
Protect pre-transition records not on baseline channel

Search options:
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K07GI-D	N7	TX	LIC	PROSPECT, OR	BLTTV1469	80.7 km
Yes	KTVL	D10	DT	LIC	MEDFORD, OR	BLANK0000115956	146.2
No	KOPB-TV	D10	DT	LIC	PORTLAND, OR	BLANK0000115984	240.3
Yes	KEET	D11	DT	LIC	EUREKA, CA	BLANK0000005864	303.2
Yes	KOAB-TV	D11	DT	LIC	BEND, OR	BLEDT20060823AAP	159.6
Yes	KCBY-TV	D11	DT	LIC	COOS BAY, OR	BLCDT20090612AGE	86.1
Yes	K11KI-D	D11	LD	LIC	DORENA, ETC, OR	BLDTV20090330AAQ	42.5
Yes	K11VI-D	D11	LD	LIC	ELKTON, OR	BLDTV20100618ARR	47.0
Yes	K11GT-D	D11	LD	LIC	EUGENE, OR	BLANK0000087692	70.2
Yes	K11SZ-D	D11	LD	LIC	OAKRIDGE, OR	BLDTV20120516ABV	69.6
No	KFFX-TV	D11	DT	LIC	PENDLETON, OR	BLCDT20140424AHO	477.5
No	KWVT-LD	D11	LD	LIC	SALEM, OR	BLANK0000157400	240.3
Yes	K11GH-D	D11	LD	LIC	TRI CITIES, ETC, OR	BLDTV20120621ABL	55.3
No	KSTW	D11	DT	LIC	TACOMA, WA	BLCDT20091117AAX	475.3
Yes	KDRV	D12	DT	LIC	MEDFORD, OR	BLCDT20090303ACL	76.8
No	KPTV	D12	DT	LIC	PORTLAND, OR	BLANK0000107781	240.2

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D11
Mask: Stringent
Latitude: 43 22 19.00 N (NAD83)
Longitude: 123 3 52.40 W
Height AMSL: 1304.9 m
HAAT: 0.0 m
Peak ERP: 0.300 kW
Antenna: SCA-CL-713 ARRAY (ID 94700) 0.0 deg
Elev Pattn: Generic

48.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.000 kW	854.8 m	17.8 km
45.0	0.000	384.9	14.0
90.0	0.044	648.6	47.7
135.0	0.281	775.3	64.3
180.0	0.202	885.7	63.9
225.0	0.230	1018.3	66.8
270.0	0.300	927.9	67.8
315.0	0.015	1008.7	44.9

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 813 m

Distance to Canadian border: 540.6 km

Table 1 K11BX-D TV Study Analysis of Proposal
(page 2 of 5)



Distance to Mexican border: 1294.2 km

Conditions at FCC monitoring station: Ferndale WA
Bearing: 3.4 degrees Distance: 621.9 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 97.6 degrees Distance: 1516.2 km

Study cell size: 1.00 km
Profile point spacing: 0.10 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

Interference to BLANK0000115956 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KTVL	D10	DT	LIC	MEDFORD, OR	BLANK0000115956	
Undesireds:	K11BX-D	D11	LD	APP	SUTHERLIN, OR	K11BX-D corr	146.2 km
	KIXE-TV	D9	DT	LIC	REDDING, CA	BLEDT20080909ABK	164.4
	KOPB-TV	D10	DT	LIC	PORTLAND, OR	BLANK0000115984	382.5
	KEET	D11	DT	LIC	EUREKA, CA	BLANK0000005864	183.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
54700.0	457,917	46924.6	407,109	46897.4	407,109	46882.4 407,050	0.03 0.01
Undesired				Total IX	Unique IX, before	Unique IX, after	
K11BX-D D11 LD APP				59		59	
KIXE-TV D9 DT LIC				19.1	19.1 0	19.1 0	
KOPB-TV D10 DT LIC				3.0	3.0 0	2.0 0	
KEET D11 DT LIC				5.0	5.0 0	5.0 0	

