READ INSTRUCTIONS CAREFULLY
BEFORE PROCEEDING

FEDERAL COMMUNICATIONS COMMISSION
REMITTANCE ADVICE
FORM 159

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Approved by OMB
3060-0589
Page No 1 of 2

(1) LOCKBOX #	SPECIAL USE ONLY
979089	FCC USE ONLY

SECTION A – PAYER INFORMATION

(2) PAYER NAME (if paying by credit card enter name exactly as it appears on the card)	(3) TOTAL AMOUNT PAID (U.S. Dollars and cents)
Entercom Communications Corp.	$1,365.00

(4) STREET ADDRESS LINE NO. 1
401 E. City Avenue

(5) STREET ADDRESS LINE NO. 2
Suite 809

(6) CITY	(7) STATE	(8) ZIP CODE
Bala Cynwyd	PA	19004

(9) DAYTIME TELEPHONE NUMBER (include area code)	(10) COUNTRY CODE (if not in U.S.A.)
(610) 660-5610	

FCC REGISTRATION NUMBER (FRN) REQUIRED

(11) PAYER (FRN)	(12) FCC USE ONLY
0006-1139-55	

IF MORE THAN ONE APPLICANT, USE CONTINUATION SHEETS (FORM 159-C)
COMPLETE SECTION BELOW FOR EACH SERVICE, IF MORE BOXES ARE NEEDED, USE CONTINUATION SHEET

(13) APPLICANT NAME
Entercom License, LLC

(14) STREET ADDRESS LINE NO. 1
401 E. City Avenue

(15) STREET ADDRESS LINE NO. 2
Suite 809

(16) CITY	(17) STATE	(18) ZIP CODE
Bala Cynwyd	PA	19004

(19) DAYTIME TELEPHONE NUMBER (include area code)	(20) COUNTRY CODE (if not in U.S.A.)
(610) 660-5610	

FCC REGISTRATION NUMBER (FRN) REQUIRED

(21) APPLICANT (FRN)	(22) FCC USE ONLY
0004-43448-66	

COMPLETE SECTION C FOR EACH SERVICE, IF MORE BOXES ARE NEEDED, USE CONTINUATION SHEET

(23A) CALL SIGN/OTHER ID	(24A) PAYMENT TYPE CODE	(25A) QUANTITY
WVEI(AM)/74466	MMR	1
(26A) FEE DUE FOR (PTC)	**(27A) TOTAL FEE**	**FCC USE ONLY**
$635.00	$635.00	
(28A) FCC CODE 1	(29A) FCC CODE 2	

(23B) CALL SIGN/OTHER ID	(24B) PAYMENT TYPE CODE	(25B) QUANTITY
WVEI(AM)/74466	MOR	1
(26B) FEE DUE FOR (PTC)	**(27B) TOTAL FEE**	**FCC USE ONLY**
$730.00	$730.00	
(28B) FCC CODE 1	(29B) FCC CODE 2	

SECTION D – CERTIFICATION

CERTIFICATION STATEMENT

I, Andrew P. Sutor, IV certify under penalty of perjury that the foregoing and supporting information is true and correct to the best of my knowledge, information and belief.

SIGNATURE [signature] DATE 4/3/14

SECTION E - CREDIT CARD PAYMENT INFORMATION

MASTERCARD_____ VISA_____ AMEX_____ DISCOVER_____

ACCOUNT NUMBER_____ EXPIRATION DATE_____

I hereby authorize the FCC to charge my credit card for the service(s)/authorization herein described.

SIGNATURE_____ DATE_____

Federal Communications Commission
Washington, D. C. 20554

Approved by OMB
3060-0627
Expires 01/31/98

FOR FCC USE ONLY

FCC 302-AM
APPLICATION FOR AM BROADCAST STATION LICENSE

(Please read instructions before filling out form.

FOR COMMISSION USE ONLY
FILE NO. BMML-20140407ACS

SECTION I - APPLICANT FEE INFORMATION

1. PAYOR NAME (Last, First, Middle Initial)

ENTERCOM COMMUNICATIONS CORP.

MAILING ADDRESS (Line 1) (Maximum 35 characters)
401 E. CITY AVENUE, SUITE 809

MAILING ADDRESS (Line 2) (Maximum 35 characters)

CITY	STATE OR COUNTRY (if foreign address)	ZIP CODE
BALA CYNWYD	PENNSYLVANIA	19004

TELEPHONE NUMBER (include area code)	CALL LETTERS	OTHER FCC IDENTIFIER (If applicable)
610-660-5652	WVEI	74466

2. A. Is a fee submitted with this application? [✓] Yes [ ] No

B. If No, indicate reason for fee exemption (see 47 C.F.R. Section

[ ] Governmental Entity [ ] Noncommercial educational licensee [ ] Other (Please explain):

C. If Yes, provide the following information:

Enter in Column (A) the correct Fee Type Code for the service you are applying for. Fee Type Codes may be found in the "Mass Media Services Fee Filing Guide." Column (B) lists the Fee Multiple applicable for this application. Enter fee amount due in Column (C).

(A) FEE TYPE CODE	(B) FEE MULTIPLE	(C) FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY
MMR	0001	$	

To be used only when you are requesting concurrent actions which result in a requirement to list more than one Fee Type Code.

(A)	(B)	(C)	FOR FCC USE ONLY
MOR	0001	$	

	TOTAL AMOUNT REMITTED WITH THIS APPLICATION	FOR FCC USE ONLY
ADD ALL AMOUNTS SHOWN IN COLUMN C, AND ENTER THE TOTAL HERE. THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED REMITTANCE.	$	

CLEAR ALL PAGES

SECTION II - APPLICANT INFORMATION		
1. NAME OF APPLICANT ENTERCOM LICENSE, LLC		
MAILING ADDRESS 401 E. CITY AVENUE, SUITE 809		
CITY BALA CYNWYD	STATE PENNSYLVANIA	ZIP CODE 19004

2. This application is for:

☑ Commercial ☐ Noncommercial

☑ AM Directional ☐ AM Non-Directional

Call letters	Community of License	Construction Permit File No.	Modification of Construction Permit File No(s).	Expiration Date of Last Construction Permit
WVEI	WORCESTER, MA	N/A	N/A	N/A

3. Is the station now operating pursuant to automatic program test authority in accordance with 47 C.F.R. Section 73.1620?

☐ Yes ☑ No

If No, explain in an Exhibit.

Exhibit No. BSTA-20131025ABI

4. Have all the terms, conditions, and obligations set forth in the above described construction permit been fully met?

☐ Yes ☐ No

If No, state exceptions in an Exhibit.

Exhibit No. N/A MoM LICENSE

5. Apart from the changes already reported, has any cause or circumstance arisen since the grant of the underlying construction permit which would result in any statement or representation contained in the construction permit application to be now incorrect?

☐ Yes ☐ No

If Yes, explain in an Exhibit.

Exhibit No. N/A MoM LICENSE

6. Has the permittee filed its Ownership Report (FCC Form 323) or ownership certification in accordance with 47 C.F.R. Section 73.3615(b)?

☐ Yes ☐ No

☑ Does not apply

If No, explain in an Exhibit.

Exhibit No.

7. Has an adverse finding been made or an adverse final action been taken by any court or administrative body with respect to the applicant or parties to the application in a civil or criminal proceeding, brought under the provisions of any law relating to the following: any felony; mass media related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination?

☐ Yes ☒ No

If the answer is Yes, attach as an Exhibit a full disclosure of the persons and matters involved, including an identification of the court or administrative body and the proceeding (by dates and file numbers), and the disposition of the litigation. Where the requisite information has been earlier disclosed in connection with another application or as required by 47 U.S.C. Section 1.65(c), the applicant need only provide: (i) an identification of that previous submission by reference to the file number in the case of an application, the call letters of the station regarding which the application or Section 1.65 information was filed, and the date of filing; and (ii) the disposition of the previously reported matter.

Exhibit No.

CLEAR ALL PAGES

8. Does the applicant, or any party to the application, have a petition on file to migrate to the expanded band (1605-1705 kHz) or a permit or license either in the existing band or expanded band that is held in combination (pursuant to the 5 year holding period allowed) with the AM facility proposed to be modified herein?

