



# KBOI-TV - BOISE, IDAHO NOVEMBER 2023 APPENDIX B 625 kW - Channel 20 Longley-Rice Interference Analysis

tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: KBOI-TV\_AP Comm Ant 2241C 625K, Model: Longley-Rice  
Start: 2023.11.10 09:24:42

Study created: 2023.11.10 09:24:42

Study build station data: LMS TV 2023-11-09

Proposal: KBOI-TV D20 DT APP BOISE, ID  
File number: KBOI-TV\_AP Comm Ant 2241C 625K  
Facility ID: 49760  
Station data: User record  
Record ID: 224  
Country: U.S.  
Zone: II

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
Yes	950306KF	D20	DT	BL	IDAHO FALLS, ID	DTVBL41238	327.7 km
Yes	KTVM-TV	D20	DT	CP	BUTTE, MT	BLANK0000157471	381.5
No	KECI-TV	D20	DT	CP	MISSOULA, MT	BLANK0000156965	397.4
Yes	KENV-DT	D20	DT	CP	ELKO, NV	BLANK0000219148	340.1
No	KTMW	D20	DT	LIC	SALT LAKE CITY, UT	BLCDT20140529AJC	470.9
No	KREM	D20	DT	LIC	SPOKANE, WA	BLCDT20050623ABG	436.7
Yes	KAID	D21	DD	LIC	BOISE, ID	BLEDT20120719ABH	0.0

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D20  
Latitude: 43 45 20.80 N (NAD83)  
Longitude: 116 5 57.00 W  
Height AMSL: 2241.0 m  
HAAT: 859.0 m  
Peak ERP: 625 kW  
Antenna: DIE TFU-32GTQ-VP-R 08 BB 0.0 deg  
Elev Pattn: Generic  
Elec Tilt: 1.50

39.4 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	529 kW	662.8 m	121.4 km
45.0	537	689.3	122.9
90.0	529	903.2	131.0

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135.0	537	865.9	129.9
180.0	529	700.9	123.3
225.0	537	1081.5	138.9
270.0	529	1002.4	135.2
315.0	537	954.7	133.3

Database HAAT does not agree with computed HAAT  
 Database HAAT: 859 m    Computed HAAT: 858 m

ERP exceeds maximum  
 ERP: 625 kW    ERP maximum: 177 kW

Distance to Canadian border: 583.0 km

Distance to Mexican border: 1232.5 km

Conditions at FCC monitoring station: Ferndale WA  
 Bearing: 321.7 degrees    Distance: 760.6 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
 Bearing: 110.4 degrees    Distance: 980.9 km

No land mobile station failures found

Study cell size: 2.00 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 DTVBL41238 BL scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	950306KF	D20	DT	BL	IDAHO FALLS, ID	DTVBL41238	
Undesireds:	KBOI-TV	D20	DT	BL	BOISE, ID	DTVBL49760	327.7 km
	KBOI-TV	D20	DT	APP	BOISE, ID	KBOI-TV_AP Comm Ant 22	327.7
	KTVM-TV	D20	DT	CP	BUTTE, MT	BLANK0000157471	281.1
	KTMW	D20	DT	LIC	SALT LAKE CITY, UT	BLCDT20140529AJC	316.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
35768.9	351,919	30368.4	312,209	30216.1	312,108	30216.1    312,108	0.00    0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
KBOI-TV	D20 DT BL	7.9	0	7.9	0		
KBOI-TV	D20 DT APP	11.9	0	7.9	0		
KTVM-TV	D20 DT CP	112.3	92	112.3	92	112.3    92	
KTMW	D20 DT LIC	32.0	9	32.0	9	28.0    9	

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 Interference to BLANK0000157471 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KTVM-TV	D20	DT	CP	BUTTE, MT	BLANK0000157471	
Undesireds:	KBOI-TV	D20	DT	BL	BOISE, ID	DTVBL49760	381.5 km
	KBOI-TV	D20	DT	APP	BOISE, ID	KBOI-TV_AP Comm Ant 22	381.5
	950306KF	D20	DT	BL	IDAHO FALLS, ID	DTVBL41238	281.1
	KTVQ	D20	DT	CP	BILLINGS, MT	BLANK0000190318	309.4
	KECI-TV	D21	DT	APP	MISSOULA, MT	BLANK0000219405	164.5
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
47272.5	251,480	33362.0	179,125	33097.5	179,027	33097.5    179,027	0.00    0.00