Interference to BLANK0000005864 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KEET	D11	DT	LIC	EUREKA, CA	BLANK0000005864	
Undesireds:	K11BX-D	D11	LD	APP	SUTHERLIN, OR	K11BX-D corr	303.2 km
	KTVL	D10	DT	LIC	MEDFORD, OR	BLANK0000115956	183.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
45785.7	177,290	41478.0	161,126	41474.0	161,126	41473.0 161,126	0.00 0.00
Undesired				Total IX	Unique IX, before	Unique IX, after	
K11BX-D D11 LD APP				1.0	0	1.0 0	
KTVL D10 DT LIC				4.0	4.0 0	4.0 0	

Interference to BLEDT20060823AAP LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KOAB-TV	D11	DT	LIC	BEND, OR	BLEDT20060823AAP	
Undesireds:	K11BX-D	D11	LD	APP	SUTHERLIN, OR	K11BX-D corr	159.6 km
	KFFX-TV	D11	DT	LIC	PENDLETON, OR	BLCDDT20140424AHO	318.9
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
34801.2	207,069	28605.1	204,811	28479.9	204,790	28478.9 204,790	0.00 0.00
Undesired				Total IX	Unique IX, before	Unique IX, after	
K11BX-D D11 LD APP				1.0	0	1.0 0	
KFFX-TV D11 DT LIC				125.1	21 125.1	21 125.1	

Interference to BLCDDT20090612AGE LIC scenario 1

Table 1 K11BX-D TVStudy Analysis of Proposal
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Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KCBY-TV	D11	DT	LIC	COOS BAY, OR	BLCDT20090612AGE	
Undesireds:	K11BX-D	D11	LD	APP	SUTHERLIN, OR	K11BX-D corr	86.1 km
	KEET	D11	DT	LIC	EUREKA, CA	BLANK000005864	296.2
	KDRV	D12	DT	LIC	MEDFORD, OR	BLCDT20090303ACL	106.7
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
15763.8 89,092		15097.1 74,939		15075.9 74,919		14653.4 74,827	2.80 0.12
Undesired		Total IX		Unique IX, before		Unique IX, after	
K11BX-D D11 LD APP		428.5 92				422.5 92	
KEET D11 DT LIC		12.1 20		12.1 20		12.1 20	
KDRV D12 DT LIC		9.0 0		9.0 0		3.0 0	

Interference to BLDTV20090330AAQ LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K11KI-D	D11	LD	LIC	DORENA, ETC, OR	BLDTV20090330AAQ	
Undesireds:	K11BX-D	D11	LD	APP	SUTHERLIN, OR	K11BX-D corr	42.5 km
	K11GT-D	D11	LD	LIC	EUGENE, OR	BLANK0000087692	38.6
	K11SZ-D	D11	LD	LIC	OAKRIDGE, OR	BLDTV20120516ABV	35.4
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
2146.2 28,870		1953.0 20,324		1913.6 20,105		1912.6 20,105	0.05 0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
K11BX-D D11 LD APP		2.0 23				1.0 0	
K11GT-D D11 LD LIC		36.3 219		36.3 219		35.3 196	
K11SZ-D D11 LD LIC		3.0 0		3.0 0		3.0 0	

Interference to BLDTV20100618ARR LIC scenario 1

**IX: 3.37% interference caused

See text and Table 2: interference to K11VI-D is not increased

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K11VI-D	D11	LD	LIC	ELKTON, OR	BLDTV20100618ARR	
Undesireds:	K11BX-D	D11	LD	APP	SUTHERLIN, OR	K11BX-D corr	47.0 km
	KCBY-TV	D11	DT	LIC	COOS BAY, OR	BLCDT20090612AGE	54.4
	K11KI-D	D11	LD	LIC	DORENA, ETC, OR	BLDTV20090330AAQ	57.0
	K11GT-D	D11	LD	LIC	EUGENE, OR	BLANK0000087692	54.1
	K11GH-D	D11	LD	LIC	TRI CITIES, ETC, OR	BLDTV20120621ABL	82.5
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
1597.8 2,401		1500.1 2,175		1485.0 2,169		1448.7 2,096	2.45 3.37
Undesired		Total IX		Unique IX, before		Unique IX, after	
K11BX-D D11 LD APP		42.4 79				36.4 73	
KCBY-TV D11 DT LIC		3.0 0		2.0 0		1.0 0	
K11KI-D D11 LD LIC		8.1 6		5.1 6		2.0 0	
K11GT-D D11 LD LIC		7.0 0		3.0 0		2.0 0	
K11GH-D D11 LD LIC		1.0 0		1.0 0		1.0 0	

