

APPLICATION FOR A LICENSE TO COVER A
CONSTRUCTION PERMITTED DIGITAL TELEVISION
BROADCAST STATION
FCC FILE NUMBER: BPCDT-19991029AGW
WPAN-DT TV CHANNEL 40 OPERATING WITH AN
ERP OF 33.5 KW ERP THROUGH A DIRECTIONAL
ANTENNA CENTERED AT 215 METERS AAT
FRANKLIN MEDIA, INC.
FORT WALTON BEACH, FLORIDA

KESSLER & GEHMAN ASSOCIATES, INC.
TELECOMMUNICATIONS CONSULTING ENGINEERS

20081104

Prepared by Ryan Wilhour

KGGA

507 N.W. 60th Street, Suite C
Gainesville, Florida 32607

TECHNICAL STATEMENT OF RYAN WILHOUR OF THE FIRM OF KESSLER AND GEHMAN ASSOCIATES, INC., CONSULTING ENGINEERS IN CONNECTION WITH APPLICATION FOR A LICENSE TO COVER A CONSTRUCTION PERMITTED DIGITAL TELEVISION BROADCAST STATION
FCC FILE NUMBER: BPCDT-19991029AGW
WPAN-DT CHANNEL 40 OPERATING WITH AN ERP OF 33.5 KW ERP THROUGH A DIRECTIONAL ANTENNA CENTERED AT 215 METERS AAT
FRANKLIN MEDIA, INC.
FORT WALTON BEACH, FLORIDA

APPLICATION SUMMARY

Franklin Media, Inc. ("FMI") is the licensee holder of WPAN-DT facility ID No.: 31570, FCC construction permit No.: BPCDT-19991029AGW. The purpose of the instant application is to file a license to cover a granted construction permit and concurrently modify the permitted technical parameters to the "as built" technical parameters. The "as built" technical parameter modification does not exceed Section 73.1690(c) thresholds for a license modification application.

ATTACHED FIGURES

In carrying out the engineering studies, the following attached figures were prepared:

1. Azimuth ERP comparison - Exhibit E1.
2. Coverage map comparison - Exhibit E2.
3. Radio Frequency Radiation (RFR) analysis - Exhibit E3.

DESCRIPTION OF LICENSE TO COVER AND MODIFICATION

The above reference WPAN-DT construction permit specifies a Dielectric TFU-18DSC P210 broadcast antenna mounted at 211 meters above ground level, it is herein proposed to file a license to cover for the construction permitted facility using a RF Technologies CS-2030-5771-14 broadcast antenna mounted at 207 meters above ground (4 meters lower). Exhibit E1 demonstrates that the substitute antenna would not produce an ERP greater than the permitted antenna or less than 0.5 db below the substitute antenna. It is herein demonstrated that the "as built" facility is compliant with Section 73.1690 for a license modification application. Exhibit E2 demonstrates that the proposed and permitted facilities produce nearly identical coverage contours and the loss of permitted population due to the modification is 0.3%.

ENVIRONMENTAL IMPACT/RFR HAZARD ANALYSIS

An analysis has been made of the human exposure to RFR using the calculation methodology described in OET Bulletin 65, Edition, 97-01. Exhibit E3 is a RFR study demonstrating compliance within 5% of the most restrictive permissible exposure at any location 2 meters above the ground. Exhibit E3 calculations were made using a frequency of 626 MHz, which is the lower edge of the proposed channel. To account for ground reflections, a coefficient of 1.6 was included in the calculations.

Pursuant to OET Bulletin 65 concerning multiple-user transmitter sites only those licensees whose transmitters produce power density levels greater than 5.0% of the exposure limit are considered significant contributors to RFR. Since the proposed operation is well within 5% of the most permissible exposure at any location 2 meters above the ground, it is not considered a significant contributor to RFR exposure. Thus, contributions to exposure from other RF sources in the vicinity of WPAN-DT were not taken into account. The instant proposal complies with the FCC limits for human exposure to RF radiation and thus is excluded from further environmental processing.

A chain link fence shall encompass the WPAN-DT support structure if it is not already. The applicant will cooperate with any other users of the tower by reducing the power to the antenna or if necessary completely cutting it off in order to protect maintenance workers on the tower.

