ADVERSE IMPACT ENGINEERING STATEMENT OF PROPOSED NEW TOWER FOR WLIF-FM BALTIMORE, MD FID NO. 28637

ON

RADIO STATION WNST TOWSON, MD FID NO. 25523

PREPARED ON BEHALF OF

CBS RADIO WLIF, INC.

BY

W.C. ALEXANDER, CPBE, AMD, DRB

December 15, 2014

Engineering Statement

The Engineering Statement which follows was prepared by the undersigned, W. Cris Alexander, CPBE, AMD, DRB, whose broadcast engineering credentials are a matter of record at the FCC. The information contained herein was prepared from information provided by CBS Radio WLIF, Inc. and retrieved from the FCCôs CDBS and ULS databases.

WNST Licensed Facilities

Frequency: 1570 kHz
Power: 5 kW-U, 270W-N, ND
ASRN: 1042993
CDBS Specified Coordinates: N39-25-04.0/W76-33-22.0

WLIF-FM Tower

WLIF-FM proposes to replace its current 260.3 meter tower, ASRN 1045612, with a new structure of the same height at the following coordinates (NAD83):

N39-25-07.0/W76-33-16.2

The proposed tower will be a guyed, uniform cross-section structure with a face width of 52 inches (equivalent radius 0.6307 meters). Its proposed location was determined to be 314.387 electrical degrees at 1570 kHz at a bearing of 56.318 degrees True from the WNST tower. Its proposed physical height will be 490.6 electrical degrees at 1570 kHz. As such the proposed new WLIF-FM tower will be within the screening criteria specified in 47 C.F.R. §1.30002(a) (one wavelength and 60 electrical degrees).

Method of Moments Model

Two moment-method models were constructed and run pursuant to 47 C.F.R. §1.3002(c). The first model was run as a control, showing the predicted WNST non-directional pattern without the influence of the nearby proposed tower. The second model was identical in all respects to the first with the exception that a grounded wire representing the proposed WLIF-FM tower was added to the array geometry. The existing WLIF-FM tower was not considered in the model because it will be dismantled as part of the project.

The models were constructed using thin wires to represent each tower. No adjustments were made to the wire lengths or diameters in an effort to match modeled with measured tower impedances, as is provided for in 47 C.F.R. §1.3002(c).

ACSModel version 1.020c (MININEC 3.1 core) was used for the models.

Control Model

A control model of the WNST non-directional radiator was made using one wire with a radius of 0.2911 meters. The tower was modeled at a height of 85.346 meters 160.9 electrical degrees at 1570 kHz). 20 segments were used for this model.

Calculations were then made to determine the complex voltage source value to be applied at ground level for the WNST tower to produce the proper power in the tower. This voltage source was then applied in the model and the tower currents were calculated.

The model was then used to calculate the electric field strength at a distance of 1,000 meters (1 km) from the WNST tower (which is X=0, Y=0).

WLIF-FM Model

A second model of the WNST non-directional radiator was made that incorporates the proposed WLIF-FM tower by adding a second wire with a radius of 0.6307 meters and a height of 490.6 electrical degrees at 1570 kHz. This wire was positioned at a distance of 314.387 electrical degrees at 1570 kHz from the WNST tower at a bearing of 56.318 degrees True. The model employed 61 segments for the second wire. The same source voltage that was used in the control model was applied to the WNST tower in the second (WLIF-FM) model.

As with the control model, the WLIF-FM model was then used to calculate the electric field strength at a distance of 1,000 meters (1 km) from the WNST tower (which again X=0, Y=0).

Calculation of Pattern Disturbance

The 1 km inverse distance field (IDF) of the WNST non-directional radiator in the control model was found to be 810.089 mV/m RMS for all azimuths.

The maximum IDF of the WLIF-FM model occurs at an azimuth of 287 degrees True with a magnitude of 906.6761 mV/m RMS. This represents a disturbance of **+0.98 dB**.

The minimum IDF of the WLIF-FM model occurs at an azimuth of 717.4526 mV/m RMS. This represents a disturbance of **-1.05 dB**.

Antenna Models

The MININEC 3 antenna models of KKPZ by itself (control) and KKPZ with the Trimet tower (Trimet) follow.

