Minor Change Expanded Technical Facility Application

This application is filed in response to the Media Bureau temporarily lifting the freeze imposed on April 5, 2013 on the filing and processing of minor modification applications that would increase a full power television station's noise-limited contour or a Class A station's protected contour in one or more directions beyond the station's authorized facilities.[1] The instant proposal, a minor change under the Commission's rules, expands the present technical facility of a television station that was not assigned a new channel in connection with the incentive auction repack process.

Post-Transition DTV Allocation Considerations

A study was performed using the FCC's software program, *tvstudy, v.2.2.4*, to ensure that the technical facility proposed herein protects the facilities proposed in the first and second priority filing window, whether those stations' applications have been granted or remain pending while protecting the construction permit facilities of reassigned stations and band changing stations filed in the initial 90-day filing window, whether those stations' applications have been granted or remain pending. Further, the instant proposal protects the facilities specified in applications filed before the April 2013 freeze with "cut-off" protection.

As demonstrated in the attached study results, the instant proposal is predicted to cause no new interference exceeding 0.5% to the populations served by any of the

[1] See *Media Bureau Temporarily Lifts the Freeze On The Filing Of Minor Modification Applications That Expand The Contour Of Full Power And Class A Television Stations,* Public Notice, DA 17-1086, Released November 6, 2017.

relevant protections discussed above. Accordingly, the instant proposal satisfies all applicable DTV interference criteria.

International DTV Considerations

As shown in the attached study, the transmitter site specified herein not within 320 kilometers of either the common border between the United States of America and Canada or between the USA and Mexico. Therefore, international notification and coordination of the instant proposal is not required.

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tvstudy v2.2.4 (Z2Qqz3)
Database: localhost, Study: KORX-CD 16 OMNI 4KW 171125, Model: Longley-Rice
Start: 2017.11.25 13:18:54

Study created: 2017.11.25 13:18:54

Study build station data: LMS TV 2017-11-22 (39)

    Proposal: KORX-CD D16 DC APP WALLA WALLA, WA
 File number: KORX-CD 16 OMNI 4KW 171125
 Facility ID: 71072
Station data: User record
   Record ID: 2497
     Country: U.S.

Build options:
Protect LPTV records from Class A

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	18.4 km
Yes	KVVK-CD	D15	DC	LIC	KENNEWICK, ETC., WA	BLDTA20100125ACB	79.9
Yes	KHQ-TV	D15	DT	LIC	SPOKANE, WA	BLCDT20100406AAP	189.5
No	K15KC-D	D15	LD	CP	YAKIMA, WA	BNPDTL20100422ADC	190.1
No	KKIC-LD	D16	LD	LIC	BOISE, ID	BLANK0000016312	296.4
No	KKIC-LD	N16-	TX	LIC	BOISE, ID	BLTTL20060419AAE	296.4
No	K16KN-D	D16	LD	CP	MISSOULA, MT	BNPDTL20101019ABS	335.6
No	K16GJ-D	D16	LD	LIC	POLSON, MT	BLDTT20090723ADB	359.4
No	K16KZ-D	D16	LD	CP	QUARTZ CREEK, ETC, MT	BLANK0000021215	337.9
No	K16KI-D	D16	LD	CP	BEND, OR	BNPDTL20100716ACW	326.6
No	KOAB-TV	D16	LD	LIC	BEND, OR	BLEDT20120427AAO	280.8
Yes	KUNP	D16	DT	LIC	LA GRANDE, OR	BLANK0000001679	82.4
Yes	K49MI-D	D16	LD	APP	PENDLETON, OR	BLANK0000029567	122.5
No	KORS-CD	D16	DC	LIC	PORTLAND, OR	BLDTA20100517ABN	358.6
No	K16EM-D	D16	LD	LIC	PRINEVILLE, ETC., OR	BLDTT20091124AHA	277.7
Yes	K16HP-D	D16	LD	LIC	EAST WENATCHEE, WA	BLDTT20101124AHH	217.0
No	KFFV	D16	DT	CP	SEATTLE, WA	BLANK0000027889	363.3
No	KFFV	D16	DT	APP	SEATTLE, WA	BLANK0000034504	363.3
No	KBTC-TV	D16	LD	LIC	TACOMA, WA	BLEDT20130726ADF	363.3
Yes	KNDO	D16	DT	LIC	YAKIMA, WA	BLCDT20090217ACI	189.8
No	K17JR-D	D17	LD	LIC	LEWISTON, ID	BLDTT20121005AFS	100.7
No	K17GK-D	D17	LD	LIC	ARLINGTON, OR	BLDTT20100910ADG	162.5
No	KVBI-CD	D17	DC	CP	CLARKSTON, WA	BLANK0000027523	100.7
No	KVBI-CD	D17	DC	APP	CLARKSTON, WA	BLANK0000032111	100.7
Yes	KELZ-LD	D17	LD	CP	PASCO, WA	BNPDTL20101001AAE	79.9
No	K17KI-D	D17	LD	CP	YAKIMA, WA	BNPDTL20100422ADD	209.3