DECLARATION OF ENGINEER

The foregoing statement and the report regarding the aforementioned engineering work are true and correct to the best of my knowledge. Executed on November 4, 2008.

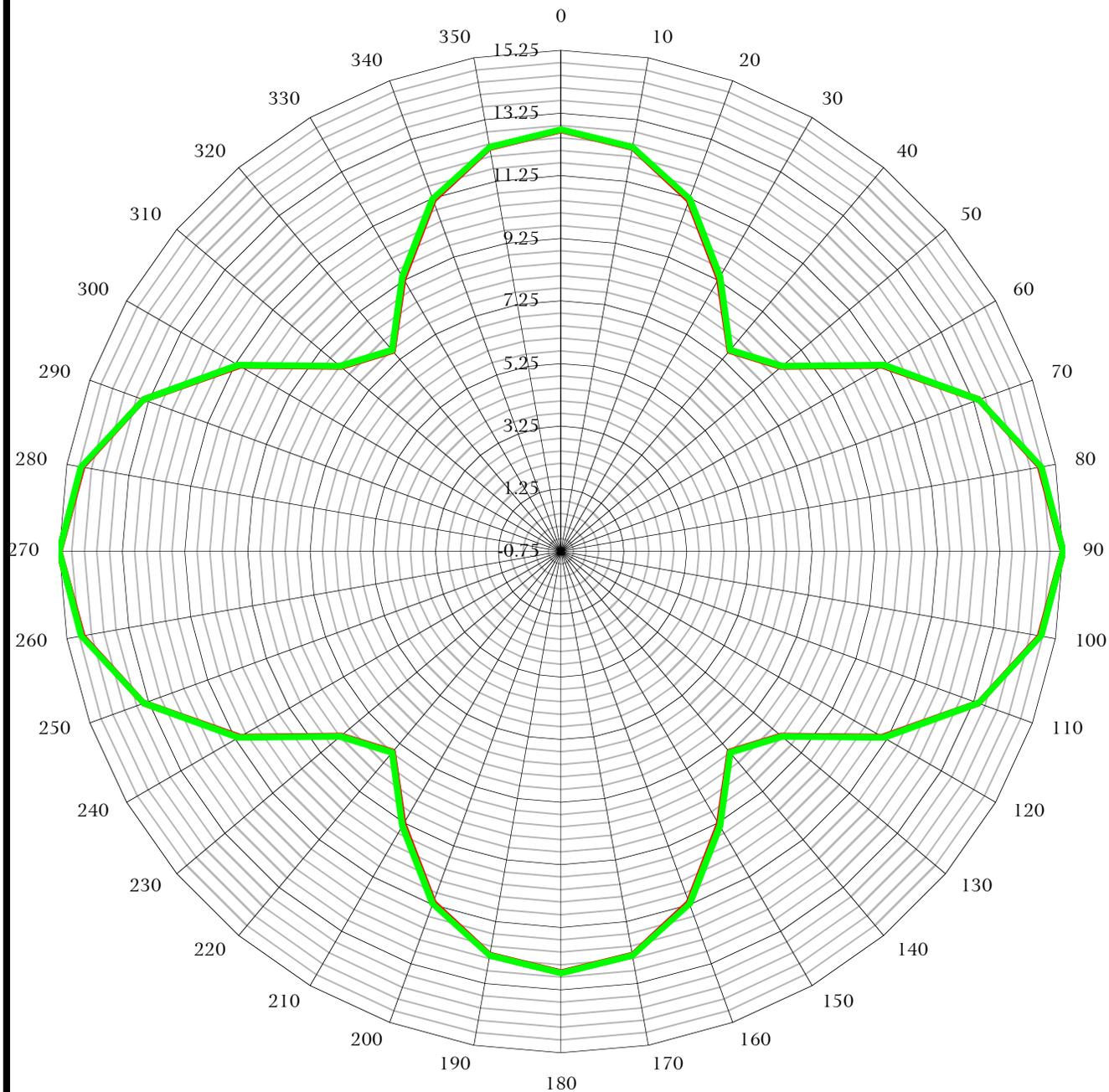
The logo for Kessler and Gehman Associates, Inc. (KGA) features the letters 'KGA' in a stylized, serif font. The letters are white and are superimposed on a thick, horizontal grey bar that extends across the width of the logo.

