

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

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: K17KI_Ch18_12kw_Hgt_Omni_Pre, Model: Longley-Rice
Start: 2019.04.18 10:35:19

Study created: 2019.04.18 10:23:16

Study build station data: LMS TV 2019-04-18

Proposal: K17KI-D D18 LD APP YAKIMA, WA
File number: K17KI_Ch18_12kw_Hgt_Omni
Facility ID: 185740
Station data: User record
Record ID: 846
Country: U.S.

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

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	K17GK-D	D17	LD	LIC	ARLINGTON, OR	BLDTT20100910ADG	112.9 km
No	K17GV-D	D17	LD	LIC	Ranier, OR	BLANK0000049611	178.8
No	K17GV-D	N17-	TX	LIC	Ranier, OR	BLTT20070209ABT	178.8
No	K17IL-D	D17	LD	LIC	ELLENSBURG, ETC., WA	BLDTT20090506ACN	24.2
No	KELZ-LD	D17	LD	CP	PASCO, WA	BNPDTL20101001AAE	133.7
No	K49KV-D	D17	LD	CP	STEMILT, ECT, WA	BLANK0000054432	63.1
No	KCDT	D18	DT	CP	COEUR D'ALENE, ID	BLANK0000034666	317.3
No	K18DT-D	D18	LD	LIC	COEUR D'ALENE, ID	BLDTT20140609AAO	317.3
No	NEW	D18	LD	APP	COOLIN, ID	BNPDTT20130618ABX	349.1
No	K18LH-D	D18	LD	LIC	LEWISTON, ID	BLDTT20141016AAN	278.6
No	K18HQ-D	D18	LD	LIC	SANDPOINT, ID	BLDTL20111018AAI	347.2
No	K18KI-D	D18	LD	LIC	BAKER CITY, OR	BLDTT20120625ABH	326.6
No	KOHD	D18	DT	LIC	BEND, OR	BLANK0000002204	299.9
No	K18LR-D	D18	LD	LIC	COTTAGE GROVE, OR	BLANK0000066926	377.5
No	KCKW-LD	D18	LD	CP	EUGENE, OR	BNPDTL20101001AAH	358.7
No	K18EL-D	D18	LD	LIC	NEWBERG/TIGARD, OR	BLDTT20140521ACS	235.7
No	K18FR-D	D18	LD	LIC	NEWPORT, OR	BLDTT20100721FZO	342.1
No	K18LB-D	D18	LD	CP	PHILOMATH, OR	BNPDTL20100514AIQ	323.6
No	KTVC	D18	DT	APP	ROSEBURG, OR	BLANK0000036020	446.8
No	KTVC	D18	DT	LIC	ROSEBURG, OR	BLCDT20060721AAR	441.3
Yes	K18HH-D	D18	LD	LIC	THE DALLES, OR	BLDTT20120621ABT	118.9
No	K24IC-D	D18	LD	CP	BELLINGHAM, WA	BLANK0000054802	270.2
No	K18AD-D	D18	LD	LIC	EAST WENATCHEE, ETC., WA	BLDTT20100831ABA	63.1
Yes	KEPR-TV	D18	DT	APP	PASCO, WA	BLANK0000035749	133.7
Yes	KEPR-TV	D18	DT	LIC	PASCO, WA	BLCDT20140717ABN	133.7
No	K47LG-D	D18	LD	CP	POINT PULLEY, ETC., WA	BLANK0000054676	154.3
No	K49IX-D	D18	LD	CP	PUYALLUP, WA	BLANK0000054677	130.3
No	KIRO-TV	D18	LD	CP	SEATTLE, WA	BLANK0000054680	130.1
No	K19KP-D	D19	LD	LIC	HERMISTON, OR	BLANK0000055043	134.8
No	KBCB	D19	DT	APP	BELLINGHAM, WA	BLANK0000035650	270.2
No	KBCB	D19	DT	LIC	BELLINGHAM, WA	BLCDT20040128AKD	270.2
No	KCKA	D19	DT	APP	CENTRALIA, WA	BLANK0000035737	183.2
No	KCKA	D19	DT	LIC	CENTRALIA, WA	BLDTT20101217ABA	183.2
No	K44CK	D19	LD	CP	CHELAN, WA	BLANK0000053161	137.9
No	KUMN-LD	D19-	LD	CP	MOSES LAKE, ETC., WA	BLANK0000067753	92.5
No	KUMN-LD	D19-	LD	LIC	MOSES LAKE, ETC., WA	BLANK0000065435	73.4
Yes	K19JX-D	D19	LD	LIC	YAKIMA, WA	BLDTL20141016ADC	25.7

