## TECHNICAL EXHIBIT IN SUPPORT OF LICENSE APPLICATION FOR STATION KSTP-DT (FACILITY ID 28010) ST. PAUL, MINNESOTA CH 35 755 KW 433 M

#### **Technical Narrative**

This technical statement was prepared in support of the license application for station KSTP-DT at Minneapolis, Minnesota. Station KSTP-DT holds a post-transition authorization for channel 35 with an effective radiated power (ERP) of 755 kilowatts (kW) and an antenna radiation center height above average terrain (HAAT) of 433 meters (BPCDT-20080321ABD). Station KSTP-DT is operating under automatic program test authority and this application for license is being filed to cover its construction permit.

Jonathan N. Edwards

du Treil, Lundin & Rackley, Inc. 201 Fletcher Avenue Sarasota, Florida 34237 (941) 329-6000 JON@DLR.COM

June 19, 2009

### du Treil, Lundin & Rackley, Inc.

\_\_\_Consulting Engineers
Page 2
St. Paul, Minnesota

# TECHNICAL EXHIBIT IN SUPPORT OF LICENSE APPLICATION FOR STATION KSTP-DT (FACILITY ID 28010) ST. PAUL, MINNESOTA CH 35 755 KW 433 M

### KSTP-DT RF Transmission System Specifications

| Description                                    | System    |
|--|-----------|
| Transmitter Power Output (35.4 kW):            | 15.5 dBk  |
| Combiner Loss (93.3%)                          | 0.3 dB    |
| Transmission Line Loss (75%) (8" rigid):       | 1.25 dB   |
| DIE TAD-32UDC-5/80-MRST (30.4 RMS Power Gain): | 14.83 dB  |
| Effective Radiated Power (755 kW-ND):          | 28.78 dBk |