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Undesired		Total IX	Unique IX, before	Unique IX, after
KBOI-TV D20 DT BL	24.0	0	4.0	0
KBOI-TV D20 DT APP	12.0	0		4.0
950306KF D20 DT BL	152.4	0	128.4	140.3
KTVQ D20 DT CP	52.1	61	48.0	48.0
KECI-TV D21 DT APP	60.1	37	60.1	37

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Interference to BLANK0000157471 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KTVM-TV	D20	DT	CP	BUTTE, MT	BLANK0000157471	
Undesireds:	KBOI-TV	D20	DT	BL	BOISE, ID	DTVBL49760	381.5 km
	KBOI-TV	D20	DT	APP	BOISE, ID	KBOI-TV_AP Comm Ant 22	381.5
	950306KF	D20	DT	BL	IDAHO FALLS, ID	DTVBL41238	281.1
	KTVQ	D20	DT	CP	BILLINGS, MT	BLANK0000190318	309.4
	KECI-TV	D20	DT	CP	MISSOULA, MT	BLANK0000156965	164.5
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
	47272.5	251,480	33362.0	179,125	31733.5	177,380	0.00 0.00
Undesired		Total IX	Unique IX, before	Unique IX, after			
KBOI-TV D20 DT BL	24.0	0	0.0	0			
KBOI-TV D20 DT APP	12.0	0		0.0		0	
950306KF D20 DT BL	152.4	0	68.1	0		72.1	0
KTVQ D20 DT CP	52.1	61	20.1	0		20.1	0
KECI-TV D20 DT CP	1532.4	1,745	1424.1	1,684		1424.1	1,684

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Interference to BLANK0000219148 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KENV-DT	D20	DT	CP	ELKO, NV	BLANK0000219148	
Undesireds:	KBOI-TV	D20	DT	BL	BOISE, ID	DTVBL49760	340.1 km
	KBOI-TV	D20	DT	APP	BOISE, ID	KBOI-TV_AP Comm Ant 22	340.1
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
	30191.5	47,372	19981.5	42,221	19848.0	42,221	-0.08 0.00
Undesired		Total IX	Unique IX, before	Unique IX, after			
KBOI-TV D20 DT BL	133.5	0	133.5	0			
KBOI-TV D20 DT APP	117.3	0		117.3		0	

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Interference to BLEDT20120719ABH LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KAID	D21	DD	LIC	BOISE, ID	BLEDT20120719ABH	
Undesireds:	KBOI-TV	D20	DT	BL	BOISE, ID	DTVBL49760	0.0 km
	KBOI-TV	D20	DT	APP	BOISE, ID	KBOI-TV_AP Comm Ant 22	0.0
	KIPT	D22	DD	LIC	TWIN FALLS, ID	BLEDT20120808ABN	177.8
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
	42440.6	711,035	35133.8	702,721	34595.9	702,366	-0.05 0.00
Undesired		Total IX	Unique IX, before	Unique IX, after			
KBOI-TV D20 DT BL	510.1	353	510.1	353			
KBOI-TV D20 DT APP	494.1	353		494.1		353	
KIPT D22 DD LIC	27.8	2	27.8	2		27.8	2

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Interference to proposal scenario 1

Desired:	Call KBOI-TV	Chan D20	Svc DT	Status APP	City, State BOISE, ID	File Number KBOI-TV_AP Comm Ant 22	Distance
Undesireds:	950306KF	D20	DT	BL	IDAHO FALLS, ID	DTVBL41238	327.7 km
	KENV-DT	D20	DT	CP	ELKO, NV	BLANK0000219148	340.1
	KAID	D21	DD	LIC	BOISE, ID	BLEDT20120719ABH	0.0
Service area		Terrain-limited		IX-free		Percent IX	
53285.6	716,094	44553.0		707,560	44357.6	707,536	0.44 0.00
Undesired		Total IX		Unique IX		Prct Unique IX	
950306KF	D20 DT BL	139.4		22	139.4	22	0.31 0.00
KENV-DT	D20 DT CP	48.1		2	48.1	2	0.11 0.00
KAID	D21 DD LIC	8.0		0	8.0	0	0.02 0.00