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                    ****************************************
                                  ACSModel
                             (MININEC 3.1 Core)
                         12-15-2014              06:28:39
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WNST
Control Model

Frequency = 1.570 MHz Wavelength = 190.95541 Meters

No. of Wires: 1

Wire No. 1 Coordinates X	Y	Z	Radius	End Connection	No. of Segments
0	0	0		-1	
0	0	85.34646	0.2911	0	20

**** ANTENNA GEOMETRY ****

Wire No. 1 Coordinates X	Y	Z	Radius	Connection End1	End2	Pulse No.
0	0	0	0.2911	-1	1	1
0	0	4.267323	0.2911	1	1	2
0	0	8.534646	0.2911	1	1	3
0	0	12.80197	0.2911	1	1	4
0	0	17.06929	0.2911	1	1	5
0	0	21.33661	0.2911	1	1	6
0	0	25.60394	0.2911	1	1	7
0	0	29.87126	0.2911	1	1	8
0	0	34.13858	0.2911	1	1	9
0	0	38.40591	0.2911	1	1	10
0	0	42.67323	0.2911	1	1	11
0	0	46.94055	0.2911	1	1	12
0	0	51.20787	0.2911	1	1	13
0	0	55.4752	0.2911	1	1	14
0	0	59.74252	0.2911	1	1	15
0	0	64.00984	0.2911	1	1	16
0	0	68.27717	0.2911	1	1	17
0	0	72.54449	0.2911	1	1	18
0	0	76.81181	0.2911	1	1	19
0	0	81.07914	0.2911	1	0	20

Sources: 1
Pulse No., Voltage Magnitude, Phase (Degrees): **1, 2887.7, 0.0**

Number of Loads: 0

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********************    SOURCE DATA     ********************
Pulse  1      Voltage = (2887.6699, 0.0j)
              Current = (3.463, 0.7829j)
              Impedance = (793.315, -179.346j)
              Power = 5000.02 Watts


********************     FAR FIELD      ********************

Zenith Angle : Initial, Increment, Number: 90.0, 0.0, 1
Azimuth Angle: Initial, Increment, Number: 0.0, 1.0, 360


********************    PATTERN DATA    ********************
              Radial Distance =  1000  Meters
              Power Level = 5000.022 Watts
                          RMS
Elev.      Azimuth   E(Theta)
Angle      Angle     Mag(mV/m)  Phase(Deg)
0.0        0.0       810.0890   17.5
0.0        1.0       810.0890   17.5
0.0        2.0       810.0890   17.5
0.0        3.0       810.0890   17.5
0.0        4.0       810.0890   17.5
0.0        5.0       810.0890   17.5
0.0        6.0       810.0890   17.5
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0.0	7.0	810.0890	17.5
0.0	8.0	810.0890	17.5
0.0	9.0	810.0890	17.5
0.0	10.0	810.0890	17.5
0.0	11.0	810.0890	17.5
0.0	12.0	810.0890	17.5
0.0	13.0	810.0890	17.5
0.0	14.0	810.0890	17.5
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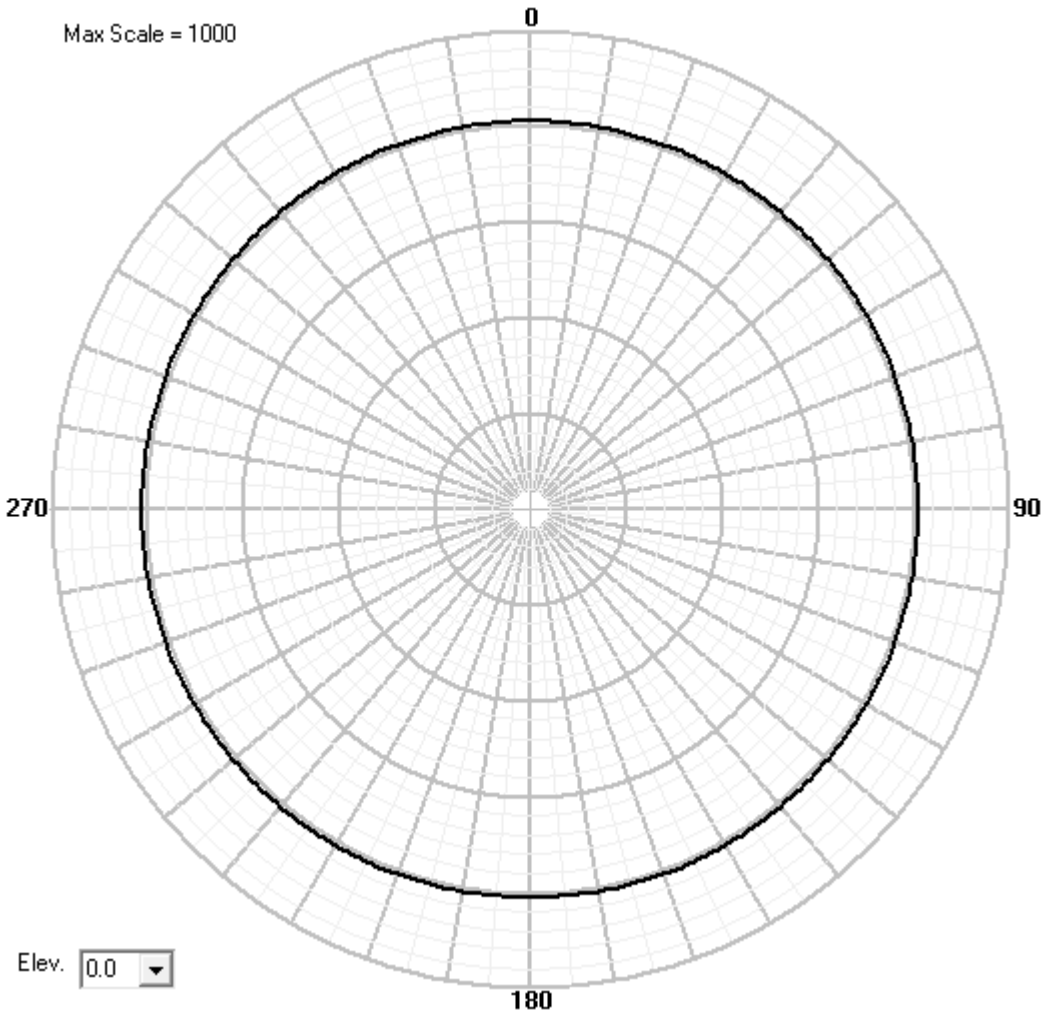
0.0	341.0	810.0890	17.5
0.0	342.0	810.0890	17.5
0.0	343.0	810.0890	17.5
0.0	344.0	810.0890	17.5
0.0	345.0	810.0890	17.5
0.0	346.0	810.0890	17.5
0.0	347.0	810.0890	17.5
0.0	348.0	810.0890	17.5
0.0	349.0	810.0890	17.5
0.0	350.0	810.0890	17.5
0.0	351.0	810.0890	17.5
0.0	352.0	810.0890	17.5
0.0	353.0	810.0890	17.5
0.0	354.0	810.0890	17.5
0.0	355.0	810.0890	17.5
0.0	356.0	810.0890	17.5
0.0	357.0	810.0890	17.5
0.0	358.0	810.0890	17.5
0.0	359.0	810.0890	17.5


