



United States of America
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

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

Son Nguyen
 Supervisory Engineer
 Audio Division
 Media Bureau

Grant Date: May 27, 2005

Facility Id: 35950

Call Sign: KXEL

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

License File Number: BL-20041026AHG

This license covers permit no.: BP-20030714AFT

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

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License No.: BL-20041026AHG

Name of Licensee: NRG LICENSE SUB, LLC

Station Location: WATERLOO, IA

Frequency (kHz): 1540

Station Class: A

Antenna Coordinates:

Day

Latitude: N 42 Deg 10 Min 47 Sec

Longitude: W 92 Deg 18 Min 38 Sec

Night

Latitude: N 42 Deg 10 Min 48 Sec

Longitude: W 92 Deg 18 Min 38 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: 50.0 Night: 52.65

Antenna Mode: Day: ND Night: DA

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

Current (amperes): Day: 19 Night: 32.45

Resistance (ohms): Day: 138.5 Night: 50

Non-Directional Antenna: Day

Radiator Height: 83.9 meters;

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

Tower No.	A	B
1	155.0	35.00

Theoretical Efficiency: 354.06 mV/m/kw at 1km

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1045075	

Night:

Tower No.	ASRN	Overall Height (m)
1	1045075	
2	1045074	

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Night: 2735.88
 Standard RMS (mV/m/km):
 Augmented RMS (mV/m/km): Night: 3060.44
 Q Factor: Night:

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	1.1000	76.000	0.0000	0.000	0	TL/S
2	1.0000	0.000	125.0000	5.500	0	TL/S

* 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	155.0	35.00	.00	.00
2	155.0	35.00	.00	.00

Augmentation Parameters:

Aug No.	Central Azimuth (Deg. T)	Span (Deg.)	Radiation at Central Azimuth (mV/m @ 1 km)
1	0.0	84.0	4023.36
2	90.0	65.0	3419.86
3	122.5	23.0	1931.21
4	134.0	18.0	981.70
5	143.0	18.0	514.99
6	192.0	34.0	885.14
7	212.0	18.0	370.15
8	245.0	48.0	1577.16
9	270.0	50.0	3540.56
10	318.0	84.0	4377.42

Night Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	74.5	1.136
2	0	1

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Antenna Monitor: POTOMAC INSTRUMENTS AM-1901

Sampling System Approved Under Section 73.68 of the Rules.

Monitoring Points:

Night Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
153.2	5.24	33.17
235.3	5.49	181.13

*** END OF AUTHORIZATION ***