☐ Yes ☑ No

If Yes, provide particulars as an Exhibit.

Exhibit No. N/A

The APPLICANT hereby waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because use of the same, whether by license or otherwise, and requests and authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended).

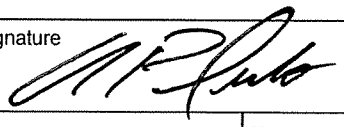
The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations and that all the exhibits are a material part hereof and are incorporated herein as set out in full in

CERTIFICATION

1. By checking Yes, the applicant certifies, that, in the case of an individual applicant, he or she is not subject to a denial of federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862, or, in the case of a non-individual applicant (e.g., corporation, partnership or other unincorporated association), no party to the application is subject to a denial of federal benefits that includes FCC benefits pursuant to that section. For the definition of a "party" for these purposes, see 47 C.F.R. Section 1.2002(b).

☒ Yes ☐ No

2. I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Name Andrew P. Sutor, IV	Signature 	
Title Senior Vice President	Date 4-3-14	Telephone Number (610) 660-5610

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The Commission will use the information provided in this form to determine whether grant of the application is in the public interest. In reaching that determination, or for law enforcement purposes, it may become necessary to refer personal information contained in this form to another government agency. In addition, all information provided in this form will be available for public inspection. If information requested on the form is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Your response is required to obtain the requested authorization.

Public reporting burden for this collection of information is estimated to average 639 hours and 53 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, can be sent to the Federal Communications Commission, Records Management Branch, Paperwork Reduction Project (3060-0627), Washington, D. C. 20554. Do NOT send completed forms to this address.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.

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SECTION III - LICENSE APPLICATION ENGINEERING DATA

Name of Applicant
ENTERCOM LICENSE, LLC

PURPOSE OF AUTHORIZATION APPLIED FOR: (check one)

☑ Station License ☐ Direct Measurement of Power

1. Facilities authorized in construction permit

Call Sign	File No. of Construction Permit (if applicable)	Frequency (kHz)	Hours of Operation	Power in kilowatts	
				Night	Day
WVEI		1440	UNLIMITED	5.0	5.0

2. Station location

State	City or Town
MASSACHUSETTS	WORCESTER

3. Transmitter location

State	County	City or Town	Street address (or other identification)
MA	WORCESTER	WORCESTER	181 MORELAND STREET

4. Main studio location

State			Street address (or other identification)
MA	SUFFOLK	BRIGHTON	20 GUEST STREET

5. Remote control point location (specify only if authorized directional antenna)

State	County		Street address (or other identification)
MA	SUFFOLK	BRIGHTON	20 GUEST STREET

6. Has type-approved stereo generating equipment been installed? ☐ Yes ☑ No

7. Does the sampling system meet the requirements of 47 C.F.R. Section 73.68? ☑ Yes ☐ No ☐ Not Applicable

Attach as an Exhibit a detailed description of the sampling system as installed. Exhibit No. SEE ENGINEERING

8. Operating constants:

RF common point or antenna current (in amperes) without modulation for night system	RF common point or antenna current (in amperes) without modulation for day system
10.2	6.33

Measured antenna or common point resistance (in ohms) at operating frequency		Measured antenna or common point reactance (in ohms) at operating frequency	
Night	Day	Night	Day
52.0	124.8	+J0	+J

Antenna indications for directional operation

Towers	Antenna monitor Phase reading(s) in degrees		Antenna monitor sample current ratio(s)		Antenna base currents	
	Night	Day	Night	Day	Night	Day
#1 EAST	+0.0		1.0			
#2 WEST	+41.5		0.991			

Manufacturer and type of antenna monitor: POTOMAC INSTRUMENTS 1901

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9. Description of antenna system ((f directional antenna is used, the information requested below should be given for each element of the array. Use separate sheets if necessary.)

Type Radiator	Overall height in meters of radiator above base insulator, or above base, if grounded.	Overall height in meters above ground (without obstruction lighting)	Overall height in meters above ground (include obstruction lighting)	If antenna is either top loaded or sectionalized, describe fully in an Exhibit.
GUYED, UNIFORM CROSS SECTION	#1=60.98, #2 = 60.98,	#1=61.3, #2 = 61.3,	#1=62.2, #2 = 62.2,	Exhibit No. N/A

Excitation ☑ Series ☐ Shunt

Geographic coordinates to nearest second. For directional antenna give coordinates of center of array. For single vertical radiator give tower location.

North Latitude					West Longitude				
42	°	17	'	25 "	71	°	50	'	47 "

If not fully described above, attach as an Exhibit further details and dimensions including any other antenna mounted on tower and associated isolation circuits. Exhibit No. N/A

Also, if necessary for a complete description, attach as an Exhibit a sketch of the details and dimensions of ground system. Exhibit No. N/A

10. In what respect, if any, does the apparatus constructed differ from that described in the application for construction permit or in the permit?

N/A METHOD OF MOMENTS LICENSE APPLICATION

11. Give reasons for the change in antenna or common point resistance.

WIRELESS FACILITY ANTENNA MOUNTED ON WEST TOWER #2

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

Name (Please Print or Type)	Signature (check appropriate box below)
Clarence M. Beverage	
Address (include ZIP Code)	Date
Communications Technologies, Inc. P.O. Box 1130 Marlton, NJ 08053	03/12/2014 Telephone No. (Include Area Code) 856-985-0077 ext. 12

☐ Technical Director ☐ Registered Professional Engineer

☐ Chief Operator ☐ Technical Consultant

☑ Other (specify) BROADCAST ENGINEERING CONSULTANT

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ENGINEERING STATEMENT IN

SUPPORT OF 302-AM

APPLICATION FOR LICENSE EMPLOYING MOMENT

METHOD MODELING

WVEI (AM) 1440 kHz

5 kW DA-N U

WORCESTER, MASSACHUSETTS

MARCH 2014

ENGINEERING STATEMENT IN

SUPPORT OF 302-AM

APPLICATION FOR LICENSE EMPLOYING MOMENT

METHOD MODELING

WVEI (AM) 1440 kHz

5 kW DA-N U

WORCESTER, MASSACHUSETTS

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MARCH 2014

ENGINEERING STATEMENT IN

SUPPORT OF 302-AM

APPLICATION FOR LICENSE EMPLOYING MOMENT

METHOD MODELING

WVEI (AM) 1440 kHz

5 kW DA-N U

WORCESTER, MASSACHUSETTS

MARCH 2014

SUMMARY

The following engineering statement has been prepared on behalf of **Entercom License, LLC**, licensee of standard broadcast station WVEI (AM), FCC ID74466, 1440 kHz, Worcester, Massachusetts. WVEI (AM) is currently licensed under BL-19900711AB which authorizes 1440 kHz non-directional daytime and nighttime directional operation at a power of 5 kilowatts. This application requests licensing of the WVEI (AM) antenna system using computer modeling and sample system verification as provided for in the Second Report and Order in MM Docket No. 93-177 released September 26, 2008. The rules specify that the night directional antenna parameters be set to the operating parameters determined by the moment method without deviation. That operation has been completed and Form 302-AM is submitted herein specifying the as adjusted operating parameters. This application is filed against STA BSTA-20131025ABI.

METHOD OF MOMENTS MODEL – SELF IMPEDANCE ANALYSIS

In an effort to model the antenna system as accurately as possible, detailed mechanical data was obtained from the licensee and FCC tower registration data and is summarized below:

> Registration 2TA1, #1006362 - #1 East tower is 200' (60.98 meters) in height, steel, uniform cross section, 2' face mounted on a base insulator above a concrete pier.
>
> Registration 2TA2, #1006363 - #2 West tower is 200' (60.98 meters) in height, steel, uniform cross section, 2' face mounted on a base insulator above a concrete pier.

Base Insulators are brown ceramic 20" in height; specified capacitance of 25 pf.

Standard tower light isolation chokes are employed.

Tower #1 supports a 950 MHz aural STL dish with a Kintronics Labs FMC-0.2P isocoupler with a capacitance of 35 picofard.

