

tvstudy v2.2.5 (4uoc83)  
Database: localhost, Study: K28QK\_MOD, Model: Longley-Rice  
Start: 2021.09.13 13:18:48

Study created: 2021.09.13 13:18:48

Study build station data: LMS TV 2021-09-12

Proposal: K28QK-D D28 LD APP PASCO, WA  
File number: K28QK\_MOD  
Facility ID: 188578  
Station data: User record  
Record ID: 739  
Country: U.S.

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

Search options:  
Non-U.S. records included  
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K14HT	N14	TX	LIC	WALLA WALLA, ETC., WA	BLTT19910213IG	64.8 km
No	DDK20ES	N20z	TX	APP	PENDLETON, ETC., OR	BLTT19960301JC	102.4
No	K21CC-D	N21	TX	LIC	LEWISTON, ID	BLTT19880525IL	156.6
No	DDK24DX	N24z	TX	APP	PENDLETON, ETC, OR	BLTT19960301JB	102.4
No	DK39DM	D27+	LD	APP	ELLENSBURG, WA	BLANK0000028952	138.2
Yes	KVEW	D27	DT	LIC	KENNEWICK, WA	BLANK0000063083	8.4
No	K27OX-D	D27	LD	CP	QUINCY, WA	BNPDTL20090825ALR	138.9
No	KYUU-LD	D28	LD	LIC	BOISE, ID	BLDTL20120906ABB	349.0
No	K28MQ-D	D28	LD	CP	MISSOULA, MT	BNPDTL20101014ABP	394.9
No	K28FP-D	D28	LD	LIC	ASTORIA, OR	BLANK0000073365	375.2
No	K28MH-D	D28	LD	CP	BEND, OR	BLANK0000068954	262.3
No	K28JC-D	D28	LD	LIC	ENTERPRISE, OR	BLDTT20110309AAH	149.9
No	KVAL-TV	D28	DT	CP	EUGENE, OR	BLANK0000156960	397.8
Yes	K28GD-D	D28	LD	LIC	HEPPNER, ETC., OR	BLDTT20111117ARH	102.4
No	K28CQ-D	D28	LD	LIC	HOOD RIVER, OR	BLDTT20120514ACX	201.7
Yes	K28NY-D	D28	LD	LIC	LA GRANDE, OR	BLANK0000067875	115.4
No	K28QR-D	D28	LD	LIC	LA PINE, OR	BLANK0000152575	333.0
No	K40MP-D	D28	LD	LIC	Madras, OR	BLANK0000063058	238.2
Yes	K28FT-D	D28	LD	LIC	MILTON-FREEWATER, OR	BLDTT20111206BCR	67.0
No	K28IH-D	D28	LD	LIC	RAINIER, OR	BLDTT20091103AAJ	294.7
Yes	K28KJ-D	D28	LD	LIC	CHELAN, WA	BLDTL20111012ABP	203.0
Yes	K28KJ-D	D28	LD	CP	CHELAN, WA	BMPDTT20101012ABD	203.0
No	K42IH-D	D28	LD	CP	EAST WENATCHEE, WA	BLANK0000054491	166.7
No	K28QG-D	D28	LD	CP	ELLENSBURG, WA	BNPDTL20090825AEW	150.3
No	KIRO-TV	D28	LD	LIC	SEATTLE, WA	BLCDT20100429ACW	362.0
Yes	KAYU-TV	D28	DT	LIC	SPOKANE, WA	BLCDT20091029ACN	209.2
Yes	K28KW-D	D28	LD	LIC	SUNNYSIDE, WA	BLDTL20130719ABV	81.3
No	KBTC-TV	D28	LD	LIC	TACOMA, WA	BLANK0000106274	300.0
No	KBTC-TV	D28	LD	APP	TACOMA, WA	BLANK0000111588	300.0
Yes	NEW	D28	LD	CP	YAKIMA, WA	BNPDTL20090825AMW	123.4
No	K29EL-D	D29	LD	LIC	LA GRANDE, OR	BLDTT20120625ABJ	134.5
No	K29EG-D	D29	LD	LIC	MILTON, ETC, OR	BLDTT20101122AJO	67.0
No	K29NO-D	D29	LD	LIC	THE DALLES, OR	BLANK0000068895	167.8
No	NEW	D29	LD	APP	ELLENSBURG, WA	BNPDTL20090825AEN	150.3
No	NEW	D29	LD	APP	ELLESNBURG, WA	BNPDTL20090825AKK	134.0
Yes	KRLB-LD	D29	LD	CP	RICHLAND, ETC, WA	BLANK0000029420	26.3
No	K29NM-D	D29	LD	LIC	SPOKANE, WA	BLANK0000065361	209.1
No	KCYU-LD	D29	LD	LIC	YAKIMA, WA	BLANK0000072828	123.3
No	CIVI-DT	D28	DT	LIC	VICTORIA, BC	BLANKCANADA102	414.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D28  
 Mask: Full Service  
 Latitude: 46 6 54.60 N (NAD83)  
 Longitude: 119 1 35.10 W  
 Height AMSL: 412.4 m  
 HAAT: 0.0 m  
 Peak ERP: 15.0 kW  
 Antenna: KAT 2x2 750 0000044 310.0 deg  
 Elev Pattn: Generic  
 Elec Tilt: 0.40

