

TECHNICAL SUMMARY

TELEVISION STATION KSTC-TV
MINNEAPOLIS, MINNESOTA
CHANNEL 30 1000 KW (H), 300 KW (V) 436 M HAAT

1. The instant application is to replace the main transmitting antenna specified for the licensed facility of KSTC-TV, Minneapolis, MN (Channel 30).^{*} There will be no change in the overall height of the existing antenna tower supporting structure.[†] But due to a change in the configuration of the new top-mounted antenna stack, the antenna radiation center for KSTC-TV will increase by 6.6 m.[‡]

2. The proposed facility is compliant with the ‘largest station in the market’ provision of Section 73.622(f)(5) of the FCC Rules. It is proposed to operate on Channel 30 with a non-directional ERP of 1000 kW and an antenna height above average terrain (HAAT) of 436 meters. These facilities exceed the normal maximum permissible facilities specified in Section 73.622(f)(8)(i) of the FCC Rules. However, the proposed facilities have been calculated in accordance with the largest station provision of Section 73.622(f)(5) of the FCC Rules. Specifically, the largest station in the Minneapolis-St. Paul market is KARE, Minneapolis, MN, Channel 11, which is licensed to provide noise-limited 36 dBu, f(50,90) service to an area of 43,560 square kilometers.[§] The proposed KSTC-TV operation is predicted to provide noise-limited 41 dBu, f(50,90) service to an area of 37,630 square kilometers.^{**} Therefore, the proposed KSTC-TV facility is compliant with the largest station provision of the FCC Rules.

3. The instant proposal is compliant with the interference protection requirements of the FCC Rules. The results the FCC’s *TVStudy* analysis are attached hereto as an exhibit.

* See FCC File No. 0000080959.

† See FCC Antenna Structure Registration No. 1023883. (This is the Telefarm north tower.)

‡ The KSTC-TV antenna is the bottom antenna of the stack. The top antenna of the new antenna stack will support the transmitting antenna for KARE (C.P.) (Ch. 31, Facility ID 23079) and WCCO-TV (C.P.) (Ch. 32, Facility ID 9629).

§ KARE(TV) is authorized for operation with a non-directional ERP of 45.3 kW and an antenna HAAT of 455 m. See FCC File No. 0000001486.

** Clarification of the largest station provision is provided in the *Report and Order and Further Notice of Proposed Rule Making* in MM Docket No. 00-39 at paragraphs 73-74.