



Engineering Statement

Bick Broadcasting Company
KSIS (AM)

This consultant has been retained by Bick Broadcasting Company (Bick) for the purpose of preparing Form 301 in application for a correction in the coordinates and antenna efficiency for KSIS (AM) in Sedalia, MO.

For unknown reasons, KSIS has always been licensed a point roughly 300 meters SSW of its actual location. This error was discovered in the process of modifying the license of the co-owned and co-located operation of KSDL (FM). The tower registration, ASRN # 1005696, has been corrected to reflect the actual tower location.

KSIS Operation

KSIS, as presently licensed operates on 1050 kHz with 1.0 kW daytime and .086 kW nighttime from an antenna located at 38° 43' 52" N by 93° 13' 32" W. The licensed antenna efficiency is 297.7 mV/m/kW at 1 km. The actual location of the KSIS radiator is 38° 44' 03" N by 93° 13' 31" W. The antenna is 68.577 m (86.47°) above the base insulator and the ground system is comprised of 120 buried copper radials that extend 208-ft (63.395 m) in all directions. The figure 8 efficiency calculations for such a radiator yield a result of 296.501 mV/m/kW at 1 km. The antenna and ground system details are graphically shown on a plat map in Exhibit 1 of this report. The antenna is precisely plotted on the relevant portion of a USGS 7.5' topographic quadrangle map in Exhibit 2. Exhibit 3 is an aerial photograph of the property which shows the 1000 mV/m nighttime contour of the KSIS operation. The scale of the aerial photograph did not permit the daytime 1000 mV/m contour to be plotted so it was plotted on a USGS 7.5' map in Exhibit 4. Exhibit 5 shows the 2.0 and 5.0 mV/m contours of the KSIS operation as well as the corporate limits of Sedalia, MO. As shown in Exhibit 5, the entire community of Sedalia is encompassed within the 5.0 mV/m contour. Exhibit 6 is a digitally generated map which shows the 0.5 mV/m contour of KSIS. Corrected tabular distances to the above contours are included as Exhibit 7.

Interference

As licensed, KSIS has a relatively small area of prohibited overlap with co-channel station KGTO in Tulsa, OK and a relatively large area of prohibited overlap with first adjacent channel station WHO in Des Moines, IA. The 0.025 mV/m and 0.5 mV/m contours of KSIS and co-channel stations is graphically shown in Exhibit 8 of this report. As shown in Exhibit 8, no prohibited overlap exists with any station other than KGTO. The interference received from KGTO and caused to KGTO, both as licensed and as actual, is detailed in Exhibits 9 & 10 respectively. As shown in those exhibits the area of actual interference is less than previously licensed.

First adjacent channel interference is graphically shown in Exhibit 11 of this report. As shown in Exhibit 11, the only radio station with which there is prohibited overlap is WHO. Although the actual KSIS tower site is closer to WHO the corrected tower efficiency reduces the distance to the 0.5 and 0.25 mV/m contours by a similar amount. The area of interference between KSIS and WHO, on paper, is essentially unchanged from the previously licensed areas. The actual area is, of course, identical.

Exhibit 12 of this report shows the 5.0 mV/m contours of KSIS and the second adjacent channel operation of KCWJ. Both the licensed KCWJ contour and the proposed KCWJ contour is shown on Exhibit 12. As shown in that exhibit, there is no 5.0 mV/m contour overlap between the two radio stations.

There are no third adjacent channel radio stations in the area.

A tabular listing of the distances to the KSIS protected and interfering contours is included as Exhibit 13 and a tabular daytime radiation limits study is included as Exhibit 14.

Environmental Considerations

Exhibit 15 and its supporting Exhibits 16 & 17 analyze the levels of non-ionizing RF radiation at the KSIS and KSDL tower site and demonstrates that there is no threat to the public of passive overexposure to excessive levels of RF Radiation. There is absolutely no actual construction associated with this application hence there is no other environmental impact.

Certification

All information in this report and its associated exhibits is true and accurate to the best of my belief. Having had numerous matters before the Commission, my qualifications are a matter of record.

April 21, 2006

Date

R. Lee Wheeler

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