



**STATEMENT OF JOHN E. HIDLE, P.E.
IN SUPPORT OF AN APPLICATION FOR A
MINOR MODIFICATION OF LICENSE,
FILE NUMBER 0000017402,
TO SUBSTITUTE A NEW NON-DIRECTIONAL ANTENNA
FOR ITS AUTHORIZED NON-DIRECTIONAL ANTENNA
KISU-TV - POCA TELLO, IDAHO
CH. 17 - 172 kW - 465 meters HAAT**

Prepared for: STATE BOARD OF EDUCATION, STATE OF IDAHO

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a Licensed Professional Engineer in the Commonwealth of Virginia, No. 7418, and in New York State, No. 63418.

GENERAL

This office has been authorized by STATE BOARD OF EDUCATION, STATE OF IDAHO, licensee of KISU-TV, channel 17, licensed to Pocatello, Idaho, to prepare this statement, FCC Form 2100, Schedule A, its technical sections, and the associated exhibits in support of an application for a minor modification of its license, file number 0000017402. KISU-TV is a two site Distributed Transmission System. Site 1 is the primary site while site 2 operates using a directional antenna with an ERP of 0.13 kW. The proposed modification affects only site 1 and proposes the substitution of a new Jampro model JA/AS-32/17 SEO non-directional antenna in lieu of its authorized antenna, a non-directional Dielectric model TFU-32DSB-B. The antenna Height Above Average Terrain and the Effective Radiated Power will remain the same at 465 meters and 172 kW. The horizontal azimuth radiation patterns for both its horizontally and vertically polarized components and its vertical

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elevation pattern, showing its radiation characteristics above and below the horizontal plane are shown and tabulated in the antenna exhibit.

PREDICTED COVERAGE CONTOURS

The predicted coverage contours are based on site 1 and were calculated in accordance with the method described in Section 73.625(b) of the Rules, utilizing the appropriate F(50,90) propagation curves (47 CFR Section 73.699, Figure 9), proposed Effective Radiated Power, and antenna height above average terrain as determined for each profile radial. The average terrain on the eight cardinal radials from 3 kilometers to 16 kilometers from the site, was determined using the NED Three Second US Terrain Database as permitted in the FCC Rules. The antenna site elevation and coordinates were determined from FCC antenna registration data. The map exhibit shows the predicted Noise Limited (39.04 dBu) contour, and the principal community (48 dBu) contour which completely encompasses the principal community of license, Pocatello, Idaho.

ALLOCATION CONSIDERATIONS

Post-Transition DTV Considerations

A study was performed, using the FCC's software, *tvstudy* v2.2.5, to determine that the instant proposal is predicted to cause no new prohibited interference to DTV stations, construction permits or DTV allotments. The study results confirm no new interference is predicted to more than 0.5% to the populations served by any full-power DTV station, construction permit or allotment. See Appendix B.

BLANKETING AND INTERMODULATION INTERFERENCE

Other broadcast and non-broadcast facilities are either co-located with, or located within 10 kilometers of KISU-TV's site 1. The applicant does recognize its responsibility to remedy complaints of interference that might result from this proposal in accordance with applicable Rules.

RADIO FREQUENCY IMPACT, SAFETY & STATEMENT OF COMPLIANCE

The licensee of KISU-TV is committed to the protection of station personnel and/or tower contractors working in the vicinity of its antennas and will reduce power or cease operation, when necessary, to ensure protection to personnel. As shown in Appendix A the KISU-TV channel 17 facility as proposed herein will operate with a maximum ERP of 172 kW from an elliptically polarized non-directional transmitting antenna with a centerline height of 40.39 meters above ground level (AGL). Considering the elevation pattern submitted elsewhere herein, the vertical plane relative field factor is less than 0.100 at all depression angles greater than 10 degrees. The proposed KISU-TV channel 17 facility is predicted to produce a worst-case power density at two meters above ground level, at 17.9 meters from the tower base, of $15.845 \mu\text{W}/\text{cm}^2$, which is 4.84% of the FCC guideline value of $327.33 \mu\text{W}/\text{cm}^2$ for an "uncontrolled" environment, and 0.968% of the FCC's guideline value for "controlled" environments. Therefore, pursuant to Section 1.1307(b)(3) of the FCC Rules, because the proposed facility would not exceed 5% of the uncontrolled and controlled exposure limits, the proposal's power density contribution is considered insignificant. Further, the Applicant will continue to cooperate/coordinate with other site

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users and reduce power and/or cease operation during times of service or maintenance of the transmission systems as necessary to avoid potentially harmful exposure to personnel. In light of the above, the proposed facility should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Commission's Rules.

SUMMARY

It is submitted that the instant application for a minor modification of KISU-TV's channel 17 DTS license, file number 0000017402, to substitute a different non-directional elliptically polarized antenna for its authorized antenna at site 1, as described herein, complies with the Rules, Regulations and relevant Policies of the Federal Communications Commission. This statement was prepared by me, or under my direct supervision, and its contents are believed to be true and correct to the best of my knowledge and belief.

DATED: March 29, 2024