Max Scale = 1000
0
270
90
180
Elev.
0.0

```
                    ****************************************
                                  ACSModel
                              (MININEC 3.1 Core)
                          12-15-2014              06:33:54
                    ****************************************

WNST
Model with WLIF Tower


Frequency = 1.570 MHz     Wavelength = 190.95541 Meters

No. of Wires: 2

Wire No. 1   Coordinates                                  End         No. of
   X             Y             Z          Radius     Connection     Segments
 0             0             0                        -1
 0             0             85.34646      0.2911       0             20

Wire No. 2   Coordinates                                  End         No. of
   X             Y             Z          Radius     Connection     Segments
 92.48273      138.7664      0                        -2
 92.48273      138.7664      260.2298      0.6307       0             61

                 **** ANTENNA GEOMETRY ****

Wire No.  1  Coordinates                                  Connection Pulse
X             Y             Z             Radius        End1 End2  No.
 0             0             0             0.2911       -1   1     1
 0             0             4.267323      0.2911       1    1     2
 0             0             8.534646      0.2911       1    1     3
 0             0             12.80197      0.2911       1    1     4
 0             0             17.06929      0.2911       1    1     5
 0             0             21.33661      0.2911       1    1     6
 0             0             25.60394      0.2911       1    1     7
 0             0             29.87126      0.2911       1    1     8
 0             0             34.13858      0.2911       1    1     9
 0             0             38.40591      0.2911       1    1     10
 0             0             42.67323      0.2911       1    1     11
 0             0             46.94055      0.2911       1    1     12
 0             0             51.20787      0.2911       1    1     13
 0             0             55.4752       0.2911       1    1     14
 0             0             59.74252      0.2911       1    1     15
 0             0             64.00984      0.2911       1    1     16
 0             0             68.27717      0.2911       1    1     17
 0             0             72.54449      0.2911       1    1     18
 0             0             76.81181      0.2911       1    1     19
 0             0             81.07914      0.2911       1    0     20

Wire No.  2  Coordinates                                  Connection Pulse
X             Y             Z             Radius        End1 End2  No.
 92.48273      138.7664      0             0.6307       -2   2     21
 92.48273      138.7664      4.266062      0.6307       2    2     22
 92.48273      138.7664      8.532125      0.6307       2    2     23
 92.48273      138.7664      12.79819      0.6307       2    2     24
 92.48273      138.7664      17.06425      0.6307       2    2     25
 92.48273      138.7664      21.33031      0.6307       2    2     26
 92.48273      138.7664      25.59637      0.6307       2    2     27
 92.48273      138.7664      29.86244      0.6307       2    2     28
 92.48273      138.7664      34.1285       0.6307       2    2     29
 92.48273      138.7664      38.39456      0.6307       2    2     30
 92.48273      138.7664      42.66062      0.6307       2    2     31
 92.48273      138.7664      46.92669      0.6307       2    2     32
 92.48273      138.7664      51.19275      0.6307       2    2     33
 92.48273      138.7664      55.45881      0.6307       2    2     34
 92.48273      138.7664      59.72487      0.6307       2    2     35
 92.48273      138.7664      63.99094      0.6307       2    2     36
 92.48273      138.7664      68.257        0.6307       2    2     37
 92.48273      138.7664      72.52306      0.6307       2    2     38
 92.48273      138.7664      76.78912      0.6307       2    2     39
 92.48273      138.7664      81.05518      0.6307       2    2     40
 92.48273      138.7664      85.32124      0.6307       2    2     41
 92.48273      138.7664      89.5873       0.6307       2    2     42
 92.48273      138.7664      93.85337      0.6307       2    2     43
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 92.48273      138.7664      98.11943      0.6307       2    2     44
 92.48273      138.7664      102.3855      0.6307       2    2     45
 92.48273      138.7664      106.6516      0.6307       2    2     46
 92.48273      138.7664      110.9176      0.6307       2    2     47
 92.48273      138.7664      115.1837      0.6307       2    2     48
 92.48273      138.7664      119.4497      0.6307       2    2     49
 92.48273      138.7664      123.7158      0.6307       2    2     50
 92.48273      138.7664      127.9819      0.6307       2    2     51
 92.48273      138.7664      132.2479      0.6307       2    2     52
 92.48273      138.7664      136.514       0.6307       2    2     53
 92.48273      138.7664      140.78        0.6307       2    2     54
 92.48273      138.7664      145.0461      0.6307       2    2     55
 92.48273      138.7664      149.3122      0.6307       2    2     56
 92.48273      138.7664      153.5782      0.6307       2    2     57
 92.48273      138.7664      157.8443      0.6307       2    2     58
 92.48273      138.7664      162.1104      0.6307       2    2     59
 92.48273      138.7664      166.3764      0.6307       2    2     60
 92.48273      138.7664      170.6425      0.6307       2    2     61
 92.48273      138.7664      174.9086      0.6307       2    2     62
 92.48273      138.7664      179.1746      0.6307       2    2     63
 92.48273      138.7664      183.4407      0.6307       2    2     64
 92.48273      138.7664      187.7067      0.6307       2    2     65
 92.48273      138.7664      191.9728      0.6307       2    2     66
 92.48273      138.7664      196.2389      0.6307       2    2     67
 92.48273      138.7664      200.5049      0.6307       2    2     68
 92.48273      138.7664      204.771       0.6307       2    2     69
 92.48273      138.7664      209.037       0.6307       2    2     70
 92.48273      138.7664      213.3031      0.6307       2    2     71
 92.48273      138.7664      217.5692      0.6307       2    2     72
 92.48273      138.7664      221.8352      0.6307       2    2     73
 92.48273      138.7664      226.1013      0.6307       2    2     74
 92.48273      138.7664      230.3674      0.6307       2    2     75
 92.48273      138.7664      234.6334      0.6307       2    2     76
 92.48273      138.7664      238.8995      0.6307       2    2     77
 92.48273      138.7664      243.1656      0.6307       2    2     78
 92.48273      138.7664      247.4316      0.6307       2    2     79
 92.48273      138.7664      251.6977      0.6307       2    2     80
 92.48273      138.7664      255.9637      0.6307       2    0     81

Sources:  1
Pulse No., Voltage Magnitude, Phase (Degrees): 1, 2887.7, 0.0

Number of Loads:  0

********************    SOURCE DATA     ********************
Pulse  1      Voltage = (2887.6699, 0.0j)
              Current = (3.5768, 0.7837j)
              Impedance = (770.343, -168.782j)
              Power = 5164.37 Watts


********************     FAR FIELD      ********************

Zenith Angle : Initial, Increment, Number: 90.0, 0.0, 1
Azimuth Angle: Initial, Increment, Number: 0.0, 1.0, 360


********************    PATTERN DATA    **********************
              Radial Distance =  1000  Meters
              Power Level = 5164.372 Watts
                          RMS
Elev.      Azimuth   E(Theta)
Angle      Angle     Mag(mV/m)  Phase(Deg)
0.0        0.0       904.5131   19.3
0.0        1.0       902.7420   19.8
0.0        2.0       900.4875   20.3
0.0        3.0       897.7788   20.7
0.0        4.0       894.6466   21.1
0.0        5.0       891.1233   21.5
0.0        6.0       887.2423   21.9
0.0        7.0       883.0378   22.2
0.0        8.0       878.5446   22.6
0.0        9.0       873.7978   22.9
0.0        10.0      868.8324   23.2
0.0        11.0      863.6832   23.4
```

