

ENGINEERING STATEMENT

PREPARED IN SUPPORT OF

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

KXEN 1010 kHz 0.5/50 kW DA-2 U ST. LOUIS, MISSOURI

MAY 2014

The following engineering statement has been prepared on behalf of BDJ Radio Enterprises, LLC (“BDJ”), licensee of Class B standard broadcast station KXEN, FCC ID Number 54739, St. Louis, Missouri. KXEN is licensed for full time, 50 kW day and 0.5 kW night, operation on 1010 kHz, employing a 6 tower day pattern and a separate three tower night pattern. The need for the STA facilities described in the STA application, Exhibit 16.

KXEN previously implemented a temporary wire antenna mounted on the side of a self-supporting TV tower located at the studios of KDNL TV in downtown St. Louis, Missouri under BSTA-20121204ACJ. The identical technical facility is proposed herein. The tower carries FCC tower

registration number 1003524. The KDNL site is located 18.4 kilometers southwest of the KXEN licensed site which places the STA facility both within the community of license and more central to the major lobe of the daytime directional antenna pattern.

An STA for use of the KDNL site is herein requested based on the following parameters:

Frequency (kHz):	1010
North Latitude:	38° 38' 08.8"
West Longitude:	90° 11' 44.6"
(NAD 27)	
Tower Registration Number:	1003524
Power Night:	0.125 kW
Radiator Height:	74.2 meter vertical wire supported on face of self supporting tower with two shorter wires below radiator as a counterpoise. All wires totally insulated from the tower (See Figure 1)
	90 degrees
Theoretical efficiency:	305.0 mV/m @ 1 km for 1 kW

It is noted that the proposed STA tower and site, although existing, are not suitable for KXEN licensed operation as the omni antenna configuration is unable to provide the required nighttime

protection to existing facilities at a power level which would allow continued fulltime Class B operation.

Figure 1 attached depict front and side views of the STA antenna system as previously installed and tested and proposed herein.

The foregoing was prepared on behalf of BDJ Radio Enterprises, LLC by Clarence M. Beverage of *Communications Technologies, Inc.*, Marlton, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The statements herein are true and correct of his own knowledge, except such statements made on information and belief, and as to these statements he believes them to be true and correct.



BY: _____

Clarence M. Beverage
for Communications Technologies, Inc.
Marlton, New Jersey
May 21, 2014