Ryan Wilhour

A handwritten signature in blue ink that reads 'Ryan Wilhour'. The signature is written in a cursive style and is positioned below the printed name.

Consulting Engineer

ERP - DBK PERMITTED - VS - PROPOSED



* THE GREEN LINE INDICATES THE PEAK ERP OF THE PERMITTED STATION.

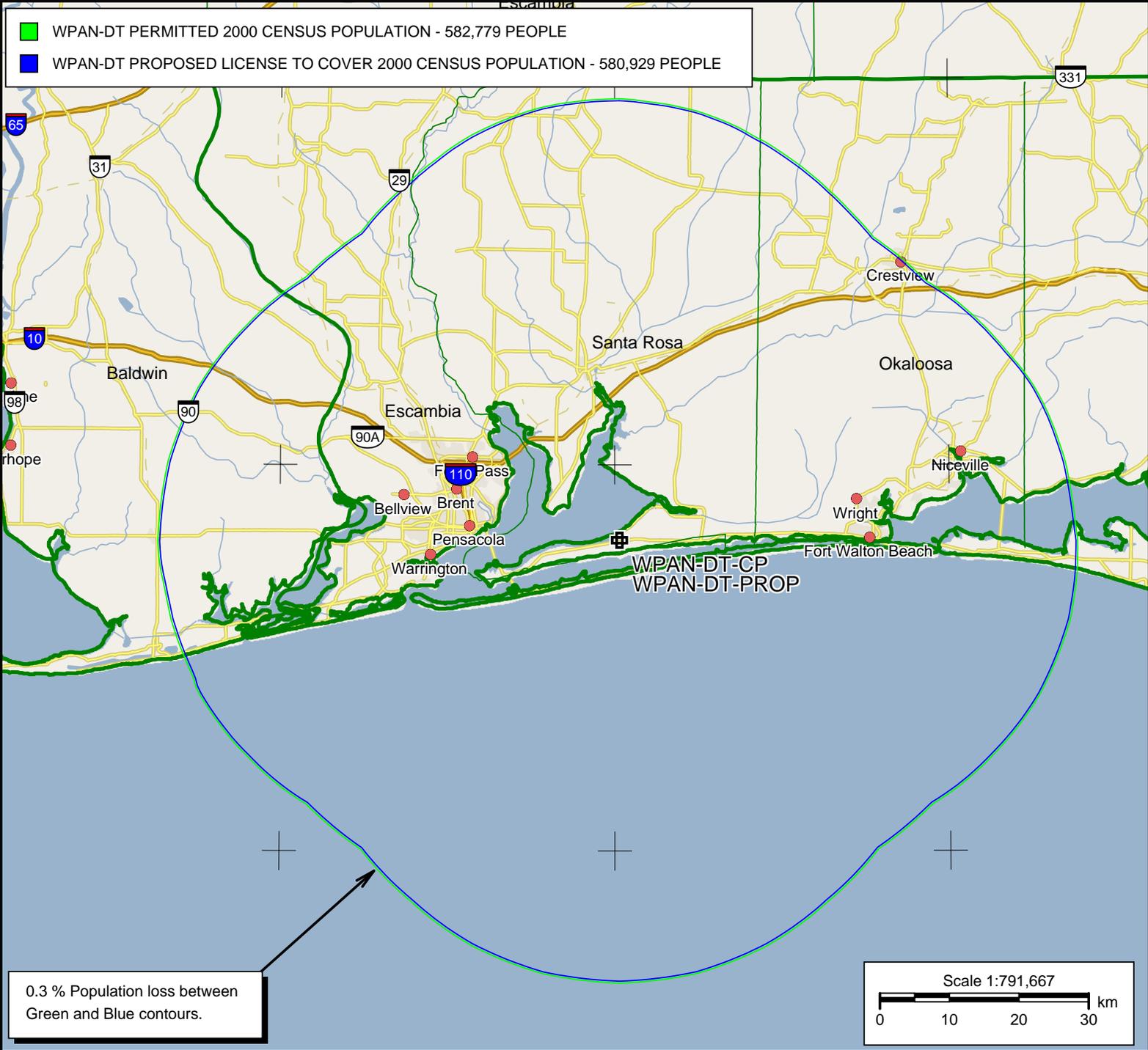
* THE RED LINE INDICATES THE PEAK ERP OF THE PROPOSED STATION.