50.1 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	294.0 m	56.1 km
45.0	1.98	277.9	44.5
90.0	0.178	263.3	31.0
135.0	0.156	147.2	24.2
180.0	0.106	45.1	12.2
225.0	4.17	-30.2	24.4
270.0	13.6	14.1	29.7
315.0	10.6	258.8	52.3

Database HAAT does not agree with computed HAAT  
 Database HAAT: 0 m Computed HAAT: 159 m

Distance to Canadian border: 320.7 km

Distance to Mexican border: 1509.3 km

Conditions at FCC monitoring station: Ferndale WA  
 Bearing: 321.3 degrees Distance: 412.0 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
 Bearing: 115.8 degrees Distance: 1296.3 km

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

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

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Interference to BLANK0000063083 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KVEW	D27	DT	LIC	KENNEWICK, WA	BLANK0000063083	
Undesireds:	K28QK-D	D28	LD	APP	PASCO, WA	K28QK_MOD	8.4 km
	KNDU	D26	DT	LIC	RICHLAND, WA	BLCDT20091007ACO	0.2
	K27DX-D	D27	DC	LIC	MCCALL, ID	BLDTA20140915ACG	272.9
	KBTC-TV	D27	DT	CP	TACOMA, WA	BLANK0000035735	288.9
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
26813.3	476,834	25539.8	464,866	25477.3	464,810	25466.2 464,357	0.04 0.10
Undesired		Total IX		Unique IX, before		Unique IX, after	
K28QK-D	D28 LD APP	11.1	453	11.1	453		
KNDU	D26 DT LIC	61.6	56	61.6	56		
K27DX-D	D27 DC LIC	1.0	0	1.0	0		

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Interference to BLDTT2011117ARH LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K28GD-D	D28	LD	LIC	HEPPNER, ETC., OR	BLDTT2011117ARH	
Undesireds:	K28QK-D	D28	LD	APP	PASCO, WA	K28QK_MOD	102.4 km

KVEW	D27	DT	LIC	KENNEWICK, WA	BLANK0000063083	99.8
K28CQ-D	D28	LD	LIC	HOOD RIVER, OR	BLDTT20120514ACX	187.5
K28NY-D	D28	LD	LIC	LA GRANDE, OR	BLANK0000067875	112.1
K28FT-D	D28	LD	LIC	MILTON-FREEWATER, OR	BLDTT20111206BCR	105.9
K28KJ-D	D28	LD	LIC	CHELAN, WA	BLDTL20111012ABP	293.9
KAYU-TV	D28	DT	LIC	SPOKANE, WA	BLCDT20091029ACN	304.3
KBTC-TV	D28	LD	LIC	TACOMA, WA	BLANK0000106274	353.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
6622.5	5,292	5639.9	3,607	5479.3
				3,298
				5477.3
				3,298
				0.04
				0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
K28QK-D D28 LD APP	10.1	1	2.0
KVEW D27 DT LIC	72.2	17	29.1
K28CQ-D D28 LD LIC	1.0	0	1.0
K28NY-D D28 LD LIC	4.0	0	4.0
K28FT-D D28 LD LIC	103.4	14	67.3
KAYU-TV D28 DT LIC	44.2	296	11.1
		291	9.0
			291

