INTERFERENCE ANALYSIS FOR K15IQ-D, ASTORIA, OREGON (CHANNEL 15)

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tvstudy v2.2.5 (4uoc83)
Database: localhost,  Study: k15iq_p3,  Model: Longley-Rice

Study build station data: LMS TV 2021-10-05

    Proposal: K15IQ_P3 D15 LD APP ASTORIA, OR
 File number: k15iq_p3
 Facility ID: 185408
Station data: User record
   Record ID: 4178
     Country: U.S.
```

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	KODT-LP	D14-	LD	CP	SALT CREEK, OR	BLANK0000152180	177.6 km
No	KODT-LP	N14-	TX	LIC	SALT CREEK, OR	BLTTL20050309ACO	177.6
No	KVOS-TV	D14	DT	LIC	BELLINGHAM, WA	BLANK0000087123	241.6
No	KAPP	D14	DT	LIC	YAKIMA, WA	BLCDT20130829AEQ	236.0
No	KFXO-CD	D15	DC	LIC	BEND, OR	BLANK0000075035	328.7
No	K15KF-D	D15	LD	LIC	COOS BAY, OR	BLANK0000005167	355.2
No	KORY-CD	D15	DC	LIC	EUGENE, OR	BLANK0000136216	287.7
No	K15JI-D	D15	LD	CP	EUGENE, OR	BNPDTL20100716ADB	287.6
No	K15DS-D	D15	LD	LIC	NEWPORT, ETC., OR	BLDTL20130130AIS	204.3
No	KOXO-CD	D15	DC	LIC	PORTLAND, OR	BLANK0000108944	133.5
No	K15IX-D	D15	LD	LIC	RAINIER, OR	BLDTT20130103ACW	72.9
No	K41GG-D	D15	LD	LIC	Rockaway Beach, OR	BLANK0000062845	95.3
No	K15KN-D	D15	LD	LIC	ROSEBURG, OR	BLANK0000067093	374.5
No	K15JG-D	D15	LD	LIC	SCOTTSBURG, OR	BLDTT20120511ABH	325.1
No	K15MW-D	D15	LD	CP	BELLINGHAM, WA	BLANK0000152842	260.9
No	K40AE-D	D15	LD	CP	CASHMERE, ECT, WA	BLANK0000054488	256.0
Yes	K15MI-D	D15	LD	LIC	CENTRALIA/CHELASIS, WA	BLANK0000087287	41.5
No	KVVK-CD	D15	DC	LIC	KENNEWICK, ETC., WA	BLDTA20100125ACB	342.3
No	K15KC-D	D15	LD	CP	YAKIMA, WA	BNPDTL20100422ADC	236.0
No	KORS-CD	D16	DC	LIC	PORTLAND, OR	BLANK0000108949	133.5
Yes	K41KT-D	D16	LD	LIC	GRAYS RIVER, WA	BLANK0000063466	12.5
No	KFFV	D16	DT	LIC	SEATTLE, WA	BLANK0000087122	152.0
No	KNDO	D16	DT	LIC	YAKIMA, WA	BLCDT20090217ACI	236.4

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

```
    Channel: D15
       Mask: Stringent
   Latitude:  46 34  3.40 N (NAD83)
  Longitude: 123 36  1.30 W
Height AMSL: 223.1 m
       HAAT: 1.0 m
   Peak ERP: 15.0 kW
    Antenna: KAT-2x2 750 10210/HN Array 210.0 deg
Elev Pattrn: Generic
  Elec Tilt: 0.90
```

48.8 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.052 kW	145.2 m	20.0 km
45.0	0.049	37.9	10.0
90.0	0.013	17.5	6.6
135.0	0.426	-76.2	15.1
180.0	1.24	-105.8	20.1
225.0	7.82	-136.7	28.6
270.0	1.11	-29.7	19.6
315.0	0.015	154.7	15.2

```
Proposal 23.83 dBu contour does not cross Canadian border
Distance to Canadian border: 184.2 km

Distance to Mexican border: 1638.9 km

Conditions at FCC monitoring station: Ferndale WA
Bearing: 16.0 degrees   Distance: 276.7 km
```

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Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 109.1 degrees Distance: 1639.9 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: 1.00 km

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

Interference to BLANK0000087287 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K15MI-D	D15	LD	LIC	CENTRALIA/CHELASIS, WA	BLANK0000087287	
Undesireds:	K15IQ_P3	D15	LD	APP	ASTORIA, OR	k15iq_p3	41.5 km
	KOXO-CD	D15	DC	LIC	PORTLAND, OR	BLANK0000108944	117.2
	K15IX-D	D15	LD	LIC	RAINIER, OR	BLDTT20130103ACW	46.3
	KORS-CD	D16	DC	LIC	PORTLAND, OR	BLANK0000108949	117.2
	KFFV	D16	DT	LIC	SEATTLE, WA	BLANK0000087122	130.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
6752.3	336,665	5366.0	251,867	5316.4	247,158	5314.4	247,158	0.04 **0.00**

Undesired	Total IX		Unique IX, before		Unique IX, after	
K15IQ_P3 D15 LD APP	2.0	0			2.0	0
KOXO-CD D15 DC LIC	31.4	2,603	14.2	1,135	14.2	1,135
K15IX-D D15 LD LIC	31.4	3,574	16.2	2,106	16.2	2,106
KORS-CD D16 DC LIC	9.1	1,010	0.0	0	0.0	0
KFFV D16 DT LIC	2.0	0	2.0	0	2.0	0

Interference to BLANK0000063466 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K41KT-D	D16	LD	LIC	GRAYS RIVER, WA	BLANK0000063466	
Undesireds:	K15IQ_P3	D15	LD	APP	ASTORIA, OR	k15iq_p3	12.5 km
	KORS-CD	D16	DC	LIC	PORTLAND, OR	BLANK0000108949	121.4
	KFFV	D16	DT	LIC	SEATTLE, WA	BLANK0000087122	159.1
	K17HA-D	D17	LD	LIC	ASTORIA, OR	BLDTT20120713ADN	32.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
4561.3	32,708	3640.5	28,422	3570.7	25,914	3564.7	25,909	0.17 **0.02**

Undesired	Total IX		Unique IX, before		Unique IX, after	
K15IQ_P3 D15 LD APP	6.0	5			6.0	5
KORS-CD D16 DC LIC	20.2	22	17.2	22	17.2	22
KFFV D16 DT LIC	26.2	12	22.2	12	22.2	12
K17HA-D D17 LD LIC	27.4	2,474	26.4	2,474	26.4	2,474

Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K15IQ_P3	D15	LD	APP	ASTORIA, OR	k15iq_p3	
Undesireds:	K41KT-D	D16	LD	LIC	GRAYS RIVER, WA	BLANK0000063466	12.5 km

Service area		Terrain-limited		IX-free		Percent IX	
1054.0	4,866	760.4	3,240	748.3	3,240	1.59	0.00

Undesired	Total IX		Unique IX		Prcnt Unique IX	
K41KT-D D16 LD LIC	12.1	0	12.1	0	1.59	0.00
