

TECHNICAL STATEMENT
SUPPORTING REQUEST FOR AUTHORIZATION TO
ESTABLISH ATSC 3.0 SERVICE AND ATSC 1.0 SIMULCAST HOST
KPDX, VANCOUVER, WA (FACILITY ID NO. 35460)
KPTV, PORTLAND, OR (FACILITY ID NO. 50633)
PORTLAND, OR DMA

Background

This statement was prepared on behalf of KPTV-KPDX Broadcasting Corporation ('Meredith'), licensee of stations KPDX(TV), Vancouver, WA; and KPTV(TV), Portland, OR. Meredith requests authorization for ATSC 3.0 service on KPDX (RF Channel 30) with KPTV (RF Channel 12) to be established as an ATSC 1.0 simulcast host station.

Compliance with Coverage Requirements

The proposal is compliant with the coverage requirements for an ATSC 1.0 simulcast signal as outlined in Section 73.3801(c) of the FCC Rules. Specifically, the KPTV predicted principal community service contour entirely encompasses the KPDX city of license of Vancouver, WA. In addition, both stations are licensed within the same DMA* (Portland, OR), as required. This is illustrated in the Predicted Coverage Analysis Map, which is attached hereto as an exhibit.

Compliance with Expedited Processing

The instant proposal qualifies for expedited processing according to the requirements outlined in Section 73.3801(f)(5) of the FCC Rules. Under a comparison of the predicted noise-limited service contours alone, the predicted noise-limited service contour of the KPTV licensed facility encompasses 100% of the predicted noise-limited service contour of the KPDX licensed facility.

* Nielsen Designated Market Area.

On the basis of an analysis utilizing the FCC's *TVStudy* Predicted Service and Interference Model,[†] the KPTV Host station will provide service to 99.2% of the KPDX predicted service population as computed on a cell by cell analysis.

Specifically, based on the *TVStudy* model studies, the predicted terrain-limited interference-free population within the KPDX predicted noise-limited service contour is 2,816,051. Based on the *TVStudy* model studies, the KPTV facility will provide predicted terrain-limited interference-free service to the KPDX predicted terrain-limited interference-free service cells of 2,794,709 persons. This is a service percentage of 99.2%, which exceeds the FCC's minimum 95% level. The attached map illustrates the results of the analysis. Summaries of the *TVStudy* results for both stations are attached hereto for reference.

All studies were conducted utilizing the same cell size and terrain profile point spacing so as to make a consistent service comparison between the respective facilities.



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[†] Version 2.2.5

TVSTUDY ANALYSIS FOR KPDX, VANCOUVER, WASHINGTON (CHANNEL 30) LICENSED FACILITY

vstudy v2.2.5 (4uoc83)

Database: localhost, Study: kpdx_lic, Model: Longley-Rice

Study build station data: LMS TV 2019-08-30

Proposal: KPDX D30 DT LIC VANCOUVER, WA
 File number: BLCDT20090612ADJ
 Facility ID: 35460
 Station data: LMS TV 2019-08-30
 Record ID: 9c3603100fe443c99006cf6212b6c0ea
 Country: U.S.
 Zone: II

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	KEPB-TV	D29	DT	LIC	EUGENE, OR	BLEDT20050127AHY	171.4 km
No	KBLN-TV	D30	DT	LIC	GRANTS PASS, OR	BLCDT20090224AAX	351.5
Yes	KOMO-TV	D30	DT	CP	SEATTLE, WA	BLANK0000034249	236.5
No	KUNW-CD	D30	DC	LIC	YAKIMA, WA	BLDTL20090923ACQ	206.1
Yes	KLSR-TV	D31	DT	LIC	EUGENE, OR	BLCDT20070104ADQ	171.5
No	KONG	D31	DT	LIC	EVERETT, WA	BLANK0000001601	236.5
No	KONG	D31	DT	CP	EVERETT, WA	BPCDT20080617AEE	236.5

Record parameters as studied:

Channel: D30
 Latitude: 45 31 18.00 N (NAD83)
 Longitude: 122 44 57.00 W
 Height AMSL: 599.7 m
 HAAT: 528.0 m
 Peak ERP: 741 kW
 Antenna: Omnidirectional
 Elev Pattn: Generic
 Elec Tilt: 0.75