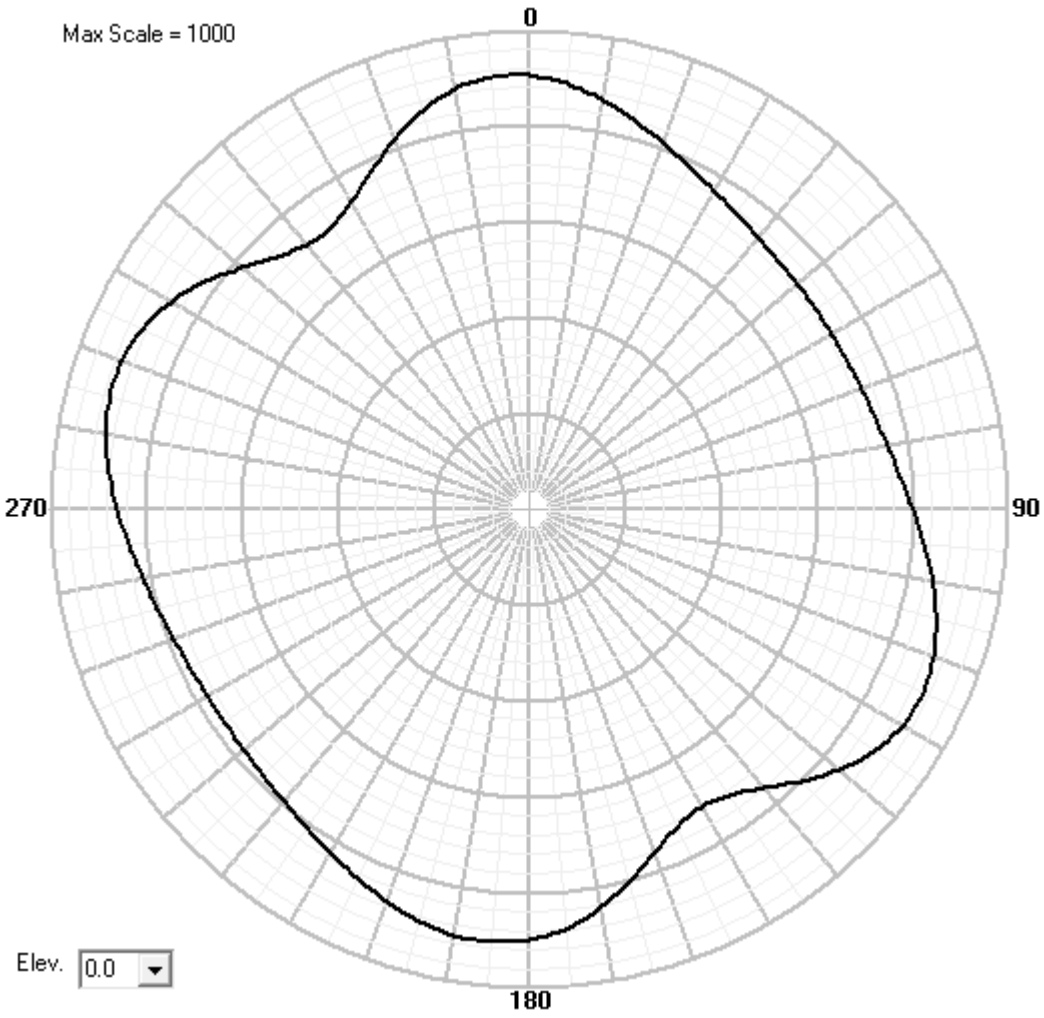
0.0	12.0	858.3843	23.7
0.0	13.0	852.9693	23.9
0.0	14.0	847.4706	24.1
0.0	15.0	841.9196	24.2
0.0	16.0	836.3462	24.4
0.0	17.0	830.7789	24.5
0.0	18.0	825.2443	24.6
0.0	19.0	819.7675	24.6
0.0	20.0	814.3715	24.7
0.0	21.0	809.0775	24.7
0.0	22.0	803.9046	24.7
0.0	23.0	798.8698	24.7
0.0	24.0	793.9880	24.6
0.0	25.0	789.2722	24.6
0.0	26.0	784.7332	24.5
0.0	27.0	780.3799	24.4
0.0	28.0	776.2192	24.3
0.0	29.0	772.2564	24.2
0.0	30.0	768.4946	24.1
0.0	31.0	764.9357	24.0
0.0	32.0	761.5799	23.8
0.0	33.0	758.4261	23.7
0.0	34.0	755.4718	23.5
0.0	35.0	752.7136	23.4
0.0	36.0	750.1469	23.3
0.0	37.0	747.7664	23.1
0.0	38.0	745.5662	23.0
0.0	39.0	743.5396	22.8
0.0	40.0	741.6799	22.7
0.0	41.0	739.9796	22.5
0.0	42.0	738.4315	22.4
0.0	43.0	737.0280	22.3
0.0	44.0	735.7617	22.1
0.0	45.0	734.6255	22.0
0.0	46.0	733.6123	21.9
0.0	47.0	732.7155	21.8
0.0	48.0	731.9288	21.7
0.0	49.0	731.2463	21.7
0.0	50.0	730.6629	21.6
0.0	51.0	730.1738	21.5
0.0	52.0	729.7748	21.5
0.0	53.0	729.4627	21.4
0.0	54.0	729.2346	21.4
0.0	55.0	729.0885	21.4
0.0	56.0	729.0230	21.4
0.0	57.0	729.0375	21.4
0.0	58.0	729.1323	21.4
0.0	59.0	729.3080	21.4
0.0	60.0	729.5665	21.4
0.0	61.0	729.9098	21.5
0.0	62.0	730.3412	21.5
0.0	63.0	730.8641	21.6
0.0	64.0	731.4830	21.7
0.0	65.0	732.2028	21.8
0.0	66.0	733.0289	21.9
0.0	67.0	733.9673	22.0
0.0	68.0	735.0245	22.1
0.0	69.0	736.2072	22.2
0.0	70.0	737.5226	22.3
0.0	71.0	738.9779	22.4
0.0	72.0	740.5805	22.6
0.0	73.0	742.3380	22.7
0.0	74.0	744.2576	22.9
0.0	75.0	746.3466	23.0
0.0	76.0	748.6117	23.2
0.0	77.0	751.0593	23.3
0.0	78.0	753.6952	23.5
0.0	79.0	756.5243	23.6
0.0	80.0	759.5509	23.7
0.0	81.0	762.7780	23.9
0.0	82.0	766.2076	24.0
0.0	83.0	769.8405	24.1
0.0	84.0	773.6757	24.3
0.0	85.0	777.7111	24.4
0.0	86.0	781.9425	24.5

