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WASHINGTON, DC

May 30, 2012

RECEIVED

**VIA FEDERAL EXPRESS**

Marlene H. Dortch, Secretary  
Federal Communications Commission  
Office of the Secretary  
9300 East Hampton Drive  
Capitol Heights, MD 20743

**Re: WPEN(AM), Facility ID No. 25095, Philadelphia, PA**

Dear Ms. Dortch:

Transmitted herewith on behalf of Greater Philadelphia Radio, Inc. ("GPR"), licensee of station WPEN(AM), Fac. ID No. 25095, Philadelphia, Pennsylvania, is an engineering statement regarding certain changes made to one of WPEN(AM)'s towers. This information is being provided at the request of the FCC staff and should be associated with the Commission's records for station WPEN(AM).

Please date-stamp the enclosed "Return Copy" of this notification and return it to the courier delivering the package.

Should there be any questions regarding this matter, please contact the undersigned.

Respectfully submitted,

John W. Bagwell

*Counsel for Greater Philadelphia Radio, Inc.*

cc: Son Nguyen (via email, son.nguyen@fcc.gov)

ORIGINAL

KHANNA & GULL, Inc. – Consulting Engineers

ENGINEERING REPORT  
IN SUPPORT OF A RECENT MODIFICATION TO TOWER 1  
OF THE THREE TOWER DAYTIME DIRECTIONAL ARRAY  
WPEN, PHILADELPHIA, PENNSYLVANIA  
950 kHz 43 KW D/21 N KW DA-2  
MAY 2012

This engineering statement has been prepared on behalf of Greater Philadelphia Radio, Inc., (“GPR”) licensee of AM radio station WPEN, Philadelphia, Pennsylvania and is to provide the results of recent changes to tower 1 of the daytime directional operation.

At present WPEN operates on 950 kHz unlimited time with 43 kW power during day and 21 kW power at night. WPEN utilizes a three tower directional antenna during daytime and a four tower directional antenna during nighttime from a separate site. Recently, WPEN permitted Cricket Communications to install cellular-service antennas along with associated control and transmission lines onto tower 1 at WPEN’s daytime site.

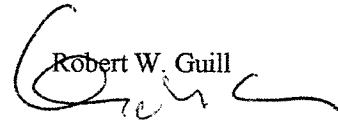
The attached engineering statement of Lawrence W. Paulausky, Chief Operator for WPEN, fully describes the recent modifications to Tower 1 of the WPEN 3 Tower directional antenna array. This statement along with the attached description of the isolation coil assembly designed and installed by Kurt Gorman of Phasetek, Inc., shows no adverse impact resulting from the cellular antenna installation.

WPEN is currently operating within the station’s licensed values and considered to be in conformance to all applicable FCC Rules and Regulations. Additionally, as indicated, in Mr. Paulausky statement, review of the partial RF antenna proof of performance demonstrated no significant change was observed to the WPEN directional antenna system following the installation of the cellular antennas.

Under penalty of perjury the undersigned states that the foregoing statement has been prepared by him and that the facts stated herein are true of his own knowledge,

except such facts as are stated to be on information and belief, and as to such facts, he believes them to be true.

29 May 2012

  
Robert W. Guill  

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Technical Consultant

## Engineering Statement for WPEN (AM)

### Background:

WPEN is licensed to use the following antenna systems:

- Main day: a three-tower system located at 7701 Brookhaven Road, in Philadelphia, PA
- Main night: a four-tower system located at 554 Foundry Road, East Norriton, PA
- Auxiliary night: the same three-tower system at Brookhaven Road in Philadelphia (but using different antenna ratios and phases and much lower transmitter power)

In all cases, WPEN uses an approved antenna monitor sample system and uses the direct method of power determination.

### Recent Colocation:

Recently, WPEN permitted a colocated tenant, Cricket Communications, to install six cellular-service antennas along with associated controls and transmission lines, onto Tower 1 at WPEN's Brookhaven Road site.

The cellular-service antennas were bonded to the tower at their elevation of 150 feet above ground, and the outer conductor of each of the six associated transmission lines were likewise bonded to the tower at the top, the bottom, and at intervals of approximately fifty feet along the run, using grounding kits provided by the manufacturer for the type of transmission line used.

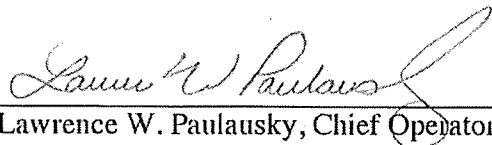
At the bottom of the tower, the lines were attached to a hollow copper tube formed into a one-turn choke, and terminated with weatherproof connectors onto the back surface of a specially designed isocoil cabinet. Inside the cabinet, six separate lengths of transmission line are wound into coils, and each line terminates in another exiting connector on the bottom of the cabinet, where additional lengths of transmission line run over the ground in a protected cage to Cricket's transceivers. The coils were resonated at 950 kHz to minimize any impact to the tower's driving point impedance.

Since it is possible that the addition of Cricket's equipment above the base insulator of the tower could have changed the electrical characteristics of the tower as a radiator in WPEN's system, in accordance with §73.61 of the Commission's rules, on March 29, 2012, a partial RF proof of performance of the Day Directional antenna pattern as described in §73.154 was undertaken.

These measurements have been reviewed and demonstrate that no significant change to the antenna system was introduced by the addition of Cricket's equipment. The partial RF proof measurements are being retained at the station.

Chief Operator's Conclusion:

The daytime directional antenna system of WPEN is within acceptable adjustment as defined by its station license, and is considered to be operating in conformance to all applicable FCC Rules and Regulations.

A handwritten signature in cursive script, reading "Lawrence W. Paulausky". The signature is written in dark ink and is positioned above a horizontal line.

Lawrence W. Paulausky, Chief Operator WPEN Radio

PHASETEK INC.

DESCRIPTION

ISOLATION COIL ASSEMBLY

RADIO STATION WPEN

The isolation coil assembly constructed for Radio Station WPEN consists of two (2) 85uH coils, part number P600-155-B12-3, wound out of Andrew ½" foam cable. Each coil has three (3) windings. Input and output connections to the coils are with 7/16" DIN connectors. The coils are mounted in a weatherproof cabinet that is installed at the base of tower #1. A variable capacitor, 50-2300pF, is connected in parallel with both coils and tuned for parallel resonance at 950 kHz. The measured impedance as set was +j 24,000 ohms. This high impedance eliminates any tower drive point impedance "shunting". Therefore, there is no noticeable change to tower current magnitude and phase.