Tower #2 supports a microwave dish/cellular panel system whose coaxial cables enter a set of Kintronics isolation coils. The inductance of the coils is 80.898 uh and the parallel resonating capacitor is 0.000151 ufd.

The choice of calculating engine and software implementation chosen for this filing is the ACS Model Version 1.021 employing MININEC3. The circuit analysis software employed is WCAP Professional Version 1.1.02.

The wire models for the three towers are constructed as specified below:

Tower #1 East	Tower #2 West
Actual radius = 0.2911 meters	Actual radius = 0.2911 meters
Model radius = 0.2911 meters	Model radius = 0.2911 meters
Percentage of actual radius = 100%	Percentage of actual radius = 100%
Z = 64.07762 meters	Z = 61.8801 meters
Percentage of actual height = 105.1%	Percentage of actual height = 101.5%
Number of segments = 21	Number of segments = 21

The values above comply with the 73.151 requirement that the radius of the wire model cylinder be within 80 and 150 percent of the radius of a circle with a circumference equal to the sum of the faces, that the height be between 75 and 125 percent of the physical length and that no segment be less than 10 electrical degrees.

The tower measured base self impedances, with all other towers floating, as measured at the J plug, are listed below. Tower impedance was obtained using an Array Solutions VNA 2180, serial number 5036. The modeled self impedance measurements, with all other towers floating, may be found in *Exhibit I, page 2* for Tower #1 and *Exhibit I, page 5* for Tower #2. A circuit model has been constructed for each tower to

account for shunt and series reactance across the tower base. All calculations have been made employing WCAP Professional version 1.1.02 as seen in *Figures 1 - 2* for self impedance and *Figures 3 - 4* for nighttime directional operation. The measured and calculated self impedance values are well within the tolerance specified in 73.151(c)(2)(ii) as seen below:

Tower #1

Measured self impedance at ATU:	119.3 +J 215.5
Modeled self impedance at base:	101.755 +J 141.643
Shunt capacitance:	25 pf in parallel with 35 pf
Series inductance:	+J 69.216, 7.65 uh
Modeled self impedance at ATU:	119.0 +J 215.5

Tower #2

Measured self impedance at ATU:	90.29 +J 193.37
Modeled self impedance at base:	86.292 +J 118.306
Shunt capacitance:	25 pf in parallel with 80.898 uh across 0.000151 ufd
Series inductance:	+J 73.287, 8.1 uh
Modeled self impedance at ATU:	91.07 +J 193.02

The calculated tolerances are:

Tower #1 119.3 ± 6.77 resistance, +J 215.5 ± 10.62 reactance
Tower #2 90.29 ± 5.61 resistance, +J 193.37 ± 9.73 reactance

METHOD OF MOMENTS MODEL – BASE OPERATING PARAMETERS

The modeled tower array was employed, as constructed for the derivation of self impedance, for the determination of nighttime operating parameters. The FCC theoretical values were converted to base excitation values. The base excitation values for the nighttime array may be found in *Exhibit II, page 9*.

The calculated base operating parameters and the phase monitor parameters as adjusted and reflected on Form 302-AM, attached, are as follows. Due to the tower height toroid sampling is employed using Delta TCT-3 toroids, serial numbers 972 and 949.

NIGHTTIME:

Tower	Figures 3 & 4 Circuit Model Ratio and Phase	Correction to Modeled Values to Derive Antenna Monitor Values
#1	0.9436 -4.39	0.9436 0.0
#2	0.9823 -0.618	0.9823 -3.772

Tower	Modeled Base Current & Phase	Antenna Monitor Current & Phase
#1	1.000 0.00	1.000 0.00
#2	0.956 +45.2	0.99 +41.5

The adjusted pattern has phase monitor values which are equal to the modeled phase and ratio corrected for circuit model amplitude and phase. The nighttime directional pattern has been adjusted to the values above and as shown on the attached form 302-AM.

DIRECT MEASUREMENT OF POWER

Common point impedance was measured with a Delta CPIB, with TCA20-EX serial number 1396. Common point current was measured with the CPIB which is permanently installed in the phasing cabinet. Common point resistance was set to 52 + J0 and the transmitter power adjusted to yield the correct current of 10.2 amps for a power level of 5,400 watts during nighttime hours as found on FCC Form 302-AM attached.

SAMPLING SYSTEM

The antenna system is licensed with an approved sampling system and no changes to the sampling system were required for this filing.

Delta toroid sampling devices, type TCT-3, are mounted in tuning houses at the base of each tower. Sample lines are equal length Cablewave FCC 12-50J. The antenna monitor is a Potomac Instruments AM-1901 serial number 205.

Measurements on the sampling system components are tabulated below. Toroidal sample devices were tested for accuracy by removing the units from the tuning units at the base of each tower and placing the devices in series on the same conductor in the transmitter building. The sample devices were then measured when connected to the phase monitor with coax jumpers having exact equal electrical length:

		Ratio	Phase
Toroid #1	#972	100.0	0.1
Toroid #2	#949	100.0	0.1

The sampling device accuracy was verified as being well within the manufacturer tolerance of ±2% in magnitude and ±3 degrees in phase

Phase monitor accuracy was confirmed by feeding two tower inputs at a time through a splitter and equal length jumpers to confirm equal magnitude and phase on each tower. There were no observable errors.

Impedance and electrical length for each of the two sample lines were measured with an Array Solutions model AIM4170C vector network analyzer ("VNA"). The VNA was connected to the sample lines at the transmitter building with the sample lines unterminated on the turning unit end. The measured electrical length data is found below:

Sample line open-circuited odd quarter wave below 1440 kHz (0.25 wavelength)	1 (E) = 1269 kHz 512' = 306.4 deg. 2 (W) = 1270 kHz 511' = 306.1 deg.
Sample line open-circuited odd quarter wave above 1440 kHz (0.75 wavelength)	1 (E) = 2120 kHz 510' = 305.7 deg. 2 (W) = 2122 kHz 510' = 305.4 deg.

It may be seen that the sample lines are equal in length. The sample system meets the rule requirement that the sample lines be equal to within one degree.

The impedance of the sample lines was determined by measuring the open circuit impedance 45 degrees above and below the resonant length of the sample lines. The measured data is presented below. The impedance is determined using the formula:

$$Z_o = ((R_1^2 + X_1^2)^{1/2} \times (R_2^2 + X_2^2)^{1/2})^{1/2}$$

	3/8 lambda +45° From 3/4 wave	Measured Impedance	1/8 lambda -45° From 3/4 wave	Measured Impedance	Calculated Impedance by formula
Tower #1(N)	1481	4.86 + J 49.54	1058	3.47 –J 49.89	50.0
Tower #2(S)	1482	4.86 +J 49.57	1058	3.42 – J 50.00	50.0

The characteristic impedance of the transmission lines is within 1 ohm. The allowable tolerance is 2 ohms. Sampling system impedance was measured with each of the sampling lines terminated in its respective toroid sampling device. Impedance was measured by connecting each sample line directly to the VNA. The measured impedance data is found below as measured at 560 kHz.

Measured impedance of sampling line and associated toroid

Tower #1(E)	47.6 –J 2.6
Tower #2(W)	49.2 –J 5.4

GROUND SYSTEM

The ground system consists of 120 radials, equally spaced, around the base of each tower between 36.6 meters and 76.2 meters in length except where terminated by property boundaries or where intersecting radials are shortened and bonded. A 14.6 meter by 14.6 meter copper mesh screen is located at the base of the #1 east tower.

REFERENCE FIELD STRENGTH MEASUREMENTS

Reference field strength measurements were taken by William P. Weeks using a Potomac Instruments FIM-41 field meter, serial Number 748, calibrated on June 15, 2006. The calibration of this meter was checked against a FIM-41, serial number 1175, calibrated on May 28, 2013 by Potomac Instruments and found to be within the manufacturer's tolerance. The measurement data appears in *Appendix 1*.

CONCLUSION

All adjustments, measurements and field work were undertaken under the direction of the affiant.

The foregoing was prepared on behalf of Entercom License, 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.