0.0	87.0	786.3643	24.5
0.0	88.0	790.9688	24.6
0.0	89.0	795.7464	24.6
0.0	90.0	800.6855	24.7
0.0	91.0	805.7724	24.7
0.0	92.0	810.9915	24.7
0.0	93.0	816.3249	24.7
0.0	94.0	821.7528	24.6
0.0	95.0	827.2535	24.5
0.0	96.0	832.8030	24.4
0.0	97.0	838.3757	24.3
0.0	98.0	843.9443	24.2
0.0	99.0	849.4798	24.0
0.0	100.0	854.9517	23.8
0.0	101.0	860.3283	23.6
0.0	102.0	865.5766	23.3
0.0	103.0	870.6629	23.1
0.0	104.0	875.5528	22.8
0.0	105.0	880.2113	22.4
0.0	106.0	884.6035	22.1
0.0	107.0	888.6942	21.7
0.0	108.0	892.4490	21.4
0.0	109.0	895.8337	21.0
0.0	110.0	898.8154	20.5
0.0	111.0	901.3623	20.1
0.0	112.0	903.4441	19.6
0.0	113.0	905.0325	19.2
0.0	114.0	906.1013	18.7
0.0	115.0	906.6268	18.2
0.0	116.0	906.5882	17.7
0.0	117.0	905.9679	17.2
0.0	118.0	904.7517	16.7
0.0	119.0	902.9290	16.2
0.0	120.0	900.4937	15.7
0.0	121.0	897.4438	15.3
0.0	122.0	893.7820	14.8
0.0	123.0	889.5159	14.3
0.0	124.0	884.6585	13.9
0.0	125.0	879.2281	13.5
0.0	126.0	873.2486	13.1
0.0	127.0	866.7496	12.7
0.0	128.0	859.7670	12.4
0.0	129.0	852.3425	12.1
0.0	130.0	844.5238	11.8
0.0	131.0	836.3648	11.6
0.0	132.0	827.9254	11.5
0.0	133.0	819.2711	11.4
0.0	134.0	810.4731	11.3
0.0	135.0	801.6076	11.3
0.0	136.0	792.7552	11.4
0.0	137.0	784.0006	11.5
0.0	138.0	775.4314	11.7
0.0	139.0	767.1373	12.0
0.0	140.0	759.2088	12.3
0.0	141.0	751.7357	12.7
0.0	142.0	744.8060	13.1
0.0	143.0	738.5040	13.6
0.0	144.0	732.9086	14.1
0.0	145.0	728.0914	14.7
0.0	146.0	724.1154	15.4
0.0	147.0	721.0331	16.1
0.0	148.0	718.8852	16.8
0.0	149.0	717.6993	17.5
0.0	150.0	717.4896	18.2
0.0	151.0	718.2560	18.9
0.0	152.0	719.9845	19.6
0.0	153.0	722.6475	20.3
0.0	154.0	726.2049	21.0
0.0	155.0	730.6047	21.6
0.0	156.0	735.7852	22.1
0.0	157.0	741.6761	22.7
0.0	158.0	748.2002	23.1
0.0	159.0	755.2758	23.5
0.0	160.0	762.8176	23.9
0.0	161.0	770.7388	24.2

