

# **United States of America**

# FEDERAL COMMUNICATIONS COMMISSION AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

KSTP-AM, LLC

3415 UNIVERSITY AVENUE, WEST

ST. PAUL MN 55114

Facility Id: 35641

Call Sign: KSTP

License File Number: BZ-20071221AFI

DM

Son Nguyen
Supervisory Engineer
Audio Division
Media Bureau

Grant Date: April 28, 2008

This license expires 3:00 a.m. local time, April 01, 2013.

Subject to the provisions of the Communications Act of 1934, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this license, the licensee is hereby authorized to use and operate the radio transmitting apparatus herein described.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such broadcasting service as will serve the public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This license is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934.

Hours of Operation: Unlimited

Average hours of sunrise and sunset: Local Standard Time (Non-Advanced)

Jan.	7:45 AM	5:00 PM	Jul.	4:45 AM	8:00 PM
Feb.	7:15 AM	5:45 PM	Aug.	5:15 AM	7:15 PM
Mar.	6:30 AM	6:15 PM	Sep.	5:45 AM	6:30 PM
Apr.	5:30 AM	7:00 PM	Oct.	6:30 AM	5:30 PM
May	4:45 AM	7:30 PM	Nov.	7:15 AM	4:45 PM
Jun.	4:30 AM	8:00 PM	Dec.	7:45 AM	4:30 PM

Callsign: KSTP License No.: BZ-20071221AFI

Name of Licensee: KSTP-AM, LLC

Station Location: ST. PAUL, MN

Frequency (kHz): 1500

Station Class: A

Antenna Coordinates:

Day

Latitude: N 45 Deg 01 Min 32 Sec Longitude: W 93 Deg 02 Min 38 Sec

Night

Latitude: N 45 Deg 01 Min 32 Sec Longitude: W 93 Deg 03 Min 06 Sec

Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Nominal Power (kW): Day: 50.0 Night: 50.0

Antenna Input Power (kW): Day: 50.00 Night: 52.65

Antenna Mode: Day: ND Night: DA

(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)

Current (amperes): Day: 31.6 Night: 32.4

Resistance (ohms): Day: 50 Night: 50

Non-Directional Antenna: Day Radiator Height: meters;

Top-Loaded/Sectionalized Tower Parameters: (See 47 CFR 73.160)

Tower No. A B C D

1 184.0 32.50 .00 .00

Theoretical Efficiency: 511.77 mV/m/kw at 1km

Antenna Registration Number(s):

Day:

Tower No. ASRN Overall Height (m)

1 1024181

Night:

Tower No. ASRN Overall Height (m)

1 1035343

2 1035344

3 1035345

Callsign: KSTP License No.: BZ-20071221AFI

### DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Night: 2748.76

Standard RMS (mV/m/km):

Augmented RMS (mV/m/km): Night:3086.12

Q Factor: Night: 70.71

### Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.5000	87.000	0.0000	0.000	0	TL/S
2	1.0000	0.000	102.5000	286.500	0	184.0
3	0.5000	-87.000	205.0000	286.500	0	160.0

\* Tower Reference Switch

0 = Spacing and orientation from reference tower
1 = Spacing and orientation from previous tower

Top-Loaded/Sectionalized Tower Parameters: (See 47 CFR 73.160)

Tower No. A B C D
1 184.0 32.50 .00 .00

# Augmentation Parameters:

Aug No.	Central Azimuth (Deg. T)	Span (Deg.)	Radiation at Central Azimuth (mV/m @ 1 km)
1	16.5	90.0	3057.75
2	70.0	73.0	450.00
3	106.5	73.0	450.00
4	143.0	73.0	450.00
5	196.5	90.0	3009.47
6	286.5	90.0	4457.88

# Night Directional Operation:

Twr. Phase Antenna Monitor
No. (Deg.) Sample Current Ratio
1 97.2 0.228
2 0 1

0.646

Antenna Monitor: POTOMAC INSTRUMENTS MODEL 1901

Sampling System Approved Under Section 73.68 of the Rules.

-101.8

Callsign: KSTP

Special operating conditions or restrictions:

### 1 MONITOR POINT DESCRIPTIONS

- $81.6^{\circ}$  Point located 0.43 km east of intersection of Lydia Ave and Lake Street in Maplewood, directly in front of mailbox at 2587 Lydia Ave, maximum 60.6 mV/m nighttime.
- $106.5^{\circ}$  Point located just south of the intersection of 1st Ave N and 11th Street E, down a short driveway traversing east side of North High School, in front of large rock east of the running track (rock has engraving of bear paw in red on front), maximum 123 mV/m nighttime.
- $131.4^{\circ}$  Point located east of intersection of McKnight Road and Larpenteur in driveway leading to Maplewood apartments, at fire hydrant on west side of driveway, maximum 60.8 mV/m nighttime.
- $286.5^{\circ}$  Point located in front of 3306 West Owasso Boulevard in Roseville, directly across the street from mailbox at edge of curb, maximum 542~mV/m nighttime
- The permittee must accept skywave interference to the nighttime facilities authorized herein from the operation of Station WTOP, as authorized by Construction Permit BP-19900328AG. The nighttime 0.5 mV/m, 50% skywave secondary service contour will be protected from objectionable interference from other stations on a single-limit basis as provided in Section 73.182, except that such protection will not be provided within the areas where interference to KSTP from Station WTOP is predicted to occur. The nighttime groundwave primary service contour will be protected on a root-sum-square (RSS) basis, 25% exclusion method, from interference caused by other stations above the single limit imposed by Station WTOP, which is assumed to be 2.5 mV/m. See letter from Acting Chief, Audio Services Division to Thomas J. Hutton, Esq., et al, May 30, 2001.

Daytime Antenna System - series excited, uniform cross section, guyed, vertical Franklin antenna, height above base insulator 199.39 meters (2 sections, each 99.69 meters or 179.4 degrees), ground system consists of 120-106.71 m equally spaced copper radials about the base of the tower.

Nighttime ground system consists of 180 buried copper radials 121.95 meters, except where radials are terminated at perpendicular from line of towers of adjacent tower where they cross and are bonded , and except where west tower radials are terminated at Kohlman's Lake and some east tower radials terminated at drainage ditch, plus a 9.2 meter x 9.2 meter copper ground screen at the base of each tower.

\*\*\* END OF AUTHORIZATION \*\*\*