



**United States of America**  
**FEDERAL COMMUNICATIONS COMMISSION**  
**AM BROADCAST STATION LICENSE**

Authorizing Official:

Official Mailing Address:

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NRG LICENSE SUB, LLC  
 2875 MT. VERNON ROAD SE  
 CEDAR RAPIDS IA 52403

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Edward P. De La Hunt  
 Associate Chief  
 Audio Division  
 Media Bureau

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Facility Id: 51662

Call Sign: KPTY

License File Number: BZ-19961004AD

Grant Date: December 29, 1997

This license expires 3:00 a.m.  
 local time, February 01, 2005.

Direct Measurement of Power

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. | jan_sunrise | jan_sunset | Jul. | jul_sunrise | jul_sunset |
| Feb. | feb_sunrise | feb_sunset | Aug. | aug_sunrise | aug_sunset |
| Mar. | mar_sunrise | mar_sunset | Sep. | sep_sunrise | sep_sunset |
| Apr. | apr_sunrise | apr_sunset | Oct. | oct_sunrise | oct_sunset |
| May  | may_sunrise | may_sunset | Nov. | nov_sunrise | nov_sunset |
| Jun. | jun_sunrise | jun_sunset | Dec. | dec_sunrise | dec_sunset |

Callsign: KPTY

License No.: BZ-19961004AD

Name of Licensee: NRG LICENSE SUB, LLC

Station Location: WATERLOO, IA

Frequency (kHz): 1330

Station Class: B

Antenna Coordinates:

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

Nominal Power (kW): Night: 5.0

Antenna Input Power (kW): Night: 5.4

Antenna Mode: Night: DA

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

Current (amperes): Night: 10.4

Resistance (ohms): Night: 50

Antenna Registration Number(s):

Night:

| Tower No. | ASRN |    |
|-----------|------|----|
| 1         | None | 59 |
| 2         | None | 59 |
| 3         | None | 59 |
| 4         | None | 59 |
| 5         | None | 59 |

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Night: 648.57

Standard RMS (mV/m/km): Night:

Augmented RMS (mV/m/km):

Q Factor: Night: 22.36

Theoretical Parameters:

Night Directional Antenna:

| Tower No. | Field Ratio | Phasing (Deg.) | Spacing (Deg.) | Orientation (Deg.) | Tower Ref Switch * | Height (Deg.) |
|-----------|-------------|----------------|----------------|--------------------|--------------------|---------------|
| 1         | 1.0000      | 0.000          | 0.0000         | 0.000              | 0                  | 92.5          |
| 2         | 0.4000      | -166.200       | 143.5000       | 105.000            | 0                  | 92.5          |
| 3         | 1.4200      | -44.200        | 287.0000       | 105.000            | 0                  | 92.5          |
| 4         | 0.2800      | 137.300        | 430.5000       | 105.000            | 0                  | 92.5          |
| 5         | 0.6500      | -91.000        | 574.0000       | 105.000            | 0                  | 92.5          |

\* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Augmentation Parameters:

| Aug No. | Central Azimuth (Deg. T) | Span (Deg.) | Radiation at Central Azimuth (mV/m @ 1 km) |
|---------|--------------------------|-------------|--|
| 1       | 11.0                     | 28.0        | 744.47                                     |
| 2       | 25.0                     | 28.0        | 1138.11                                    |
| 3       | 105.0                    | 30.0        | 498.90                                     |
| 4       | 120.0                    | 30.0        | 318.09                                     |
| 5       | 135.0                    | 30.0        | 152.89                                     |
| 6       | 155.0                    | 40.0        | 166.73                                     |
| 7       | 198.0                    | 46.0        | 795.50                                     |
| 8       | 221.0                    | 18.0        | 61.16                                      |
| 9       | 341.0                    | 10.0        | 128.75                                     |
| 10      | 348.0                    | 14.0        | 90.12                                      |
| 11      | 357.0                    | 18.0        | 128.75                                     |

Night Directional Operation:

| Twr. No. | Phase (Deg.) | Antenna Monitor Sample Current Ratio |
|----------|--------------|--------------------------------------|
| 1        | 72           |                                      |
| 2        | 81           |                                      |
| 3        | 0            |                                      |
| 4        | 37           |                                      |
| 5        | -35          |                                      |

Callsign: KPTY

License No.: BZ-19961004AD

Antenna Monitor: POTOMAC INSTRUMENTS, AM-19 (204)

Sampling System Approved Under Section 73.68 of the Rules.

Monitoring Points:

Night Operation:

| Radial<br>(Deg. T) | Distance From Transmitter<br>(kM) | Maximum Field Strength<br>(mV/m) |
|--------------------|-----------------------------------|----------------------------------|
| 70                 | 4.11                              |                                  |
| 135                | 5.47                              |                                  |
| 175                | 7.57                              |                                  |
| 221                | 6.44                              |                                  |
| 260                | 4.7                               |                                  |
| 341                | 7.12                              |                                  |
| 348                | 6.89                              |                                  |
| 357                | 6.73                              |                                  |

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