0.0	162.0	778.9524	24.4
0.0	163.0	787.3727	24.5
0.0	164.0	795.9159	24.6
0.0	165.0	804.5020	24.7
0.0	166.0	813.0547	24.7
0.0	167.0	821.5022	24.6
0.0	168.0	829.7781	24.5
0.0	169.0	837.8213	24.3
0.0	170.0	845.5764	24.1
0.0	171.0	852.9937	23.9
0.0	172.0	860.0293	23.6
0.0	173.0	866.6453	23.3
0.0	174.0	872.8092	22.9
0.0	175.0	878.4942	22.6
0.0	176.0	883.6789	22.2
0.0	177.0	888.3468	21.8
0.0	178.0	892.4866	21.4
0.0	179.0	896.0915	20.9
0.0	180.0	899.1591	20.5
0.0	181.0	901.6910	20.0
0.0	182.0	903.6927	19.6
0.0	183.0	905.1731	19.1
0.0	184.0	906.1445	18.7
0.0	185.0	906.6217	18.2
0.0	186.0	906.6225	17.8
0.0	187.0	906.1666	17.3
0.0	188.0	905.2761	16.9
0.0	189.0	903.9744	16.5
0.0	190.0	902.2867	16.1
0.0	191.0	900.2390	15.7
0.0	192.0	897.8584	15.3
0.0	193.0	895.1727	15.0
0.0	194.0	892.2099	14.6
0.0	195.0	888.9983	14.3
0.0	196.0	885.5661	14.0
0.0	197.0	881.9414	13.7
0.0	198.0	878.1517	13.4
0.0	199.0	874.2240	13.1
0.0	200.0	870.1845	12.9
0.0	201.0	866.0586	12.7
0.0	202.0	861.8705	12.5
0.0	203.0	857.6437	12.3
0.0	204.0	853.4000	12.1
0.0	205.0	849.1602	12.0
0.0	206.0	844.9437	11.9
0.0	207.0	840.7686	11.7
0.0	208.0	836.6515	11.6
0.0	209.0	832.6077	11.6
0.0	210.0	828.6509	11.5
0.0	211.0	824.7937	11.4
0.0	212.0	821.0470	11.4
0.0	213.0	817.4207	11.4
0.0	214.0	813.9233	11.3
0.0	215.0	810.5619	11.3
0.0	216.0	807.3428	11.3
0.0	217.0	804.2711	11.3
0.0	218.0	801.3507	11.3
0.0	219.0	798.5850	11.3
0.0	220.0	795.9761	11.4
0.0	221.0	793.5259	11.4
0.0	222.0	791.2351	11.4
0.0	223.0	789.1044	11.4
0.0	224.0	787.1335	11.5
0.0	225.0	785.3222	11.5
0.0	226.0	783.6697	11.5
0.0	227.0	782.1751	11.5
0.0	228.0	780.8372	11.6
0.0	229.0	779.6549	11.6
0.0	230.0	778.6269	11.6
0.0	231.0	777.7522	11.6
0.0	232.0	777.0296	11.7
0.0	233.0	776.4582	11.7
0.0	234.0	776.0371	11.7
0.0	235.0	775.7657	11.7
0.0	236.0	775.6437	11.7