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Interference to BLANK0000067875 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K28NY-D	D28	LD	LIC	LA GRANDE, OR	BLANK0000067875	
Undesireds:	K28QK-D	D28	LD	APP	PASCO, WA	K28QK_MOD	115.4 km
	KYUU-LD	D28	LD	LIC	BOISE, ID	BLDTL20120906ABB	234.9
	K28JC-D	D28	LD	LIC	ENTERPRISE, OR	BLDTT20110309AAH	40.0
	K28GD-D	D28	LD	LIC	HEPPNER, ETC., OR	BLDTT20111117ARH	112.1
	K28KJ-D	D28	LD	LIC	CHELAN, WA	BLDTL20111012ABP	309.8
	KAYU-TV	D28	DT	LIC	SPOKANE, WA	BLCDT20091029ACN	242.4
	K29EL-D	D29	LD	LIC	LA GRANDE, OR	BLDTT20120625ABJ	19.1

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
5071.2	25,774	3772.0	25,069	3676.6
				25,053
				3676.6
				25,053
				0.00
				0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
K28QK-D D28 LD APP	1.0	0	0.0
KYUU-LD D28 LD LIC	1.0	0	1.0
K28JC-D D28 LD LIC	57.0	16	51.0
K28GD-D D28 LD LIC	8.1	0	5.0
KAYU-TV D28 DT LIC	7.1	0	3.0
K29EL-D D29 LD LIC	35.2	0	24.2
		0	24.2
			0

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Interference to BLDTT20111206BCR LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K28FT-D	D28	LD	LIC	MILTON-FREEWATER, OR	BLDTT20111206BCR	
Undesireds:	K28QK-D	D28	LD	APP	PASCO, WA	K28QK_MOD	67.0 km
	KVEW	D27	DT	LIC	KENNEWICK, WA	BLANK0000063083	73.8
	K28GD-D	D28	LD	LIC	HEPPNER, ETC., OR	BLDTT20111117ARH	105.9
	K28KJ-D	D28	LD	LIC	CHELAN, WA	BLDTL20111012ABP	257.7
	KAYU-TV	D28	DT	LIC	SPOKANE, WA	BLCDT20091029ACN	207.6

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
2555.8	66,740	2265.1	65,590	1924.8
				64,611
				1910.6
				64,588
				0.74
				0.04

Undesired	Total IX	Unique IX, before	Unique IX, after
K28QK-D D28 LD APP	54.8	53	14.2
KVEW D27 DT LIC	24.3	19	3.0
K28GD-D D28 LD LIC	320.1	975	287.9
KAYU-TV D28 DT LIC	42.4	15	13.1
		0	10.1
			0

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Interference to BLDTL20111012ABP LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K28KJ-D	D28	LD	LIC	CHELAN, WA	BLDTL20111012ABP	

Undesireds:	K28QK-D	D28	LD	APP	PASCO, WA	K28QK_MOD	203.0 km
	KAYU-TV	D28	DT	LIC	SPOKANE, WA	BLCDT20091029ACN	206.3
	KBTC-TV	D28	LD	LIC	TACOMA, WA	BLANK0000106274	171.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
3984.7	22,918	2639.2	14,717	0.04

Undesired	Total IX	Unique IX, before	Unique IX, after
K28QK-D D28 LD APP	2.0	0	1.0
KAYU-TV D28 DT LIC	97.6	4	96.6