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D16
       Mask: Stringent
   Latitude: 45 59 3.40 N (NAD83)
  Longitude: 118 10 11.80 W
Height AMSL: 1191.0 m
       HAAT: 0.0 m
   Peak ERP: 4.00 kW
    Antenna: Omnidirectional
Elev Pattrn: Generic

48.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	4.00 kW	594.7 m	61.7 km

45.0	4.00	234.8	47.4
90.0	4.00	176.9	44.1
135.0	4.00	-89.5	25.4
180.0	4.00	136.1	41.5
225.0	4.00	560.9	60.9
270.0	4.00	801.5	66.1
315.0	4.00	784.7	65.8

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 400 m

Distance to Canadian border: 335.2 km

Distance to Mexican border: 1490.0 km

Conditions at FCC monitoring station: Ferndale WA
Bearing: 316.7 degrees Distance: 466.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 117.2 degrees Distance: 1230.6 km

No land mobile station failures found

Proposal is not within the Offshore Radio Service protected area

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 BLDTA20100125ACB LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KVVK-CD	D15	DC	LIC	KENNEWICK, ETC., WA	BLDTA20100125ACB	
Undesireds:	KORX-CD	D16	DC	BL	WALLA WALLA, WA	DTVBL71072	79.9 km
	KORX-CD	D16	DC	APP	WALLA WALLA, WA	KORX-CD 16 OMNI 4KW 17	79.9
	KAPP	D14	DT	LIC	YAKIMA, WA	BLCDT20130829AEQ	112.3
	KHQ-TV	D15	DT	LIC	SPOKANE, WA	BLCDT20100406AAP	219.0
	KNDO	D16	DT	LIC	YAKIMA, WA	BLCDT20090217ACI	112.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
11608.2	318,658	11018.4	288,405	10878.4	283,088	10758.2	282,804	1.10	0.10

Undesired	Total IX		Unique IX, before		Unique IX, after	
KORX-CD D16 DC BL	20.1	58	4.0	3		
KORX-CD D16 DC APP	184.2	5,141			124.2	287
KAPP D14 DT LIC	4.0	237	0.0	0	0.0	0
KHQ-TV D15 DT LIC	131.9	5,077	115.9	5,022	71.9	223
KNDO D16 DT LIC	4.0	237	0.0	0	0.0	0

Interference to BLCDT20100406AAP LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KHQ-TV	D15	DT	LIC	SPOKANE, WA	BLCDT20100406AAP	
Undesireds:	KORX-CD	D16	DC	BL	WALLA WALLA, WA	DTVBL71072	189.5 km
	KORX-CD	D16	DC	APP	WALLA WALLA, WA	KORX-CD 16 OMNI 4KW 17	189.5
	KUKL-TV	D15	DT	CP	KALISPELL, MT	BLANK0000025189	224.1
	KVVK-CD	D15	DC	LIC	KENNEWICK, ETC., WA	BLDTA20100125ACB	219.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
48706.4	822,371	41842.3	774,821	41310.0	774,504	41310.0	774,504	0.00	0.00

Undesired		Total IX	Unique IX, before		Unique IX, after	
KORX-CD D16 DC BL	12.0	11	4.0	0		
KORX-CD D16 DC APP	51.9	15			4.0	0
KVVK-CD D15 DC LIC	528.3	317	520.4	306	480.4	302