Interference to BLANK0000087692 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K11GT-D	D11	LD	LIC	EUGENE, OR	BLANK0000087692	
Undesireds:	K11BX-D	D11	LD	APP	SUTHERLIN, OR	K11BX-D corr	70.2 km
	KCBY-TV	D11	DT	LIC	COOS BAY, OR	BLCDT20090612AGE	106.1
	K11KI-D	D11	LD	LIC	DORENA, ETC, OR	BLDTV20090330AAQ	38.6
	K11VI-D	D11	LD	LIC	ELKTON, OR	BLDTV20100618ARR	54.1
	K11SZ-D	D11	LD	LIC	OAKRIDGE, OR	BLDTV20120516ABV	62.3
	KWVT-LD	D11	LD	LIC	SALEM, OR	BLANK0000157400	171.4
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
7774.3 347,981		7085.8 336,930		7039.4 336,593		7036.4 336,577	0.04 0.00

Table 1 K11BX-D TVStudy Analysis of Proposal
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Undesired		Total IX	Unique IX, before	Unique IX, after
K11BX-D D11 LD APP	7.1	16		3.0 16
KCBY-TV D11 DT LIC	2.0	0	0.0 0	0.0 0
K11KI-D D11 LD LIC	38.3	337	33.2 337	31.2 337
K11VI-D D11 LD LIC	2.0	0	1.0 0	1.0 0
K11SZ-D D11 LD LIC	3.0	0	1.0 0	1.0 0
KWVT-LD D11 LD LIC	8.0	0	6.0 0	6.0 0

Interference to BLDTV20120516ABV LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K11SZ-D	D11	LD	LIC	OAKRIDGE, OR	BLDTV20120516ABV	
Undesireds:	K11BX-D	D11	LD	APP	SUTHERLIN, OR	K11BX-D corr	69.6 km
	KOAB-TV	D11	DT	LIC	BEND, OR	BLEDT20060823AAP	92.1
	K11KI-D	D11	LD	LIC	DORENA, ETC, OR	BLDTV20090330AAQ	35.4
	K11GT-D	D11	LD	LIC	EUGENE, OR	BLANK0000087692	62.3
	K11GH-D	D11	LD	LIC	TRI CITIES, ETC, OR	BLDTV20120621ABL	120.6
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
3868.5 6,063		3264.8 5,787		3250.7 5,787		3250.7 5,787	0.00 0.00

Undesired		Total IX	Unique IX, before	Unique IX, after
K11BX-D D11 LD APP	1.0	0		0.0 0
KOAB-TV D11 DT LIC	2.0	0	0.0 0	0.0 0
K11KI-D D11 LD LIC	3.0	0	1.0 0	0.0 0
K11GT-D D11 LD LIC	12.2	0	11.1 0	11.1 0
K11GH-D D11 LD LIC	1.0	0	0.0 0	0.0 0

Interference to BLDTV20120621ABL LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K11GH-D	D11	LD	LIC	TRI CITIES, ETC, OR	BLDTV20120621ABL	
Undesireds:	K11BX-D	D11	LD	APP	SUTHERLIN, OR	K11BX-D corr	55.3 km
	KDRV	D12	DT	LIC	MEDFORD, OR	BLCDT20090303ACL	23.8
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
2762.0 74,473		2308.2 49,997		2302.2 49,997		2234.0 49,494	2.96 1.01

Undesired		Total IX	Unique IX, before	Unique IX, after
K11BX-D D11 LD APP	70.2	503		68.2 503
KDRV D12 DT LIC	6.0	0	6.0 0	4.0 0