/s/ Clarence M. Beverage
for Communications Technologies, Inc.
Marlton, New Jersey

March 31, 2014

EXHIBIT I

```
****************************************
                ACSModel
          (MININEC 3.1 Core)
     02-12-2014          10:37:26
****************************************
```

WVEI #1 ND
TOWER #1 EAST
TOWER #2 LOADED -J10,000

Frequency = 1.440 MHz Wavelength = 208.19444 Meters

No. of Wires: 2

Wire No. 1 Coordinates X	Y	Z	Radius	End Connection	No. of Segments
0	0	0		-1	
0	0	64.07762	0.291	0	21

Wire No. 2 Coordinates X	Y	Z	Radius	End Connection	No. of Segments
-13.22161	-76.94524	0		-2	
-13.22161	-76.94524	61.88001	0.291	0	21

**** ANTENNA GEOMETRY ****

Wire No. 1 Coordinates X	Y	Z	Radius	Connection End1	End2	Pulse No.
0	0	0	0.291	-1	1	1
0	0	3.051315	0.291	1	1	2
0	0	6.102631	0.291	1	1	3
0	0	9.153946	0.291	1	1	4
0	0	12.20526	0.291	1	1	5
0	0	15.25658	0.291	1	1	6
0	0	18.30789	0.291	1	1	7
0	0	21.35921	0.291	1	1	8
0	0	24.41052	0.291	1	1	9
0	0	27.46184	0.291	1	1	10
0	0	30.51315	0.291	1	1	11
0	0	33.56447	0.291	1	1	12
0	0	36.61578	0.291	1	1	13
0	0	39.6671	0.291	1	1	14
0	0	42.71841	0.291	1	1	15
0	0	45.76973	0.291	1	1	16
0	0	48.82104	0.291	1	1	17
0	0	51.87236	0.291	1	1	18
0	0	54.92368	0.291	1	1	19
0	0	57.97499	0.291	1	1	20
0	0	61.02631	0.291	1	0	21

Wire No. 2 Coordinates X	Y	Z	Radius	Connection End1	End2	Pulse No.
-13.22161	-76.94524	0	0.291	-2	2	22
-13.22161	-76.94524	2.946667	0.291	2	2	23
-13.22161	-76.94524	5.893334	0.291	2	2	24
-13.22161	-76.94524	8.840002	0.291	2	2	25
-13.22161	-76.94524	11.78667	0.291	2	2	26
-13.22161	-76.94524	14.73334	0.291	2	2	27
-13.22161	-76.94524	17.68	0.291	2	2	28
-13.22161	-76.94524	20.62667	0.291	2	2	29
-13.22161	-76.94524	23.57334	0.291	2	2	30
-13.22161	-76.94524	26.52	0.291	2	2	31
-13.22161	-76.94524	29.46667	0.291	2	2	32
-13.22161	-76.94524	32.41334	0.291	2	2	33
-13.22161	-76.94524	35.36001	0.291	2	2	34
-13.22161	-76.94524	38.30667	0.291	2	2	35
-13.22161	-76.94524	41.25334	0.291	2	2	36
-13.22161	-76.94524	44.20001	0.291	2	2	37
-13.22161	-76.94524	47.14668	0.291	2	2	38
-13.22161	-76.94524	50.09334	0.291	2	2	39
-13.22161	-76.94524	53.04001	0.291	2	2	40
-13.22161	-76.94524	55.98668	0.291	2	2	41
-13.22161	-76.94524	58.93334	0.291	2	0	42

Sources: 1
Pulse No., Voltage Magnitude, Phase (Degrees): 1, 1728.9, 53.8

Number of Loads: 1
Pulse No., Resistance, Reactance: 22 , 0 ,-10000

********** SOURCE DATA **********
Pulse 1 Voltage = (1022.231, 1394.3707j)
Current = (9.9129, -0.0956j)
Impedance = (101.755, 141.643j)
Power = 5000.0 Watts

********** CURRENT DATA **********

Wire No. 1 :

Pulse No.	Real (Amps)	Imaginary (Amps)	Magnitude (Amps)	Phase (Degrees)
1	9.9129	-0.0956	9.9134	-0.5526
2	10.8807	-0.8253	10.912	-4.3376
3	11.3786	-1.2508	11.4471	-6.2732
4	11.7122	-1.5957	11.8204	-7.7585
5	11.9096	-1.88	12.0571	-8.9704
6	11.9845	-2.1125	12.1692	-9.997
7	11.9439	-2.2974	12.1628	-10.8879
8	11.7927	-2.4367	12.0418	-11.6745
9	11.5351	-2.5316	11.8097	-12.3786
10	11.175	-2.5832	11.4696	-13.0157
11	10.7161	-2.5921	11.0252	-13.5978
12	10.1629	-2.5591	10.4802	-14.1338
13	9.5197	-2.4852	9.8388	-14.6311
14	8.7913	-2.3713	9.1055	-15.0954

Wire No. 1 :(Continued)

Pulse No.	Real (Amps)	Imaginary (Amps)	Magnitude (Amps)	Phase (Degrees)
15	7.9825	-2.2185	8.285	-15.5317
16	7.0979	-2.0278	7.3819	-15.9439
17	6.142	-1.8002	6.4004	-16.3356
18	5.118	-1.5364	5.3436	-16.7099
19	4.0265	-1.2364	4.2121	-17.0698
20	2.8619	-0.8979	2.9995	-17.4188
21	1.6046	-0.5141	1.6849	-17.7651
E	0.0	0.0	0.0	0.0

Wire No. 2 :

Pulse No.	Real (Amps)	Imaginary (Amps)	Magnitude (Amps)	Phase (Degrees)
22	-0.05	0.0043	0.0501	175.1015
23	-0.4	0.0344	0.4015	175.082
24	-0.602	0.0521	0.6043	175.0501
25	-0.7653	0.0668	0.7682	175.0118
26	-0.8993	0.0792	0.9028	174.9683
27	-1.0086	0.0897	1.0125	174.9203
28	-1.095	0.0983	1.0994	174.8683
29	-1.1598	0.1053	1.1646	174.8126
30	-1.2036	0.1105	1.2087	174.7531
31	-1.2268	0.114	1.2321	174.6902
32	-1.23	0.1158	1.2354	174.6237
33	-1.2134	0.1157	1.219	174.5538
34	-1.1777	0.1138	1.1832	174.4803
35	-1.1232	0.1101	1.1286	174.4032
36	-1.0504	0.1044	1.0556	174.3224
37	-0.9599	0.0969	0.9648	174.2378
38	-0.8522	0.0873	0.8566	174.149
39	-0.7274	0.0757	0.7314	174.0559
40	-0.5856	0.062	0.5889	173.9579
41	-0.4256	0.0458	0.4281	173.8544
42	-0.2442	0.0268	0.2456	173.7425
E	0.0	0.0	0.0	0.0

********** BASE OPERATING PARAMETERS **********

Twr.	Ratio	Phase
1	1.000	0.0
2	0.005	175.7

EXHIBIT I CONTINUED

****

ACSModel

(MININEC 3.1 Core)

02-12-2014 10:49:00

****

WVEI #2 ND
TOWER #2 WEST
TOWER #1 LOADED -J10,000

Frequency = 1.440 MHz Wavelength = 208.19444 Meters

No. of Wires: 2

Wire No. 1 Coordinates X	Y	Z	Radius	End Connection	No. of Segments
0	0	0		-1	
0	0	64.07762	0.291	0	21

Wire No. 2 Coordinates X	Y	Z	Radius	End Connection	No. of Segments
-13.22161	-76.94524	0		-2	
-13.22161	-76.94524	61.88001	0.291	0	21