40.3 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	741 kW	567.3 m	117.4 km
45.0	741	573.8	117.7
90.0	741	537.7	115.6
135.0	741	513.9	114.1
180.0	741	528.9	115.1
225.0	741	497.8	113.0
270.0	741	538.4	115.7
315.0	741	456.7	109.7

Study cell size: 2.00 km
 Profile point spacing: 1.00 km

 Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KPDX	D30	DT	LIC	VANCOUVER, WA	BLCDT20090612ADJ	
Undesireds:	KEPB-TV	D29	DT	LIC	EUGENE, OR	BLEDT20050127AHY	171.4 km
	KOMO-TV	D30	DT	CP	SEATTLE, WA	BLANK0000034249	236.5
	KUNW-CD	D30	DC	LIC	YAKIMA, WA	BLDTL20090923ACQ	206.1
	KLSR-TV	D31	DT	LIC	EUGENE, OR	BLCDT20070104ADQ	171.5
	Service area			Terrain-limited		IX-free	Percent IX
41468.3	2,970,703	30587.5		2,848,423	30064.1	2,816,051	1.71 1.14

Undesired	Total IX	Unique IX	Prcnt Unique IX
KEPB-TV D29 DT LIC	194.6 25,511	11.9 396	0.04 0.01
KOMO-TV D30 DT CP	320.9 5,954	316.9 5,954	1.04 0.21
KUNW-CD D30 DC LIC	4.0 0	0.0 0	0.00 0.00
KLSR-TV D31 DT LIC	190.6 26,022	7.9 907	0.03 0.03

Note: Based on cell by cell analysis, KPTV will provide IX-free service to a population of 2,794,709 (99.2%) of the KPDX IX-free service cells.

TVSTUDY ANALYSIS FOR KPTV, PORTLAND, OREGON (CHANNEL 12) LICENSED FACILITY

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

Study build station data: LMS TV 2019-08-30

Proposal: KPTV D12 DT LIC PORTLAND, OR
File number: BLCDT20090612ADH
Facility ID: 50633
Station data: LMS TV 2019-08-30
Record ID: 5555e3ebb3704af39987cf6212b6c0ea
Country: U.S.
Zone: II

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	KOAB-TV	D11	DT	LIC	BEND, OR	BLEDT20060823AAP	195.5 km
No	KSTW	D11	DT	LIC	TACOMA, WA	BLCDT20091117AAX	235.1
No	KUID-TV	D12	DT	LIC	MOSCOW, ID	BLEDT20060804AFK	463.5
Yes	KDRV	D12	DT	LIC	MEDFORD, OR	BLCDT20090303ACL	316.9
Yes	KVAL-TV	D13	DT	LIC	EUGENE, OR	BLCDT20090612AGY	171.4
No	KCPQ	D13	DT	LIC	TACOMA, WA	BLCDT20090918ABR	225.2

Record parameters as studied:

Channel: D12
Latitude: 45 31 18.00 N (NAD83)
Longitude: 122 44 57.00 W
Height AMSL: 615.7 m
HAAT: 529.0 m
Peak ERP: 24.5 kW
Antenna: Omnidirectional
Elev Pattn: Generic
Elec Tilt: 0.80

36.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	24.5 kW	583.3 m	119.6 km
45.0	24.5	589.8	120.0
90.0	24.5	553.7	117.6
135.0	24.5	529.9	116.2
180.0	24.5	544.9	117.0
225.0	24.5	513.8	115.3
270.0	24.5	554.4	117.6
315.0	24.5	472.7	113.1

Study cell size: 2.00 km
Profile point spacing: 1.00 km

Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KPTV	D12	DT	LIC	PORTLAND, OR	BLCDT20090612ADH	
Undesireds:	KOAB-TV	D11	DT	LIC	BEND, OR	BLEDT20060823AAP	195.5 km
	KDRV	D12	DT	LIC	MEDFORD, OR	BLCDT20090303ACL	316.9
	KVAL-TV	D13	DT	LIC	EUGENE, OR	BLCDT20090612AGY	171.4

	Service area	Terrain-limited	IX-free	Percent IX
43001.3	2,998,460	32365.2	2,847,263	31979.8
			2,816,518	1.19
				1.08

Undesired	Total IX	Unique IX	Prcnt Unique IX
KOAB-TV D11 DT LIC	4.0	0	0.01
KDRV D12 DT LIC	286.1	13,904	0.63
KVAL-TV D13 DT LIC	178.7	21,760	0.29
KLSR-TV D31 DT LIC	190.6	26,022	0.03