Interference to BLANK0000001679 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KUNP	D16	DT	LIC	LA GRANDE, OR	BLANK0000001679	
Undesireds:	KORX-CD	D16	DC	BL	WALLA WALLA, WA	DTVBL71072	82.4 km
	KORX-CD	D16	DC	APP	WALLA WALLA, WA	KORX-CD 16 OMNI 4KW 17	82.4
	KVVK-CD	D15	DC	LIC	KENNEWICK, ETC., WA	BLDTA20100125ACB	143.2
	KNDO	D16	DT	LIC	YAKIMA, WA	BLCDT20090217ACI	254.1
	KVBI-CD	D17	DC	CP	CLARKSTON, WA	BLANK0000027523	137.6

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
24779.2	130,559	17014.6	43,472	16506.6	43,340	16382.3	43,264	0.75	0.18

Undesired		Total IX	Unique IX, before		Unique IX, after	
KORX-CD D16 DC BL	255.6	117	80.0	28		
KORX-CD D16 DC APP	444.1	195			204.2	104
KVVK-CD D15 DC LIC	211.6	25	24.0	2	16.0	0
KNDO D16 DT LIC	388.1	102	148.6	0	112.3	0

Interference to BLANK0000001679 LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KUNP	D16	DT	LIC	LA GRANDE, OR	BLANK0000001679	
Undesireds:	KORX-CD	D16	DC	BL	WALLA WALLA, WA	DTVBL71072	82.4 km
	KORX-CD	D16	DC	APP	WALLA WALLA, WA	KORX-CD 16 OMNI 4KW 17	82.4
	KVVK-CD	D15	DC	LIC	KENNEWICK, ETC., WA	BLDTA20100125ACB	143.2
	KNDO	D16	DT	LIC	YAKIMA, WA	BLCDT20090217ACI	254.1
	KVBI-CD	D17	DC	APP	CLARKSTON, WA	BLANK0000032111	137.6

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
24779.2	130,559	17014.6	43,472	16502.6	43,340	16378.4	43,264	0.75	0.18

Undesired		Total IX	Unique IX, before		Unique IX, after	
KORX-CD D16 DC BL	255.6	117	80.0	28		
KORX-CD D16 DC APP	444.1	195			204.2	104
KVVK-CD D15 DC LIC	211.6	25	24.0	2	16.0	0
KNDO D16 DT LIC	388.1	102	148.6	0	112.3	0
KVBI-CD D17 DC APP	4.0	0	4.0	0	4.0	0

Interference to BLANK0000029567 APP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K49MI-D	D16	LD	APP	PENDLETON, OR	BLANK0000029567	
Undesireds:	KORX-CD	D16	DC	BL	WALLA WALLA, WA	DTVBL71072	122.5 km
	KORX-CD	D16	DC	APP	WALLA WALLA, WA	KORX-CD 16 OMNI 4KW 17	122.5
	KVVK-CD	D15	DC	LIC	KENNEWICK, ETC., WA	BLDTA20100125ACB	98.6
	KKIC-LD	D16	LD	LIC	BOISE, ID	BLANK0000016312	299.2
	KUNP	D16	DT	LIC	LA GRANDE, OR	BLANK0000001679	122.8
	KFFV	D16	DT	CP	SEATTLE, WA	BLANK0000027889	353.0
	KNDO	D16	DT	LIC	YAKIMA, WA	BLCDT20090217ACI	174.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
3937.0	2,680	3345.1	1,934	2857.3	1,840	2641.3	1,829	7.56	0.60

Undesired		Total IX	Unique IX, before		Unique IX, after	
KORX-CD D16 DC BL	283.8	56	100.0	25		
KORX-CD D16 DC APP	543.7	85			316.1	36
KVVK-CD D15 DC LIC	231.3	49	27.9	11	19.9	7
KUNP D16 DT LIC	56.3	0	28.2	0	28.2	0
KNDO D16 DT LIC	291.7	51	68.1	13	64.1	13

Interference to BLDTT20101124AHH LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K16HP-D	D16	LD	LIC	EAST WENATCHEE, WA	BLDTT20101124AHH	
Undesireds:	KORX-CD	D16	DC	BL	WALLA WALLA, WA	DTVBL71072	217.0 km
	KORX-CD	D16	DC	APP	WALLA WALLA, WA	KORX-CD 16 OMNI 4KW 17	217.0
	K49MI-D	D16	LD	APP	PENDLETON, OR	BLANK0000029567	245.4
	KFFV	D16	DT	CP	SEATTLE, WA	BLANK0000027889	158.8
	KNDO	D16	DT	LIC	YAKIMA, WA	BLCDT20090217ACI	90.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
2836.3	91,184	2194.6	83,167	2134.3	82,933	2122.3	82,912	0.56	0.03