**** ANTENNA GEOMETRY ****

Wire No. 1 Coordinates X	Y	Z	Radius	Connection End1	End2	Pulse No.
0	0	0	0.291	-1	1	1
0	0	3.051315	0.291	1	1	2
0	0	6.102631	0.291	1	1	3
0	0	9.153946	0.291	1	1	4
0	0	12.20526	0.291	1	1	5
0	0	15.25658	0.291	1	1	6
0	0	18.30789	0.291	1	1	7
0	0	21.35921	0.291	1	1	8
0	0	24.41052	0.291	1	1	9
0	0	27.46184	0.291	1	1	10
0	0	30.51315	0.291	1	1	11
0	0	33.56447	0.291	1	1	12
0	0	36.61578	0.291	1	1	13
0	0	39.6671	0.291	1	1	14
0	0	42.71841	0.291	1	1	15
0	0	45.76973	0.291	1	1	16
0	0	48.82104	0.291	1	1	17
0	0	51.87236	0.291	1	1	18

0	0	54.92368	0.291	1	1	19
0	0	57.97499	0.291	1	1	20
0	0	61.02631	0.291	1	0	21

Wire No. 2 Coordinates

X	Y	Z	Radius	Connection End1	End2	Pulse No.
-13.22161	-76.94524	0	0.291	-2	2	22
-13.22161	-76.94524	2.946667	0.291	2	2	23
-13.22161	-76.94524	5.893334	0.291	2	2	24
-13.22161	-76.94524	8.840002	0.291	2	2	25
-13.22161	-76.94524	11.78667	0.291	2	2	26
-13.22161	-76.94524	14.73334	0.291	2	2	27
-13.22161	-76.94524	17.68	0.291	2	2	28
-13.22161	-76.94524	20.62667	0.291	2	2	29
-13.22161	-76.94524	23.57334	0.291	2	2	30
-13.22161	-76.94524	26.52	0.291	2	2	31
-13.22161	-76.94524	29.46667	0.291	2	2	32
-13.22161	-76.94524	32.41334	0.291	2	2	33
-13.22161	-76.94524	35.36001	0.291	2	2	34
-13.22161	-76.94524	38.30667	0.291	2	2	35
-13.22161	-76.94524	41.25334	0.291	2	2	36
-13.22161	-76.94524	44.20001	0.291	2	2	37
-13.22161	-76.94524	47.14668	0.291	2	2	38
-13.22161	-76.94524	50.09334	0.291	2	2	39
-13.22161	-76.94524	53.04001	0.291	2	2	40
-13.22161	-76.94524	55.98668	0.291	2	2	41
-13.22161	-76.94524	58.93334	0.291	2	0	42

Sources: 1
Pulse No., Voltage Magnitude, Phase (Degrees): 22, 1576.4, 62.4

Number of Loads: 1
Pulse No., Resistance, Reactance: 1 , 0 ,-10000

********** SOURCE DATA **********
Pulse 22 Voltage = (729.6403, 1397.3236j)
Current = (10.6458, 1.5976j)
Impedance = (86.292, 118.306j)
Power = 5000.0 Watts

********** CURRENT DATA **********

Wire No. 1 :

Pulse No.	Real (Amps)	Imaginary (Amps)	Magnitude (Amps)	Phase (Degrees)
1	-0.0544	-0.0039	0.0546	-175.9022
2	-0.4429	-0.0316	0.444	-175.9226
3	-0.6692	-0.0473	0.6709	-175.9558
4	-0.8524	-0.0597	0.8545	-175.9956
5	-1.0031	-0.0694	1.0055	-176.0407
6	-1.1261	-0.077	1.1288	-176.0904
7	-1.2237	-0.0825	1.2264	-176.1442
8	-1.2968	-0.0861	1.2997	-176.2019
9	-1.3463	-0.0879	1.3492	-176.2633
10	-1.3726	-0.0881	1.3755	-176.3284

11	-1.3763	-0.0867	1.379	-176.3971
12	-1.3577	-0.0838	1.3603	-176.4695
13	-1.3175	-0.0795	1.3199	-176.5456
14	-1.2562	-0.0741	1.2583	-176.6254
15	-1.1743	-0.0675	1.1762	-176.7092
16	-1.0725	-0.06	1.0742	-176.797
17	-0.9514	-0.0517	0.9528	-176.8892
18	-0.8113	-0.0427	0.8125	-176.9861
19	-0.6524	-0.0332	0.6532	-177.0881
20	-0.4734	-0.0232	0.474	-177.196
21	-0.2708	-0.0127	0.2711	-177.3128
E	0.0	0.0	0.0	0.0

Wire No. 2 :

Pulse No.	Real (Amps)	Imaginary (Amps)	Magnitude (Amps)	Phase (Degrees)
22	10.6458	1.5976	10.765	8.5346
23	11.5962	1.0816	11.6466	5.3284
24	12.075	0.7723	12.0997	3.6598
25	12.3885	0.5104	12.399	2.3593
26	12.5643	0.282	12.5675	1.2856
27	12.6161	0.0808	12.6164	0.3669
28	12.5511	-0.0957	12.5514	-0.4371
29	12.3742	-0.2489	12.3767	-1.1523
30	12.0896	-0.3792	12.0956	-1.7966
31	11.7012	-0.4869	11.7113	-2.383
32	11.2128	-0.5722	11.2274	-2.9214
33	10.6287	-0.6351	10.6477	-3.4196
34	9.9532	-0.6757	9.9761	-3.8837
35	9.1908	-0.6941	9.2169	-4.3187
36	8.3461	-0.6904	8.3746	-4.7287
37	7.4236	-0.6648	7.4533	-5.1173
38	6.4272	-0.6175	6.4568	-5.4876
39	5.3597	-0.5484	5.3877	-5.8423
40	4.2211	-0.4574	4.2459	-6.1841
41	3.0048	-0.3432	3.0243	-6.5162
42	1.6892	-0.2028	1.7013	-6.8466
E	0.0	0.0	0.0	0.0

********** BASE OPERATING PARAMETERS **********

Twr.	Ratio	Phase
1	0.005	-184.4
2	1.000	0.0

EXHIBIT II

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****************************************
                ACSModel
          (MININEC 3.1 Core)
     03-31-2014          15:18:29
****************************************