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D18
Mask: Full Service
Latitude: 46 44 8.90 N (NAD83)
Longitude: 120 40 17.40 W
Height AMSL: 653.2 m
HAAT: 0.0 m
Peak ERP: 12.1 kW
Antenna: Omnidirectional
Elev Pattn: Generic

49.1 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	12.1 kW	-168.2 m	30.2 km
45.0	12.1	-25.9	30.2
90.0	12.1	148.2	47.7
135.0	12.1	165.3	48.8
180.0	12.1	156.0	48.2
225.0	12.1	-5.7	30.2
270.0	12.1	-2.2	30.2
315.0	12.1	-496.2	30.2

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: -29 m

Proposal 24.15 dBu contour does not cross Canadian border

Distance to Canadian border: 251.7 km

Distance to Mexican border: 1595.8 km

Conditions at FCC monitoring station: Ferndale WA

Bearing: 331.0 degrees Distance: 283.9 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 115.0 degrees Distance: 1439.7 km

No land mobile station failures found

Proposal is not within the Offshore Radio Service protected area

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 BLDTT20120621ABT LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K18HH-D	D18	LD	LIC	THE DALLES, OR	BLDTT20120621ABT	
Undesireds:	K17KI-D	D18	LD	APP	YAKIMA, WA	K17KI_Ch18_12kw_Hgt_Om	118.9 km
	K17GV-D	D17	LD	LIC	Ranier, OR	BLANK0000049611	143.2
	KOHD	D18	DT	LIC	BEND, OR	BLANK0000002204	182.4
	KTVC	D18	DT	APP	ROSEBURG, OR	BLANK0000036020	331.8
	KEPR-TV	D18	DT	APP	PASCO, WA	BLANK0000035749	154.9
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
8429.8	67,540	7005.2	51,977	6680.3	51,893	6678.2 51,893	0.03 0.00
Undesired				Total IX	Unique IX, before	Unique IX, after	
K17KI-D	D18	LD	APP	4.1 0	2.0 0		
KOHD	D18	DT	LIC	25.3 11	13.2 0		
KEPR-TV	D18	DT	APP	311.8 84	299.7 73	298.7 73	

Interference to BLDTT20120621ABT LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K18HH-D	D18	LD	LIC	THE DALLES, OR	BLDTT20120621ABT	

Undesireds:	K17KI-D	D18	LD	APP	YAKIMA, WA	K17KI_Ch18_12kw_Hgt_Om	118.9	km
	K17GV-D	D17	LD	LIC	Ranier, OR	BLANK0000049611	143.2	
	KOHD	D18	DT	LIC	BEND, OR	BLANK0000002204	182.4	
	KTVC	D18	DT	APP	ROSEBURG, OR	BLANK00000036020	331.8	
	KEPR-TV	D18	DT	LIC	PASCO, WA	BLCDDT20140717ABN	154.9	

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
8429.8 67,540	7005.2 51,977	6834.1 51,929	6832.0 51,929	0.03 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
K17KI-D D18 LD APP 4.1	0		2.0 0
KOHD D18 DT LIC 25.3	11	14.2 0	14.2 0
KEPR-TV D18 DT LIC 157.0	48	145.9 37	144.9 37

Interference to BLANK0000035749 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KEPR-TV	D18	DT	APP	PASCO, WA	BLANK0000035749	
Undesireds:	K17KI-D	D18	LD	APP	YAKIMA, WA	K17KI_Ch18_12kw_Hgt_Om	133.7 km
	KCDT	D18	DT	CP	COEUR D'ALENE, ID	BLANK0000034666	260.6
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX			
25398.2 474,923	24505.9 463,485	24494.8 463,477	24438.2 463,401	0.23 0.02			

Undesired	Total IX	Unique IX, before	Unique IX, after
K17KI-D D18 LD APP 56.6	76		56.6 76
KCDT D18 DT CP 11.1	8	11.1 8	11.1 8

Interference to BLCDDT20140717ABN LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KEPR-TV	D18	DT	LIC	PASCO, WA	BLCDDT20140717ABN	
Undesireds:	K17KI-D	D18	LD	APP	YAKIMA, WA	K17KI_Ch18_12kw_Hgt_Om	133.7 km
	KCDT	D18	DT	CP	COEUR D'ALENE, ID	BLANK0000034666	260.6
	KOHD	D18	DT	LIC	BEND, OR	BLANK0000002204	280.4
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX			
21004.0 453,116	20127.4 432,600	20121.4 432,598	20108.3 431,801	0.07 0.18			

