



KECI-TV - MISSOULA, MONTANA **NOVEMBER 2020** **APPENDIX B** **Longley-Rice Interference Analysis**

tvstudy v2.2.5 (4uoc83)
 Database: localhost, Study: KECI AP 20 925KW OMNI 610H, Model: Longley-Rice
 Start: 2020.11.19 11:06:31

Study created: 2020.11.19 11:06:30

Study build station data: LMS TV 2020-11-19

Proposal: KECI-TV D20 DT APP MISSOULA, MT
 File number: KECI AP 20 925KW OMNI 610H
 Facility ID: 18084
 Station data: User record
 Record ID: 1348
 Country: U.S.
 Zone: II

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	KWYB	D19	DT	LIC	BUTTE, MT	BLCDT20080424ABB	164.6 km
Yes	KREM	D20	DT	LIC	SPOKANE, WA	BLCDT20050623ABG	255.8
No	KUGF-TV	D21	DT	LIC	GREAT FALLS, MT	BLEDT20101008ACG	213.7
No	CJIL-TV-1	D20	DT	LIC	BOW ISLAND, AB	BLANKCANADA4	366.0
No	CKAL-DT	D20	DT	LIC	CALGARY, AB	BLANKCANADA13	451.0

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: 47 1 4.00 N (NAD83)
 Longitude: 114 0 50.00 W
 Height AMSL: 2152.0 m
 HAAT: 610.0 m
 Peak ERP: 925 kW
 Antenna: Omnidirectional
 Elev Pattn: Generic
 Elec Tilt: 1.00

39.4 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	925 kW	816.5 m	134.2 km
45.0	925	3.2	59.0
90.0	925	209.8	87.0
135.0	925	578.7	122.3
180.0	925	1016.3	143.3
225.0	925	1052.2	144.7
270.0	925	852.6	135.7
315.0	925	686.8	128.6

Database HAAT does not agree with computed HAAT

Appendix B - Interference Analysis **KECI-TV - Missoula Montana** **Channel 20- 925kW - Page 2**

Database HAAT: 610 m Computed HAAT: 652 m

ERP exceeds maximum

ERP: 925 kW ERP maximum: 282 kW

****Proposal is within coordination distance of Canadian border**

Distance to Canadian border: 220.2 km

Distance to Mexican border: 1590.5 km

Conditions at FCC monitoring station: Ferndale WA

Bearing: 291.9 degrees Distance: 670.5 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 134.2 degrees Distance: 1037.8 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%

----- Interference to BLCDT20080424ABB LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KWYB	D19	DT	LIC	BUTTE, MT	BLCDT20080424ABB	
Undesireds:	KECI-TV	D20	DT	APP	MISSOULA, MT	KECI AP 20 925KW OMNI	164.6 km
	Service area			Terrain-limited	IX-free, before	IX-free, after	Percent New IX
	24693.1	86,495	15189.5	69,598	15189.5	69,598	0.03 0.00
Undesired				Total IX	Unique IX, before	Unique IX, after	
KECI-TV D20 DT APP		4.0		0		4.0 0	

----- Interference to BLCDT20050623ABG LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KREM	D20	DT	LIC	SPOKANE, WA	BLCDT20050623ABG	
Undesireds:	KECI-TV	D20	DT	APP	MISSOULA, MT	KECI AP 20 925KW OMNI	255.8 km
	K21JQ-D	D21	DC	LIC	WALLA WALLA, WA	BLDTA20090721ABT	190.6
	Service area			Terrain-limited	IX-free, before	IX-free, after	Percent New IX
	44728.6	817,619	37775.6	752,113	37731.7	752,113	0.28 0.38
Undesired				Total IX	Unique IX, before	Unique IX, after	
KECI-TV D20 DT APP		104.2		2,831		104.2 2,831	
K21JQ-D D21 DC LIC		43.9		0	43.9	0	

----- Interference to proposal scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KECI-TV	D20	DT	APP	MISSOULA, MT	KECI AP 20 925KW OMNI	
Undesireds:	KWYB	D19	DT	LIC	BUTTE, MT	BLCDT20080424ABB	164.6 km
	KREM	D20	DT	LIC	SPOKANE, WA	BLCDT20050623ABG	255.8
	Service area			Terrain-limited	IX-free	Percent IX	
	48108.7	228,116	38616.5	196,148	38424.0	196,134	0.50 0.01

Appendix B - Interference Analysis
KECI-TV - Missoula Montana
Channel 20- 925kW - Page 3

Undesired		Total	IX		Unique	IX	Prcnt	Unique	IX
KWYB D19 DT LIC	12.1		14	12.1	14		0.03	0.01	
KREM D20 DT LIC	180.4		0	180.4	0		0.47	0.00	