Interference to BLCDT20090303ACL LIC scenario 1

**IX: 1.01% interference caused

See text: KDRV is accepting 1.01% interference

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KDRV	D12	DT	LIC	MEDFORD, OR	BLCDT20090303ACL	
Undesireds:	K11BX-D	D11	LD	APP	SUTHERLIN, OR	K11BX-D corr	76.8 km
	KCBY-TV	D11	DT	LIC	COOS BAY, OR	BLCDT20090612AGE	106.7
	KPTV	D12	DT	LIC	PORTLAND, OR	BLANK0000107781	316.9
	KOTI	D13	DT	LIC	KLAMATH FALLS, OR	BLCDT20060525AHY	146.8
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
47902.7 520,085		39111.3 446,917		38960.4 445,311		38837.4 440,800	0.32 1.01

Undesired		Total IX	Unique IX, before	Unique IX, after
K11BX-D D11 LD APP	122.9	4,511		122.9 4,511
KCBY-TV D11 DT LIC	110.7	1,188	110.7 1,188	110.7 1,188
KPTV D12 DT LIC	17.2	418	17.2 418	17.2 418
KOTI D13 DT LIC	23.1	0	23.1 0	23.1 0

Table 1 K11BX-D TVStudy Analysis of Proposal
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Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K11BX-D	D11	LD	APP	SUTHERLIN, OR	K11BX-D corr	
Undesireds:	KCBY-TV	D11	DT	LIC	COOS BAY, OR	BLCDT20090612AGE	86.1 km
	K11KI-D	D11	LD	LIC	DORENA, ETC, OR	BLDTV20090330AAQ	42.5
	K11VI-D	D11	LD	LIC	ELKTON, OR	BLDTV20100618ARR	47.0
	K11GT-D	D11	LD	LIC	EUGENE, OR	BLANK0000087692	70.2
	K11SZ-D	D11	LD	LIC	OAKRIDGE, OR	BLDTV20120516ABV	69.6
	K11GH-D	D11	LD	LIC	TRI CITIES, ETC, OR	BLDTV20120621ABL	55.3
	KDRV	D12	DT	LIC	MEDFORD, OR	BLCDT20090303ACL	76.8

Service area		Terrain-limited		IX-free		Percent IX	
8503.6	94,747	7460.1	73,428	7339.9	73,270	1.61	0.22
Undesired		Total IX		Unique IX		Prct Unique IX	
KCBY-TV	D11 DT LIC	6.0	0	6.0	0	0.08	0.00
K11KI-D	D11 LD LIC	2.0	0	1.0	0	0.01	0.00
K11VI-D	D11 LD LIC	36.1	14	36.1	14	0.48	0.02
K11GT-D	D11 LD LIC	10.0	0	4.0	0	0.05	0.00
K11SZ-D	D11 LD LIC	3.0	0	2.0	0	0.03	0.00
K11GH-D	D11 LD LIC	67.1	144	48.1	144	0.64	0.20
KDRV	D12 DT LIC	18.9	0	2.0	0	0.03	0.00

Table 2 Interference Study Details Regarding K11VI-D
(page 1 of 1)



Existing Condition
Licensed K11BX-D Interference to K11VI-D: 3.37 percent

Study cell size: 1.00 km
Profile point spacing: 0.10 km

Interference to BLDTV20100618ARR LIC scenario 1

****IX: 3.37% interference caused**

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K11VI-D	D11	LD	LIC	ELKTON, OR	BLDTV20100618ARR	
Undesireds:	K11BX-D	D11	LD	LIC	SUTHERLIN, OR	BLDTV20100115AAA	48.0 km
	KCBY-TV	D11	DT	LIC	COOS BAY, OR	BLCDT20090612AGE	54.4
	K11KI-D	D11	LD	LIC	DORENA, ETC, OR	BLDTV20090330AAQ	57.0
	K11GT-D	D11	LD	LIC	EUGENE, OR	BLANK0000087692	54.1
	K11GH-D	D11	LD	LIC	TRI CITIES, ETC, OR	BLDTV20120621ABL	82.5
<hr/>							
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	1597.8	2,401	1500.1	2,175	1485.0	2,169	1456.8 2,096 1.90 3.37
<hr/>							
Undesired			Total IX	Unique IX, before		Unique IX, after	
K11BX-D D11 LD LIC			34.3	79		28.2	73
KCBY-TV D11 DT LIC			3.0	0		1.0	0
K11KI-D D11 LD LIC			8.1	6		2.0	0
K11GT-D D11 LD LIC			7.0	0		2.0	0
K11GH-D D11 LD LIC			1.0	0		1.0	0