Undesired	Total IX	Unique IX, before	Unique IX, after
K17KI-D D18 LD APP 13.1	797		13.1 797
KCDT D18 DT CP 5.0	2	5.0 2	5.0 2
KOHD D18 DT LIC 1.0	0	1.0 0	1.0 0

Interference to BLDTL20141016ADC LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K19JX-D	D19	LD	LIC	YAKIMA, WA	BLDTL20141016ADC	
Undesireds:	K17KI-D	D18	LD	APP	YAKIMA, WA	K17KI_Ch18_12kw_Hgt_Om	25.7 km
	KEPR-TV	D18	DT	APP	PASCO, WA	BLANK0000035749	112.4
	K19KP-D	D19	LD	LIC	HERMISTON, OR	BLANK00000055043	111.9
	KBCB	D19	DT	APP	BELLINGHAM, WA	BLANK00000035650	295.7
	KCKA	D19	DT	APP	CENTRALIA, WA	BLANK00000035737	194.4
	KUMN-LD	D19-	LD	CP	MOSES LAKE, ETC., WA	BLANK00000067753	103.1
	K19KU-D	D19	LD	LIC	WALLA WALLA, WA	BLANK00000059178	190.0
	K20LQ-D	D20	LD	LIC	YAKIMA, WA	BLDTT20141016ADB	0.0
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX			
7782.2 232,015	6002.3 200,994	5401.3 166,143	5370.2 165,817	0.58 0.20			

Undesired	Total IX	Unique IX, before	Unique IX, after
K17KI-D D18 LD APP 31.1	326		31.1 326
K19KP-D D19 LD LIC 25.2	84	13.1 0	13.1 0
KCKA D19 DT APP 1.0	0	1.0 0	1.0 0
KUMN-LD D19- LD CP 9.1	0	7.1 0	7.1 0
K19KU-D D19 LD LIC 7.0	8	1.0 0	1.0 0
K20LQ-D D20 LD LIC 573.7	34,851	565.7 34,767	565.7 34,767

Interference to BLDTL20141016ADC LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K19JX-D	D19	LD	LIC	YAKIMA, WA	BLDTL20141016ADC	
Undesireds:	K17KI-D	D18	LD	APP	YAKIMA, WA	K17KI_Ch18_12kw_Hgt_Om	25.7 km
	KEPR-TV	D18	DT	APP	PASCO, WA	BLANK0000035749	112.4
	K19KP-D	D19	LD	LIC	HERMISTON, OR	BLANK0000055043	111.9
	KBCB	D19	DT	APP	BELLINGHAM, WA	BLANK0000035650	295.7
	KCKA	D19	DT	APP	CENTRALIA, WA	BLANK0000035737	194.4
	KUMN-LD	D19-	LD	LIC	MOSES LAKE, ETC., WA	BLANK0000065435	75.0
	K19KU-D	D19	LD	LIC	WALLA WALLA, WA	BLANK0000059178	190.0
	K20LQ-D	D20	LD	LIC	YAKIMA, WA	BLDTT20141016ADB	0.0
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
7782.2	232,015	6002.3	200,994	5407.4	166,143	5376.3 165,817	0.58 0.20

Undesired	Total IX		Unique IX, before		Unique IX, after	
K17KI-D D18 LD APP	31.1	326			31.1	326
K19KP-D D19 LD LIC	25.2	84	14.1	0	14.1	0
KCKA D19 DT APP	1.0	0	1.0	0	1.0	0
KUMN-LD D19- LD LIC	2.0	0	1.0	0	1.0	0
K19KU-D D19 LD LIC	7.0	8	1.0	0	1.0	0
K20LQ-D D20 LD LIC	573.7	34,851	565.7	34,767	565.7	34,767