0.0	237.0	775.6709	11.7
0.0	238.0	775.8472	11.7
0.0	239.0	776.1730	11.7
0.0	240.0	776.6487	11.7
0.0	241.0	777.2751	11.7
0.0	242.0	778.0529	11.6
0.0	243.0	778.9833	11.6
0.0	244.0	780.0673	11.6
0.0	245.0	781.3061	11.6
0.0	246.0	782.7009	11.5
0.0	247.0	784.2529	11.5
0.0	248.0	785.9631	11.5
0.0	249.0	787.8324	11.4
0.0	250.0	789.8614	11.4
0.0	251.0	792.0504	11.4
0.0	252.0	794.3993	11.4
0.0	253.0	796.9075	11.3
0.0	254.0	799.5736	11.3
0.0	255.0	802.3960	11.3
0.0	256.0	805.3719	11.3
0.0	257.0	808.4978	11.3
0.0	258.0	811.7693	11.3
0.0	259.0	815.1809	11.3
0.0	260.0	818.7262	11.4
0.0	261.0	822.3973	11.4
0.0	262.0	826.1855	11.5
0.0	263.0	830.0803	11.5
0.0	264.0	834.0703	11.6
0.0	265.0	838.1424	11.7
0.0	266.0	842.2825	11.8
0.0	267.0	846.4746	11.9
0.0	268.0	850.7018	12.0
0.0	269.0	854.9453	12.2
0.0	270.0	859.1853	12.4
0.0	271.0	863.4007	12.6
0.0	272.0	867.5688	12.8
0.0	273.0	871.6662	13.0
0.0	274.0	875.6680	13.2
0.0	275.0	879.5485	13.5
0.0	276.0	883.2813	13.8
0.0	277.0	886.8392	14.1
0.0	278.0	890.1943	14.4
0.0	279.0	893.3187	14.7
0.0	280.0	896.1839	15.1
0.0	281.0	898.7618	15.5
0.0	282.0	901.0243	15.8
0.0	283.0	902.9441	16.2
0.0	284.0	904.4943	16.6
0.0	285.0	905.6491	17.1
0.0	286.0	906.3841	17.5
0.0	**287.0**	**906.6761**	**17.9** ←
0.0	288.0	906.5041	18.4
0.0	289.0	905.8489	18.8
0.0	290.0	904.6939	19.3
0.0	291.0	903.0249	19.7
0.0	292.0	900.8311	20.2
0.0	293.0	898.1047	20.6
0.0	294.0	894.8415	21.1
0.0	295.0	891.0414	21.5
0.0	296.0	886.7083	21.9
0.0	297.0	881.8507	22.3
0.0	298.0	876.4818	22.7
0.0	299.0	870.6197	23.1
0.0	300.0	864.2878	23.4
0.0	301.0	857.5150	23.7
0.0	302.0	850.3358	24.0
0.0	303.0	842.7901	24.2
0.0	304.0	834.9241	24.4
0.0	305.0	826.7895	24.5
0.0	306.0	818.4438	24.6
0.0	307.0	809.9500	24.7
0.0	308.0	801.3766	24.7
0.0	309.0	792.7971	24.6
0.0	310.0	784.2891	24.5
0.0	311.0	775.9343	24.3