WVEI DA-N FCC
MoM MODEL NIGHT DA
ADJUSTED TO MATCH ND REFERENCE

Frequency = 1.440 MHz      Wavelength = 208.19444 Meters

No. of Wires: 2
```

Wire No. 1 Coordinates X	Y	Z	Radius	End Connection	No. of Segments
0	0	0		-1	
0	0	64.07762	0.291	0	21

Wire No. 2 Coordinates X	Y	Z	Radius	End Connection	No. of Segments
-13.22161	-76.94524	0		-2	
-13.22161	-76.94524	61.88001	0.291	0	21

**** ANTENNA GEOMETRY ****

Wire No. 1 Coordinates X	Y	Z	Radius	Connection End1	End2	Pulse No.
0	0	0	0.291	-1	1	1
0	0	3.051315	0.291	1	1	2
0	0	6.102631	0.291	1	1	3
0	0	9.153946	0.291	1	1	4
0	0	12.20526	0.291	1	1	5
0	0	15.25658	0.291	1	1	6
0	0	18.30789	0.291	1	1	7
0	0	21.35921	0.291	1	1	8
0	0	24.41052	0.291	1	1	9
0	0	27.46184	0.291	1	1	10
0	0	30.51315	0.291	1	1	11
0	0	33.56447	0.291	1	1	12
0	0	36.61578	0.291	1	1	13
0	0	39.6671	0.291	1	1	14
0	0	42.71841	0.291	1	1	15
0	0	45.76973	0.291	1	1	16
0	0	48.82104	0.291	1	1	17
0	0	51.87236	0.291	1	1	18
0	0	54.92368	0.291	1	1	19
0	0	57.97499	0.291	1	1	20
0	0	61.02631	0.291	1	0	21

Wire No. 2 Coordinates				Connection		Pulse
X	Y	Z	Radius	End1	End2	No.
-13.22161	-76.94524	0	0.291	-2	2	22
-13.22161	-76.94524	2.946667	0.291	2	2	23
-13.22161	-76.94524	5.893334	0.291	2	2	24
-13.22161	-76.94524	8.840002	0.291	2	2	25
-13.22161	-76.94524	11.78667	0.291	2	2	26
-13.22161	-76.94524	14.73334	0.291	2	2	27
-13.22161	-76.94524	17.68	0.291	2	2	28
-13.22161	-76.94524	20.62667	0.291	2	2	29
-13.22161	-76.94524	23.57334	0.291	2	2	30
-13.22161	-76.94524	26.52	0.291	2	2	31
-13.22161	-76.94524	29.46667	0.291	2	2	32
-13.22161	-76.94524	32.41334	0.291	2	2	33
-13.22161	-76.94524	35.36001	0.291	2	2	34
-13.22161	-76.94524	38.30667	0.291	2	2	35
-13.22161	-76.94524	41.25334	0.291	2	2	36
-13.22161	-76.94524	44.20001	0.291	2	2	37
-13.22161	-76.94524	47.14668	0.291	2	2	38
-13.22161	-76.94524	50.09334	0.291	2	2	39
-13.22161	-76.94524	53.04001	0.291	2	2	40
-13.22161	-76.94524	55.98668	0.291	2	2	41
-13.22161	-76.94524	58.93334	0.291	2	0	42

Sources: 2
Pulse No., Voltage Magnitude, Phase (Degrees): 1, 1281.5, 53.8
Pulse No., Voltage Magnitude, Phase (Degrees): 22, 691.6, 121.5

Number of Loads: 0

********** SOURCE DATA **********

Pulse 1 Voltage = (757.7081, 1033.5491j)
Current = (7.2666, 1.9997j)
Impedance = (133.318, 105.545j)
Power = 3786.36 Watts

Pulse 22 Voltage = (-361.1091, 589.786j)
Current = (3.5342, 6.2794j)
Impedance = (46.749, 83.818j)
Power = 1213.64 Watts

Total Power = 5000.000 Watts

********** CURRENT DATA **********

Wire No. 1 :

Pulse No.	Real (Amps)	Imaginary (Amps)	Magnitude (Amps)	Phase (Degrees)
1	7.2666	1.9997	7.5367	15.3863
2	7.9841	1.4531	8.1153	10.3148
3	8.3537	1.1206	8.4285	7.6401
4	8.6018	0.8365	8.6424	5.5544
5	8.7494	0.5863	8.7691	3.8335
6	8.8065	0.3635	8.814	2.3638
7	8.7784	0.1656	8.7799	1.0807

8	8.6687	-0.0087	8.6687	-0.0573
9	8.4804	-0.1597	8.4819	-1.0792
10	8.2164	-0.2878	8.2215	-2.0062
11	7.8797	-0.3929	7.8895	-2.8544
12	7.4733	-0.4749	7.4884	-3.6363
13	7.0006	-0.534	7.021	-4.3621
14	6.4651	-0.5702	6.4902	-5.0399
15	5.8703	-0.5835	5.8992	-5.6766
16	5.2197	-0.5742	5.2512	-6.2778
17	4.5166	-0.5425	4.5491	-6.8487
18	3.7634	-0.4884	3.7949	-7.3938
19	2.9606	-0.4117	2.9891	-7.9173
20	2.1041	-0.3116	2.1271	-8.4244
21	1.1796	-0.1853	1.194	-8.9269
E	0.0	0.0	0.0	0.0

Wire No. 2 :

Pulse No.	Real (Amps)	Imaginary (Amps)	Magnitude (Amps)	Phase (Degrees)
22	3.5342	6.2794	7.2057	60.628
23	3.9381	6.5154	7.6131	58.8502
24	4.1482	6.6103	7.804	57.8903
25	4.2938	6.6434	7.9102	57.1243
26	4.3865	6.6222	7.9433	56.4795
27	4.432	6.5507	7.9091	55.9187
28	4.4331	6.4311	7.811	55.4209
29	4.3916	6.2655	7.6514	54.9726
30	4.3093	6.0557	7.4324	54.5642
31	4.1873	5.8034	7.1563	54.1889
32	4.0271	5.5107	6.8253	53.8413
33	3.8302	5.1795	6.4418	53.5173
34	3.598	4.8119	6.0084	53.2135
35	3.3322	4.4103	5.5276	52.9271
36	3.0344	3.9769	5.0023	52.6557
37	2.7062	3.5138	4.4351	52.3975
38	2.3489	3.0229	3.8282	52.1506
39	1.9636	2.5055	3.1833	51.9135
40	1.5501	1.9617	2.5002	51.6846
41	1.106	1.3885	1.7751	51.4621
42	0.6231	0.7762	0.9954	51.2407
E	0.0	0.0	0.0	0.0

********** BASE OPERATING PARAMETERS **********

Twr.	Ratio	Phase
1	1.000	0.0
2	0.956	45.2

WVEI FIGURE #1

WCAP - WVEI TOWER #1 ND

WCAP OUTPUT AT FREQUENCY: 1.440 MHz

NODE VOLTAGES

Node: 1	3693.0613 ∠	61.0971° V
Node: 2	3693.1338 ∠	61.0951° V