Undesired	Total IX	Unique IX, before		Unique IX, after	
KORX-CD D16 DC BL	28.1	121	4.0	0	
KORX-CD D16 DC APP	52.2	142		16.1	21
K49MI-D D16 LD APP	28.1	200	0.0	0	0.0	0
KNDO D16 DT LIC	48.2	232	20.1	0	12.1	0

Interference to BLCDT20090217ACI LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KNDO	D16	DT	LIC	YAKIMA, WA	BLCDT20090217ACI	
Undesireds:	KORX-CD	D16	DC	BL	WALLA WALLA, WA	DTVBL71072	189.8 km
	KORX-CD	D16	DC	APP	WALLA WALLA, WA	KORX-CD 16 OMNI 4KW 17	189.8
	KVVK-CD	D15	DC	LIC	KENNEWICK, ETC., WA	BLDTA20100125ACB	112.0
	KUNP	D16	DT	LIC	LA GRANDE, OR	BLANK0000001679	254.1
	KORS-CD	D16	DC	LIC	PORTLAND, OR	BLDTA20100517ABN	206.1
	KFFV	D16	DT	CP	SEATTLE, WA	BLANK0000027889	181.8

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
21254.5	314,875	14679.9	270,892	13422.3	270,462	13000.8	270,386	3.14	0.03

Undesired	Total IX	Unique IX, before		Unique IX, after	
KORX-CD D16 DC BL	1036.1	305	424.4	203	
KORX-CD D16 DC APP	1558.4	437		846.0	279
KVVK-CD D15 DC LIC	664.5	227	84.6	39	52.3	9
KUNP D16 DT LIC	672.0	182	64.4	0	32.2	0
KORS-CD D16 DC LIC	8.1	0	4.0	0	4.0	0

Interference to BNPDTL20101001AAE CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KELZ-LD	D17	LD	CP	PASCO, WA	BNPDTL20101001AAE	
Undesireds:	KORX-CD	D16	DC	BL	WALLA WALLA, WA	DTVBL71072	79.9 km
	KORX-CD	D16	DC	APP	WALLA WALLA, WA	KORX-CD 16 OMNI 4KW 17	79.9
	K17GK-D	D17	LD	LIC	ARLINGTON, OR	BLDTT20100910ADG	89.5
	K17GV	N17-	TX	LIC	RAINIER, OR	BLTT20070209ABT	282.0
	KVBI-CD	D17	DC	CP	CLARKSTON, WA	BLANK0000027523	169.4
	KEPR-TV	D18	DT	LIC	PASCO, WA	BLCDT20140717ABN	0.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
2173.1	232,660	2040.3	221,342	1673.4	216,006	1673.4	216,006	0.00	0.00

Undesired	Total IX	Unique IX, before		Unique IX, after	
KORX-CD D16 DC BL	0.0	0	0.0	0	
KORX-CD D16 DC APP	4.0	0		0.0	0
K17GK-D D17 LD LIC	24.2	0	0.0	0	0.0	0
KEPR-TV D18 DT LIC	366.9	5,336	342.7	5,336	338.6	5,336

Interference to proposal scenario 1
1.53% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KORX-CD	D16	DC	APP	WALLA WALLA, WA	KORX-CD 16 OMNI 4KW 17	
Undesireds:	KVVK-CD	D15	DC	LIC	KENNEWICK, ETC., WA	BLDTA20100125ACB	79.9 km
	KUNP	D16	DT	LIC	LA GRANDE, OR	BLANK0000001679	82.4
	KFFV	D16	DT	CP	SEATTLE, WA	BLANK0000027889	363.3
	KNDO	D16	DT	LIC	YAKIMA, WA	BLCDT20090217ACI	189.8
	KVBI-CD	D17	DC	CP	CLARKSTON, WA	BLANK0000027523	100.7

Service area		Terrain-limited		IX-free		Percent IX	
9119.9	92,639	8023.3	89,295	7551.5	87,931	5.88	1.53

Undesired	Total IX		Unique IX		Prcnt Unique IX	
KVVK-CD D15 DC LIC	320.1	705	116.3	518	1.45	0.58
KUNP D16 DT LIC	160.4	150	44.0	4	0.55	0.00
KNDO D16 DT LIC	243.0	732	91.6	655	1.14	0.73