0.0	312.0	767.8171	24.1
0.0	313.0	760.0239	23.8
0.0	314.0	752.6418	23.4
0.0	315.0	745.7572	23.0
0.0	316.0	739.4543	22.5
0.0	317.0	733.8134	21.9
0.0	318.0	728.9094	21.4
0.0	319.0	724.8095	20.7
0.0	320.0	721.5723	20.1
0.0	321.0	719.2454	19.4
0.0	322.0	717.8646	18.7
0.0	**323.0**	**717.4526**	**17.9**
0.0	324.0	718.0184	17.2
0.0	325.0	719.5569	16.5
0.0	326.0	722.0488	15.8
0.0	327.0	725.4618	15.2
0.0	328.0	729.7506	14.5
0.0	329.0	734.8588	13.9
0.0	330.0	740.7202	13.4
0.0	331.0	747.2601	12.9
0.0	332.0	754.3975	12.5
0.0	333.0	762.0467	12.1
0.0	334.0	770.1188	11.9
0.0	335.0	778.5235	11.6
0.0	336.0	787.1705	11.5
0.0	337.0	795.9707	11.4
0.0	338.0	804.8375	11.3
0.0	339.0	813.6876	11.3
0.0	340.0	822.4418	11.4
0.0	341.0	831.0258	11.5
0.0	342.0	839.3704	11.7
0.0	343.0	847.4121	11.9
0.0	344.0	855.0933	12.2
0.0	345.0	862.3622	12.5
0.0	346.0	869.1732	12.9
0.0	347.0	875.4869	13.2
0.0	348.0	881.2697	13.6
0.0	349.0	886.4940	14.1
0.0	350.0	891.1380	14.5
0.0	351.0	895.1853	15.0
0.0	352.0	898.6250	15.4
0.0	353.0	901.4513	15.9
0.0	354.0	903.6631	16.4
0.0	355.0	905.2641	16.9
0.0	356.0	906.2620	17.4
0.0	357.0	906.6687	17.9
0.0	358.0	906.4998	18.4
0.0	359.0	905.7739	18.9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0
270
90
180
Elev.
0.0

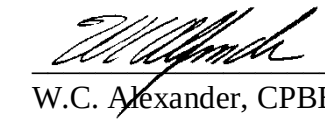
Conclusion

Based on the foregoing, I conclude that the proposed WLIF-FM tower will not produce a significant disturbance in the WNST non-directional radiation pattern such that it will distort the WNST radiation pattern by more that ±2 dB.

As such, detuning of the WLIF-FM tower is not indicated.

This Adverse Impact Engineering Statement is made under penalty of perjury and is true and correct to the best of my knowledge and belief.

Respectfully submitted this 15th day of December, 2014 by:



W.C. Alexander, CPBE, AMD, DRB