Node: 3	2829.0106 ∠	50.8800° V
Node: 4	2828.9160 ∠	50.8823° V
Node: 5	2828.9160 ∠	50.8822° V

	WCAP PART WCAP PART		CURRENT IN BRANCH VOLTAGE		CURRENT OUT BRANCH CURRENT	
R	2→1	0.01000000	0.15 ∠	0.000° V	15.00 ∠	0.000° A
L	1→3	7.65000000	1038.23 ∠	90.000° V	15.00 ∠	0.000° A
R	3→4	0.01000000	0.15 ∠	0.000° V	15.00 ∠	0.000° A
C	5→0	0.00002500	2828.92 ∠	50.882° V	0.64 ∠	140.882° A
R	4→0	101.75500000	2828.92 ∠	50.882° V	16.22 ∠	-3.425° A
R	4→5	0.01000000	0.01 ∠	140.882° V	0.64 ∠	140.882° A
C	4→0	0.00003500	2828.92 ∠	50.882° V	0.90 ∠	140.882° A

	WCAP PART		FROM IMPEDANCE		TO IMPEDANCE	
R	2→1	0.01000000	119.01 + j	215.537	119.00 + j	215.537
L	1→3	7.65000000	119.00 + j	215.537	119.00 + j	146.321
R	3→4	0.01000000	119.00 + j	146.321	118.99 + j	146.321
C	5→0	0.00002500	0.00 - j	4420.971	0.00 + j	0.000
R	4→0	101.75500000	101.75 + j	141.643	0.00 + j	0.000
R	4→5	0.01000000	0.01 - j	4420.971	0.00 - j	4420.971
C	4→0	0.00003500	0.00 - j	3157.836	0.00 + j	0.000

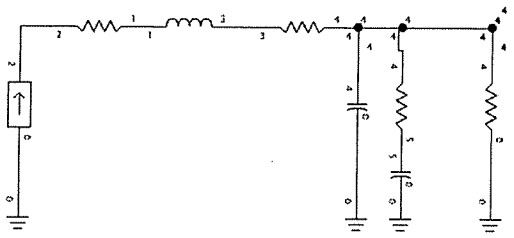
WCAP INPUT DATA:

	1.4400	0.00000000	0	
I	15.00000000	0	2	0.00000000
R	0.01000000	2	1	0.00000000
L	7.65000000	1	3	0.00000000
R	0.01000000	3	4	0.00000000
C	0.00002500	5	0	
R	101.75500000	4	0	141.64300000
R	0.01000000	4	5	0.00000000
C	0.00003500	4	0	

Center Frequency: 1.44 MHz

Frequency Range: 0 MHz

Frequency Step: 0 Hz



WVEI FIGURE #2

WCAP - WVEI TOWER #2

WCAP OUTPUT AT FREQUENCY: 1.440 MHz

NODE VOLTAGES

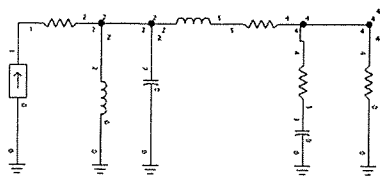
Node:	1	3201.4671 ∠ 64.7379° V
Node:	2	3201.4031 ∠ 64.7403° V
Node:	3	2256.4168 ∠ 52.7447° V
Node:	4	2256.4168 ∠ 52.7448° V
Node:	5	2256.5076 ∠ 52.7418° V

	WCAP PART WCAP PART		CURRENT IN BRANCH VOLTAGE	CURRENT OUT BRANCH CURRENT
R	1→2	0.01000000	0.15 ∠ 0.000° V	15.00 ∠ 0.000° A
L	2→5	8.10000000	1099.31 ∠ 90.000° V	15.00 ∠ 0.001° A
C	3→0	0.00002500	2256.42 ∠ 52.745° V	0.51 ∠ 142.745° A
R	4→0	86.29000000	2256.42 ∠ 52.745° V	15.41 ∠ -1.149° A
R	4→3	0.01000000	0.01 ∠ 142.745° V	0.51 ∠ 142.745° A
L	2→0	80.89800000	3201.40 ∠ 64.740° V	4.37 ∠ -25.260° A
C	2→0	0.00015100	3201.40 ∠ 64.740° V	4.37 ∠ 154.740° A
R	5→4	0.01000000	0.15 ∠ 0.001° V	15.00 ∠ 0.001° A

	WCAP PART		FROM IMPEDANCE	TO IMPEDANCE
R	1→2	0.01000000	91.08 + j 193.020	91.07 + j 193.020
L	2→5	8.10000000	91.07 + j 193.020	91.07 + j 119.733
C	3→0	0.00002500	0.00 - j 4420.971	0.00 + j 0.000
R	4→0	86.29000000	86.29 + j 118.306	0.00 + j 0.000
R	4→3	0.01000000	0.01 - j 4420.971	-0.00 - j 4420.971
L	2→0	80.89800000	0.00 + j 731.948	0.00 + j 0.000
C	2→0	0.00015100	0.00 - j 731.949	0.00 + j 0.000
R	5→4	0.01000000	91.07 + j 119.733	91.06 + j 119.733

WCAP INPUT DATA:

	1.4400	0.00000000	0	
I	15.00000000	0	1	0.00000000
R	0.01000000	1	2	0.00000000
L	8.10000000	2	5	0.00000000
C	0.00002500	3	0	
R	86.29000000	4	0	118.30600000
R	0.01000000	4	3	0.00000000
L	80.89800000	2	0	0.00000000
C	0.00015100	2	0	
R	0.01000000	5	4	0.00000000



WVEI FIGURE #3

WCAP - WVEI TOWER #1 DA-N

WCAP OUTPUT AT FREQUENCY: 1.440 MHz

NODE VOLTAGES

Node:	1	1138.2957 ∠ 53.0824° V
Node:	2	1138.3290 ∠ 53.0805° V
Node:	3	906.0837 ∠ 38.3660° V
Node:	4	906.0420 ∠ 38.3678° V
Node:	5	906.0420 ∠ 38.3676° V

	WCAP PART	WCAP PART	CURRENT IN BRANCH VOLTAGE	CURRENT OUT BRANCH CURRENT
R	2→1	0.01000000	0.05 ∠ 4.390° V	5.04 ∠ 4.390° A
L	1→3	7.65000000	348.70 ∠ 94.390° V	5.04 ∠ 4.390° A
R	3→4	0.01000000	0.05 ∠ 4.390° V	5.04 ∠ 4.390° A
C	5→0	0.00002500	906.04 ∠ 38.368° V	0.20 ∠ 128.368° A
R	4→0	133.31800000	906.04 ∠ 38.368° V	5.33 ∠ -0.000° A
R	4→5	0.01000000	0.00 ∠ 128.368° V	0.20 ∠ 128.368° A
C	4→0	0.00003500	906.04 ∠ 38.368° V	0.29 ∠ 128.368° A

	WCAP PART	WCAP PART	FROM IMPEDANCE	TO IMPEDANCE
R	2→1	0.01000000	149.16 + j 169.726	149.15 + j 169.726
L	1→3	7.65000000	149.15 + j 169.726	149.15 + j 100.510
R	3→4	0.01000000	149.15 + j 100.510	149.14 + j 100.510
C	5→0	0.00002500	0.00 - j 4420.971	0.00 + j 0.000
R	4→0	133.31800000	133.32 + j 105.545	0.00 + j 0.000
R	4→5	0.01000000	0.01 - j 4420.971	-0.00 - j 4420.971
C	4→0	0.00003500	0.00 - j 3157.836	0.00 + j 0.000

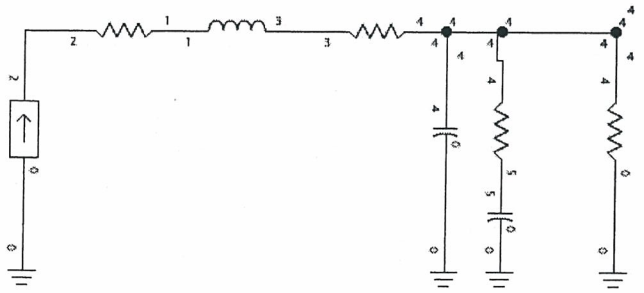
WCAP INPUT DATA:

	1.4400	0.00000000	0	
I	5.03790000	0	2	4.39000000
R	0.01000000	2	1	0.00000000
L	7.65000000	1	3	0.00000000
R	0.01000000	3	4	0.00000000
C	0.00002500	5	0	
R	133.31800000	4	0	105.54500000
R	0.01000000	4	5	0.00000000
C	0.00003500	4	0	