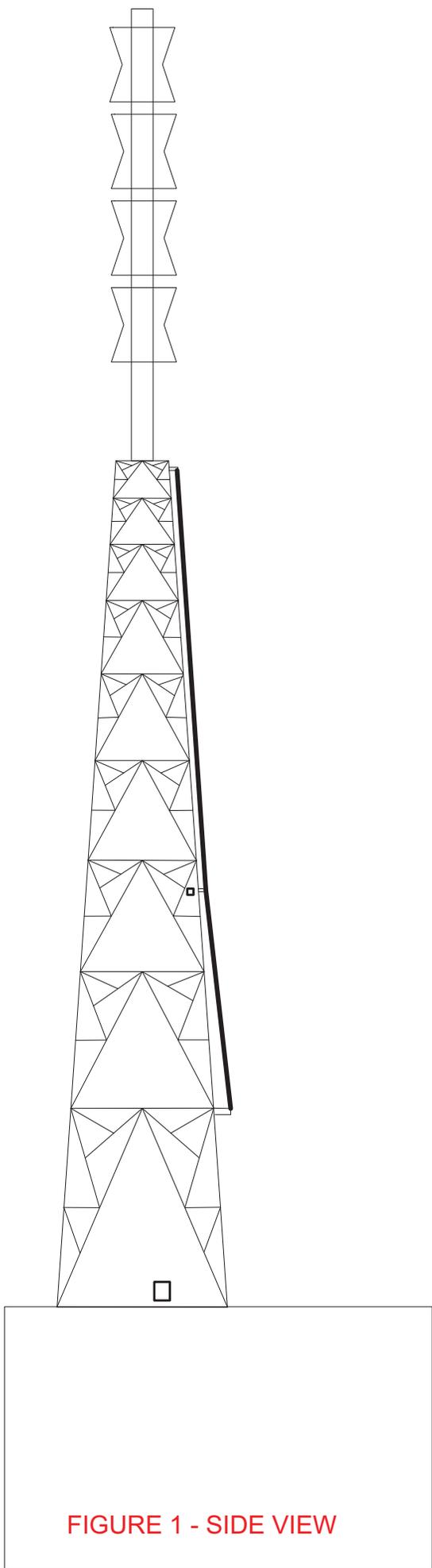


FIGURE 1 - SIDE VIEW

- ← Overall HAG 527.5'
- ← TV Batwing antenna
- ← Top of grid tower 453' approx
- ← Top of antenna wire 450'
- ← Antenna spaced 3' from tower centered on face
- ← Feedpoint of KXEN antenna 207', Matching box mounted on tower
- ← Below feed point antenna has two wires in inverted "V"
- ← Bottom of antenna 60' AGL
- ← Antenna matching unit on building roof
- ← Building roof approx 20' AGL

Sketch of proposed KXEN antenna on KDNL TV tower.
No scale

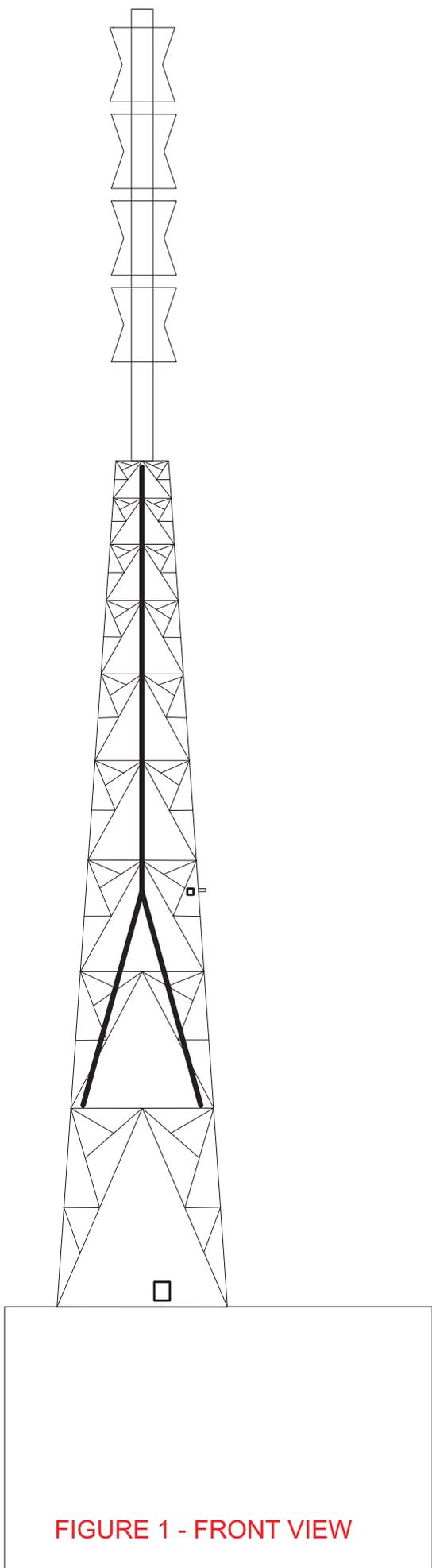


FIGURE 1 - FRONT VIEW

- ← Overall HAG 527.5'
- ← TV Batwing antenna - elements removed
- ← Top of grid tower 453' approx
- ← Top of antenna wire 450'
- ← Antenna spaced 3' from tower centered on face
- ← Feedpoint of KXEN antenna 207', Matching box mounted on tower
- ← Below feed point antenna has two wires in inverted "V"
- ← Bottom of antenna 60' AGL
- ← Antenna matching unit on building roof
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