

# **KWSU Minor Modification**

## **Attachment 1, Overview**

### **Washington State University**

Washington State University (“WSU”), Licensee of KWSU (DTV), licensed to Pullman, WA (facility ID 71024), respectfully submits this application as our proposal to modify the authorized effective radiated power (“ERP”) for this facility from 23kW (13.6dBk) to 35kW (15.4dBk) during the Commissions temporary lift of the filing freeze on minor modifications to television broadcast facilities.

The increase in ERP is the only facility modification requested by the applicant. WSU intends to continue to use its Ampex BR-12S VHF antenna with the increased facilities. Details of the antenna are contained in *Attachment 2, Antenna Technical Data*.

*Table 1* shows the results of the FCC’s *TVStudy*<sup>1</sup> program demonstrating compliance with the Commission’s interference standards.

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<sup>1</sup> FCC Office of Engineering and Technology (OET) TVStudy Version 2.2.3

**Table 1. TVStudy Results for Proposed Facility**

Study created: 2017.11.20 18:18:21

Study build station data: LMS TV 2017-11-15 (58)

Proposal: KWSU-TV D10 DT LIC PULLMAN, WA

File number: BLANK0000001648

Facility ID: 71024

Station data: User record

Record ID: 76

Country: U.S.

Zone: II

Stations affected by proposal:

Call	Chan	Svc	Status	City, State	File Number	Distance
KNIN-TV	D10	DT	LIC	CALDWELL, ID	BLCDT20111007AEB	355.4 km
KFFX-TV	D11	DT	LIC	PENDLETON, OR	BLCDT20140424AHO	140.5

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D10

Latitude: 46 51 42.30 N (NAD83)

Longitude: 117 10 32.50 W

Height AMSL: 1167.6 m

HAAT: 408.0 m

Peak ERP: 35.0 kW

Antenna: Omnidirectional

Elev Pattn: Generic

Elec Tilt: 0.50

36.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	35.0 kW	374.5 m	108.2 km
45.0	35.0	377.2	108.4
90.0	35.0	309.2	102.9
135.0	35.0	367.0	107.6
180.0	35.0	401.5	110.3
225.0	35.0	409.5	111.0
270.0	35.0	453.1	115.0
315.0	35.0	425.4	112.5

Database HAAT does not agree with computed HAAT

Database HAAT: 408 m Computed HAAT: 390 m

\*\*Proposal service area extends beyond baseline plus 1.0%

Proposal service area population is more than 95.0% of baseline

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

Distance to Canadian border: 237.6 km

Distance to Mexican border: 1584.4 km

Conditions at FCC monitoring station: Ferndale WA

Bearing: 302.1 degrees Distance: 463.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 123.6 degrees Distance: 1214.2 km

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%

No IX check failures found.