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Interference to BMPDTT20101012ABD CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K28KJ-D	D28	LD	CP	CHELAN, WA	BMPDTT20101012ABD	

Undesireds:	K28QK-D	D28	LD	APP	PASCO, WA	K28QK_MOD	203.0 km
	KAYU-TV	D28	DT	LIC	SPOKANE, WA	BLCDT20091029ACN	206.3
	KBTC-TV	D28	LD	LIC	TACOMA, WA	BLANK0000106274	171.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
3984.7	22,918	2633.2	14,190	0.04

Undesired	Total IX	Unique IX, before	Unique IX, after
K28QK-D D28 LD APP	2.0	0	1.0
KAYU-TV D28 DT LIC	97.6	4	96.6

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Interference to BLCDT20091029ACN LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KAYU-TV	D28	DT	LIC	SPOKANE, WA	BLCDT20091029ACN	

Undesireds:	K28QK-D	D28	LD	APP	PASCO, WA	K28QK_MOD	209.2 km
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Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
41542.3	809,907	34655.6	749,718	0.08

Undesired	Total IX	Unique IX, before	Unique IX, after
K28QK-D D28 LD APP	29.2	4	29.2

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Interference to BLDTL20130719ABV LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K28KW-D	D28	LD	LIC	SUNNYSIDE, WA	BLDTL20130719ABV	

Undesireds:	K28QK-D	D28	LD	APP	PASCO, WA	K28QK_MOD	81.3 km
	K28GD-D	D28	LD	LIC	HEPPNER, ETC., OR	BLDTT20111117ARH	136.8
	K28KJ-D	D28	LD	LIC	CHELAN, WA	BLDTL20111012ABP	164.2
	KAYU-TV	D28	DT	LIC	SPOKANE, WA	BLCDT20091029ACN	249.9
	KBTC-TV	D28	LD	LIC	TACOMA, WA	BLANK0000106274	223.8
	NEW	D28	LD	CP	YAKIMA, WA	BNPDTL20090825AMW	43.0
	KCYU-LD	D29	LD	LIC	YAKIMA, WA	BLANK0000072828	42.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
1087.5	87,417	992.3	86,710	0.10

Undesired	Total IX	Unique IX, before	Unique IX, after
K28QK-D D28 LD APP	2.0	15	1.0
K28GD-D D28 LD LIC	2.0	17	2.0
KAYU-TV D28 DT LIC	1.0	0	1.0
NEW D28 LD CP	1.0	3	0.0
KCYU-LD D29 LD LIC	1.0	2	1.0

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Interference to BNPDTL20090825AMW CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	NEW	D28	LD	CP	YAKIMA, WA	BNPDTL20090825AMW	

Undesireds:	K28QK-D	D28	LD	APP	PASCO, WA	K28QK_MOD	123.4 km
	DK39DM	D27+	LD	APP	ELLENSBURG, WA	BLANK0000028952	40.3
	K28GD-D	D28	LD	LIC	HEPPNER, ETC., OR	BLDTT20111117ARH	174.2
	K28FT-D	D28	LD	LIC	MILTON-FREEWATER, OR	BLDTT20111206BCR	190.2
	K28KJ-D	D28	LD	LIC	CHELAN, WA	BLDTL20111012ABP	146.8
	K28QG-D	D28	LD	CP	ELLENSBURG, WA	BNPDTL20090825AEW	52.2
	KAYU-TV	D28	DT	LIC	SPOKANE, WA	BLCDT20091029ACN	270.4
	K28KW-D	D28	LD	LIC	SUNNYSIDE, WA	BLDTL20130719ABV	43.0
	KBTC-TV	D28	LD	LIC	TACOMA, WA	BLANK0000106274	181.5
	KCYU-LD	D29	LD	LIC	YAKIMA, WA	BLANK0000072828	0.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
2195.6	152,145	1648.1	142,580	0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
K28QK-D D28 LD APP	17.1	123	0.0
DK39DM D27+ LD APP	5.0	0	4.0
K28GD-D D28 LD LIC	24.1	6	13.0
K28FT-D D28 LD LIC	11.1	0	0.0
K28QG-D D28 LD CP	11.0	0	11.0
KAYU-TV D28 DT LIC	7.0	123	1.0
K28KW-D D28 LD LIC	214.3	1,638	115.5
KCYU-LD D29 LD LIC	139.0	4,932	51.3