Interference to BLDTL20141016ADC LIC scenario 3

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K19JX-D	D19	LD	LIC	YAKIMA, WA	BLDTL20141016ADC	
Undesireds:	K17KI-D	D18	LD	APP	YAKIMA, WA	K17KI_Ch18_12kw_Hgt_Om	25.7 km
	KEPR-TV	D18	DT	APP	PASCO, WA	BLANK0000035749	112.4
	K19KP-D	D19	LD	LIC	HERMISTON, OR	BLANK0000055043	111.9
	KBCB	D19	DT	APP	BELLINGHAM, WA	BLANK0000035650	295.7
	KUMN-LD	D19-	LD	CP	MOSES LAKE, ETC., WA	BLANK0000067753	103.1
	K19KU-D	D19	LD	LIC	WALLA WALLA, WA	BLANK0000059178	190.0
	K20LQ-D	D20	LD	LIC	YAKIMA, WA	BLDTT20141016ADB	0.0
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
7782.2	232,015	6002.3	200,994	5402.4	166,143	5371.2 165,817	0.58 0.20

Undesired	Total IX		Unique IX, before		Unique IX, after	
K17KI-D D18 LD APP	31.1	326			31.1	326
K19KP-D D19 LD LIC	25.2	84	13.1	0	13.1	0
KUMN-LD D19- LD CP	9.1	0	7.1	0	7.1	0
K19KU-D D19 LD LIC	7.0	8	1.0	0	1.0	0
K20LQ-D D20 LD LIC	573.7	34,851	565.7	34,767	565.7	34,767

Interference to BLDTL20141016ADC LIC scenario 4

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K19JX-D	D19	LD	LIC	YAKIMA, WA	BLDTL20141016ADC	
Undesireds:	K17KI-D	D18	LD	APP	YAKIMA, WA	K17KI_Ch18_12kw_Hgt_Om	25.7 km
	KEPR-TV	D18	DT	APP	PASCO, WA	BLANK0000035749	112.4
	K19KP-D	D19	LD	LIC	HERMISTON, OR	BLANK0000055043	111.9
	KBCB	D19	DT	APP	BELLINGHAM, WA	BLANK0000035650	295.7
	KUMN-LD	D19-	LD	LIC	MOSES LAKE, ETC., WA	BLANK0000065435	75.0
	K19KU-D	D19	LD	LIC	WALLA WALLA, WA	BLANK0000059178	190.0
	K20LQ-D	D20	LD	LIC	YAKIMA, WA	BLDTT20141016ADB	0.0
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
7782.2	232,015	6002.3	200,994	5408.4	166,143	5377.3 165,817	0.58 0.20

Undesired	Total IX		Unique IX, before		Unique IX, after	
K17KI-D D18 LD APP	31.1	326			31.1	326
K19KP-D D19 LD LIC	25.2	84	14.1	0	14.1	0
KUMN-LD D19- LD LIC	2.0	0	1.0	0	1.0	0
K19KU-D D19 LD LIC	7.0	8	1.0	0	1.0	0
K20LQ-D D20 LD LIC	573.7	34,851	565.7	34,767	565.7	34,767

Interference to proposal scenario 1
**MX: 25.82% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K17KI-D	D18	LD	APP	YAKIMA, WA	K17KI_Ch18_12kw_Hgt_Om	
Undesireds:	KEPR-TV	D18	DT	APP	PASCO, WA	BLANK0000035749	133.7 km
	KUMN-LD	D19-	LD	CP	MOSES LAKE, ETC., WA	BLANK0000067753	92.5
	K19JX-D	D19	LD	LIC	YAKIMA, WA	BLDTL20141016ADC	25.7

Service area	Terrain-limited	IX-free	Percent IX
4642.5 198,743	2760.7 114,709	2668.1 85,094	3.35 25.82
Undesired	Total IX	Unique IX	Prcnt Unique IX
KEPR-TV D18 DT APP	46.3 1,433	35.2 0	1.27 0.00
K19JX-D D19 LD LIC	57.4 29,615	46.3 28,182	1.68 24.57

Interference to proposal scenario 2
25.82% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K17KI-D	D18	LD	APP	YAKIMA, WA	K17KI_Ch18_12kw_Hgt_Om	
Undesireds:	KEPR-TV	D18	DT	LIC	PASCO, WA	BLCDT20140717ABN	133.7 km
	KUMN-LD	D19-	LD	CP	MOSES LAKE, ETC., WA	BLANK0000067753	92.5
	K19JX-D	D19	LD	LIC	YAKIMA, WA	BLDTL20141016ADC	25.7

Service area	Terrain-limited	IX-free	Percent IX
4642.5 198,743	2760.7 114,709	2678.1 85,094	2.99 25.82
Undesired	Total IX	Unique IX	Prcnt Unique IX
KEPR-TV D18 DT LIC	30.2 0	25.1 0	0.91 0.00
K19JX-D D19 LD LIC	57.4 29,615	52.4 29,615	1.90 25.82