Center Frequency: 1.44 MHz

Frequency Range: ±0 kHz

Frequency Step: 0 kHz



WVEI FIGURE #4

WCAP - WVEI TOWER #2 DA-N

WCAP OUTPUT AT FREQUENCY: 1.440 MHz

NODE VOLTAGES

Node: 1	826.8106 ∠	73.5449° V
Node: 2	826.7959 ∠	73.5482° V
Node: 3	488.7217 ∠	60.8500° V
Node: 4	488.7217 ∠	60.8501° V
Node: 5	488.7465 ∠	60.8450° V

	WCAP PART	WCAP PART	CURRENT IN BRANCH VOLTAGE	CURRENT OUT BRANCH CURRENT
R	1→2	0.01000000	0.05 ∠ 0.618° V	5.00 ∠ 0.618° A
L	2→5	8.10000000	366.14 ∠ 90.618° V	5.00 ∠ 0.618° A
C	3→0	0.00002500	488.72 ∠ 60.850° V	0.11 ∠ 150.850° A
R	4→0	46.74900000	488.72 ∠ 60.850° V	5.09 ∠ 0.000° A
R	4→3	0.01000000	0.00 ∠ 150.850° V	0.11 ∠ 150.850° A
L	2→0	80.89800000	826.80 ∠ 73.548° V	1.13 ∠ -16.452° A
C	2→0	0.00015100	826.80 ∠ 73.548° V	1.13 ∠ 163.548° A
R	5→4	0.01000000	0.05 ∠ 0.618° V	5.00 ∠ 0.618° A

	WCAP PART	WCAP PART	FROM IMPEDANCE	TO IMPEDANCE
R	1→2	0.01000000	48.59 + j 158.201	48.58 + j 158.201
L	2→5	8.10000000	48.58 + j 158.201	48.58 + j 84.914
C	3→0	0.00002500	0.00 - j 4420.971	0.00 + j 0.000
R	4→0	46.74900000	46.75 + j 83.818	0.00 + j 0.000
R	4→3	0.01000000	0.01 - j 4420.971	-0.00 - j 4420.971
L	2→0	80.89800000	-0.00 + j 731.948	0.00 + j 0.000
C	2→0	0.00015100	0.00 - j 731.949	0.00 + j 0.000
R	5→4	0.01000000	48.58 + j 84.914	48.57 + j 84.914

WCAP INPUT DATA:

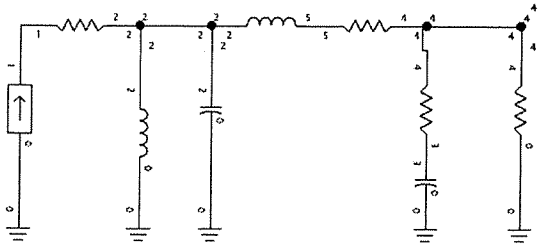
1.4400 0.00000000 0

I	4.99600000	0	1	0.61800000
R	0.01000000	1	2	0.00000000
L	8.10000000	2	5	0.00000000
C	0.00002500	3	0	
R	46.74900000	4	0	83.81800000
R	0.01000000	4	3	0.00000000
L	80.89800000	2	0	0.00000000
C	0.00015100	2	0	
R	0.01000000	5	4	0.00000000

Center Frequency: 1.44 MHz

Frequency Range: +0 kHz

Frequency Step: 0 kHz

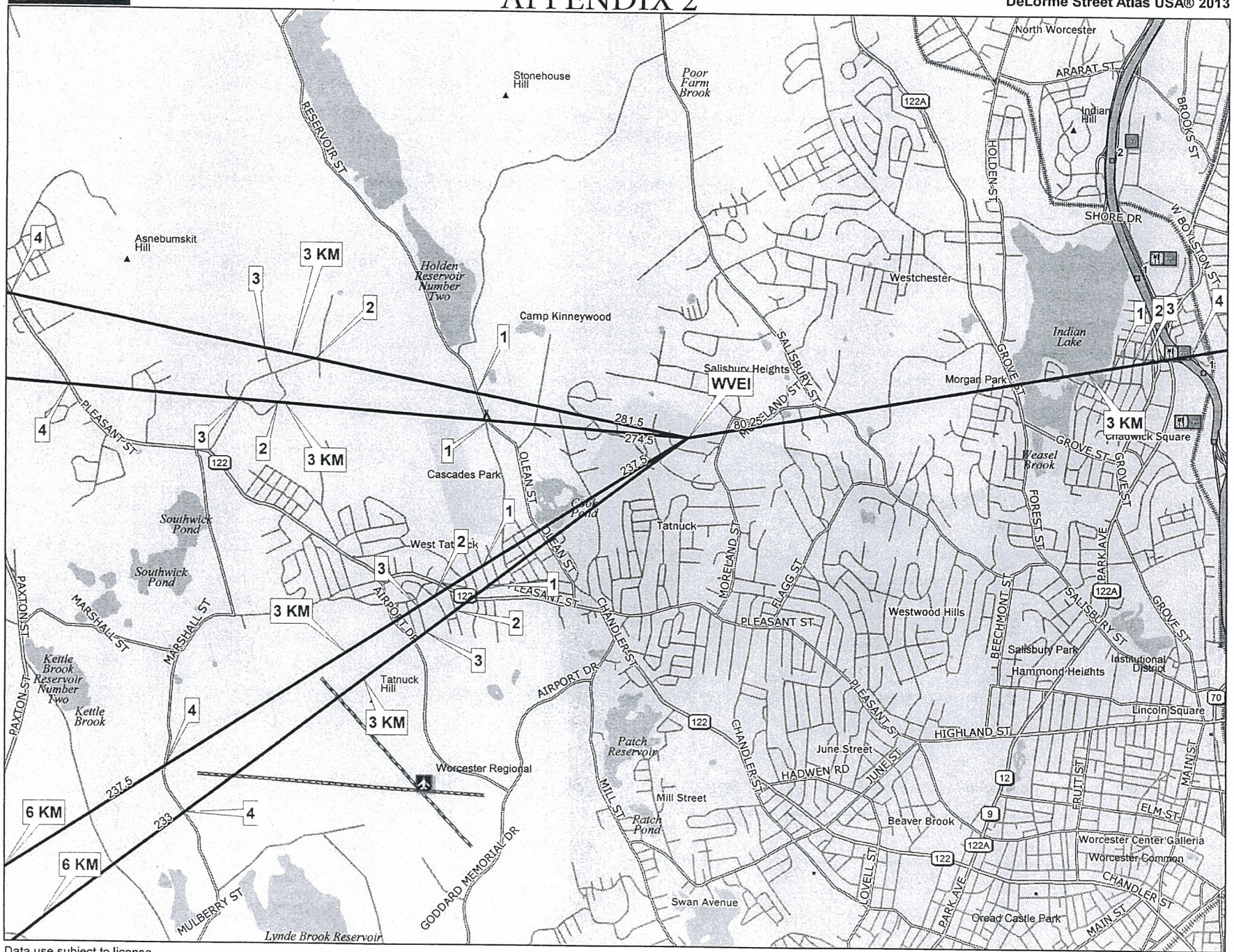


WVEI AM
5 KW Night, 1440 KHz
Reference Field Strength Measurements
February 12, 2014

Radial	Point	Distance KM	2014 Tme	2014 Field mV/m	Coordinates (WGS84)		Description
80.25	1	3.19	1:48 PM	87	42.294807	71.807943	At driveway of #25 Proctor
	2	3.33	1:51 PM	63	42.295015	71.806281	In front of #82 Tower
	3	3.42	1:56 PM	56	42.29515	71.805255	In front of #30 Boardman
	4	3.78	2:06 PM	47	42.295714	71.800882	At dumpster nook Greendale mall
233	1	1.85	2:28 PM	16.5	42.279948	71.864189	Driveway #1 Navastota
	2	2.15	2:36 PM	12.5	42.278276	71.867177	Driveway #23 Joppa
	3	2.42	2:46 PM	8.8	42.276838	71.869781	Driveway #34 Worcester
	4	4.65	4:06 PM	5.6	42.264748	71.891455	Side of road
237.5	1	1.80	2:31 PM	13	42.281243	71.864722	#29 Navastota
	2	2.22	2:41 PM	11	42.279188	71.869059	#31 Rockrimmon
	3	2.36	2:44 PM	8.1	42.278507	71.870494	#11 Worcester
	4	4.58	4:04 PM	3.2	42.267805	71.893195	opposite end of runway
274.5	1	1.48	3:48 PM	13.5	42.291	71.864197	20' S of 246 Olean
	2	3.05	3:08 PM	6.7	42.292121	71.883197	#15 Old Lantern
	3	3.34	2:56 PM	5.5	42.292303	71.886771	Camp; & Iron Forgge
	4	4.59	3:13 PM	1.5	42.293233	71.901912	#305 Rt 122
281.5	1	1.60	3:50 PM	4.9	42.292864	71.865267	opposite pole 48, Olean
	2	2.82	2:59 PM	4	42.294992	71.87986	#56 Camp
	3	3.20	3:04 PM	3.8	42.295681	71.884427	#7 Duanderry
	4	5.12	3:20 PM	1.4	42.299117	71.907254	Rt 122

APPENDIX 1

APPENDIX 2


DeLORME
DeLorme Street Atlas USA® 2013
North Worcester
ARARAT ST
Stonehouse Hill
Poor Farm Brook
RESERVOIR ST
122A
Indian Hill
BROOKS ST
HOLDEN ST
SHORE DR
W BOYLSTON ST
Asnebumskit Hill
3 KM
Holden Reservoir Number Two
Camp Kinneywood
Westchester
Indian Lake
Salisbury Heights
WVEI
SALISBURY ST
GROVE ST
Morgan Park
281.5
274.5
237.5
60-25-LAND ST
PLEASANT ST
122
Cascades Park
OLEAN ST
Crook Pond
Chadwick Square
Weasel Brook
GROVE ST
Southwick Pond
Tatnuck
West Tatnuck
MORELAND ST
FOREST ST
PARK AVE
FLAGG ST
AIRPORT DR
CHANDLER ST
Westwood Hills
BEECHMONT ST
Salisbury Park
Institutional District
Hammond Heights
PAXTON ST
MARSHALL ST
Kettle Brook Reservoir Number Two
Kettle Brook
Tatnuck Hill
Lincoln Square
70
HIGHLAND ST
Patch Reservoir
June Street
HADWEN RD
JUNE ST
12
FRUIT ST
MAIN ST
ELM ST
Worcester Regional
Mill Street
MILL ST
Patch Pond
Beaver Brook
9
Worcester Center Galleria
Worcester Common
6 KM
233
GODDARD MEMORIAL DR
Swan Avenue
LOVELL ST
CHANDLER ST
PARK AVE
Cread Castle Park
MAIN ST
MULBERRY ST
Lynde Brook Reservoir
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TN
MN (14.5°W)
Scale 1 : 37,500
1 cm = 375.0 m
Data Zoom 12-4