Proposed Condition
Corrected K11BX-D Interference to K11VI-D: 3.37 percent

Study cell size: 1.00 km
Profile point spacing: 0.10 km

Interference to BLDTV20100618ARR LIC scenario 1

****IX: 3.37% interference caused**

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K11VI-D	D11	LD	LIC	ELKTON, OR	BLDTV20100618ARR	
Undesireds:	K11BX-D	D11	LD	APP	SUTHERLIN, OR	K11BX-D corr	47.0 km
	KCBY-TV	D11	DT	LIC	COOS BAY, OR	BLCDT20090612AGE	54.4
	K11KI-D	D11	LD	LIC	DORENA, ETC, OR	BLDTV20090330AAQ	57.0
	K11GT-D	D11	LD	LIC	EUGENE, OR	BLANK0000087692	54.1
	K11GH-D	D11	LD	LIC	TRI CITIES, ETC, OR	BLDTV20120621ABL	82.5
<hr/>							
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	1597.8	2,401	1500.1	2,175	1485.0	2,169	1448.7 2,096 2.45 3.37
<hr/>							
Undesired			Total IX	Unique IX, before		Unique IX, after	
K11BX-D D11 LD APP			42.4	79		36.4	73
KCBY-TV D11 DT LIC			3.0	0		1.0	0
K11KI-D D11 LD LIC			8.1	6		2.0	0
K11GT-D D11 LD LIC			7.0	0		2.0	0
K11GH-D D11 LD LIC			1.0	0		1.0	0

**Channel and
Facility
Information**

Section	Question	Response
Facility ID	34403	
State	Oregon	
City	SUTHERLIN	
LPT Channel	11	

Primary station proposed to be rebroadcast:

Facility Id	Call Sign	City	State
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**Antenna Location
Data**

Section	Question	Response
Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	No
	ASR Number	
Coordinates (NAD83)	Latitude	43° 22' 19.0" N+
	Longitude	123° 03' 52.4" W-
	Structure Type	LTOWER-Lattice Tower
	Overall Structure Height	12.2 meters
	Support Structure Height	12.2 meters
	Ground Elevation (AMSL)	1293.9 meters
Antenna Data	Height of Radiation Center Above Ground Level	11 meters
	Height of Radiation Center Above Mean Sea Level	1304.9 meters
	Effective Radiated Power	0.3 kW

**Antenna
Technical Data**

Section	Question	Response
Antenna Type	Antenna Type	Directional Custom
	Do you have an Antenna ID?	Yes
	Antenna ID	94700
Antenna Manufacturer and Model	Manufacturer:	SCA
	Model	CL-713 ARRAY
	Rotation	0 degrees
	Electrical Beam Tilt	Not Applicable
	Mechanical Beam Tilt	Not Applicable
	toward azimuth	
	Polarization	Horizontal
Elevation Radiation Pattern	Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?	No
	Uploaded file for elevation antenna (or radiation) pattern data	
	Out-of-Channel Emission Mask:	Stringent

Directional Antenna Relative Field Values (Pre-rotated Pattern)

Degree	Value	Degree	Value	Degree	Value	Degree	Value
0	0.049	90	0.381	180	0.82	270	1
10	0.049	100	0.619	190	0.937	280	0.951
20	0.049	110	0.82	200	0.99	290	0.82
30	0.049	120	0.951	210	0.937	300	0.619
40	0.049	130	1	220	0.82	310	0.381
50	0.053	140	0.937	230	0.933	320	0.068
60	0.053	150	0.82	240	0.933	330	0.049
70	0.049	160	0.933	250	0.82	340	0.053
80	0.068	170	0.933	260	0.937	350	0.053

Additional Azimuths

Degree	V _A
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