Interference to BLANK0000029420 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KRLB-LD	D29	LD	CP	RICHLAND, ETC, WA	BLANK0000029420	
Undesireds:	K28QK-D	D28	LD	APP	PASCO, WA	K28QK_MOD	26.3 km
	K28KW-D	D28	LD	LIC	SUNNYSIDE, WA	BLDTL20130719ABV	56.0
	K29EL-D	D29	LD	LIC	LA GRANDE, OR	BLDTT20120625ABJ	160.4
	K29EG-D	D29	LD	LIC	MILTON, ETC, OR	BLDTT20101122AJO	93.3
	KCYU-LD	D29	LD	LIC	YAKIMA, WA	BLANK0000072828	97.2
	K30QM-D	D30	LD	CP	KENNEWICK, WA	BLANK0000071872	11.6
	KUNW-CD	D30	DC	LIC	YAKIMA, WA	BLDTL20090923ACQ	96.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
4755.6	242,647	4326.0	235,690	0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
K28QK-D D28 LD APP	4.1	125	0.0
K28KW-D D28 LD LIC	5.1	9	0.0
K29EL-D D29 LD LIC	3.0	0	0.0
K29EG-D D29 LD LIC	288.8	691	239.2
KCYU-LD D29 LD LIC	84.0	144	38.5
K30QM-D D30 LD CP	78.1	1,360	60.8
KUNW-CD D30 DC LIC	11.1	21	0.0

Interference to proposal scenario 1  
2.89% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K28QK-D	D28	LD	APP	PASCO, WA	K28QK_MOD	
Undesireds:	KVEW	D27	DT	LIC	KENNEWICK, WA	BLANK0000063083	8.4 km
	K28GD-D	D28	LD	LIC	HEPPNER, ETC., OR	BLDTT20111117ARH	102.4
	K28NY-D	D28	LD	LIC	LA GRANDE, OR	BLANK0000067875	115.4
	K28FT-D	D28	LD	LIC	MILTON-FREEWATER, OR	BLDTT20111206BCR	67.0
	K28KJ-D	D28	LD	LIC	CHELAN, WA	BLDTL20111012ABP	203.0
	KAYU-TV	D28	DT	LIC	SPOKANE, WA	BLCDT20091029ACN	209.2
	K28KW-D	D28	LD	LIC	SUNNYSIDE, WA	BLDTL20130719ABV	81.3
	KBTC-TV	D28	LD	LIC	TACOMA, WA	BLANK0000106274	300.0
	K29EG-D	D29	LD	LIC	MILTON, ETC, OR	BLDTT20101122AJO	67.0
	KRLB-LD	D29	LD	CP	RICHLAND, ETC, WA	BLANK0000029420	26.3

Service area	Terrain-limited	IX-free	Percent IX
4358.7	237,549	224,254	2.89

Undesired		Total IX		Unique IX	Prct Unique IX	
KVEW D27 DT LIC	541.3	3,841	104.4	2,077	2.75	0.90
K28GD-D D28 LD LIC	527.1	956	206.9	223	5.44	0.10
K28NY-D D28 LD LIC	1.0	0	0.0	0	0.00	0.00
K28FT-D D28 LD LIC	341.0	1,439	43.5	58	1.14	0.03
KAYU-TV D28 DT LIC	68.8	207	1.0	0	0.03	0.00
K28KW-D D28 LD LIC	2.0	0	0.0	0	0.00	0.00
K29EG-D D29 LD LIC	5.1	0	0.0	0	0.00	0.00
KRLB-LD D29 LD CP	328.0	3,648	74.7	1,416	1.97	0.61