WPAN-DT

FORT WALTON BEACH, FLORIDA

AZIMUTH	PERMITTED		PROPOSED		ERP-DBK DIFFERENCE*
	REL FIELD	ERP-DBK	REL FIELD	ERP-DBK	
N000°E	0.747	12.717	0.745	12.694	0.023
N010°E	0.716	12.349	0.715	12.337	0.012
N020°E	0.629	11.223	0.625	11.168	0.055
N030°E	0.508	9.368	0.505	9.316	0.051
N040°E	0.416	7.632	0.415	7.611	0.021
N050°E	0.457	8.449	0.455	8.411	0.038
N060°E	0.622	11.126	0.620	11.098	0.028
N070°E	0.810	13.420	0.810	13.420	0.000
N080°E	0.949	14.796	0.945	14.759	0.037
N090°E	1.000	15.250	1.000	15.250	0.000
N100°E	0.949	14.796	0.945	14.759	0.037
N110°E	0.810	13.420	0.810	13.420	0.000
N120°E	0.622	11.126	0.620	11.098	0.028
N130°E	0.457	8.449	0.455	8.411	0.038
N140°E	0.416	7.632	0.415	7.611	0.021
N150°E	0.508	9.368	0.505	9.316	0.051
N160°E	0.629	11.223	0.625	11.168	0.055
N170°E	0.716	12.349	0.715	12.337	0.012
N180°E	0.747	12.717	0.745	12.694	0.023
N190°E	0.716	12.349	0.715	12.337	0.012
N200°E	0.629	11.223	0.625	11.168	0.055
N210°E	0.508	9.368	0.505	9.316	0.051
N220°E	0.416	7.632	0.415	7.611	0.021
N230°E	0.457	8.449	0.455	8.411	0.038
N240°E	0.622	11.126	0.620	11.098	0.028
N250°E	0.810	13.420	0.810	13.420	0.000
N260°E	0.949	14.796	0.945	14.759	0.037
N270°E	1.000	15.250	1.000	15.250	0.000
N280°E	0.949	14.796	0.945	14.759	0.037
N290°E	0.810	13.420	0.810	13.420	0.000
N300°E	0.622	11.126	0.620	11.098	0.028
N310°E	0.457	8.449	0.455	8.411	0.038
N320°E	0.416	7.632	0.415	7.611	0.021
N330°E	0.508	9.368	0.505	9.316	0.051
N340°E	0.629	11.223	0.625	11.168	0.055
N350°E	0.716	12.349	0.715	12.337	0.012

* DIFFERENCE = PERMITTED ERP - PROPOSED ERP



■ WPAN-DT PERMITTED 2000 CENSUS POPULATION - 582,779 PEOPLE
■ WPAN-DT PROPOSED LICENSE TO COVER 2000 CENSUS POPULATION - 580,929 PEOPLE

WPAN-DT-CP
 BPCDT19991029AGW
 Latitude: 30-24-09 N
 Longitude: 086-59-35 W
 ERP: 33.50 kW
 Channel: 40
 Frequency: 629.0 MHz
 AMSL Height: 222.0 m
 Elevation: 11.0 m
 Horiz. Pattern: Directional
 Vert. Pattern: Yes
 Elec Tilt: 0.75
 Prop Model: None

WPAN-DT-PROP
 PROP. LIC TO COVER
 Latitude: 30-24-09 N
 Longitude: 086-59-35 W
 ERP: 33.50 kW
 Channel: 40
 Frequency: 629.0 MHz
 AMSL Height: 218.0 m
 Elevation: 11.0 m
 Horiz. Pattern: Directional
 Vert. Pattern: Yes
 Elec Tilt: 0.75
 Prop Model: None

0.3 % Population loss between Green and Blue contours.

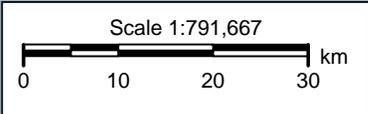
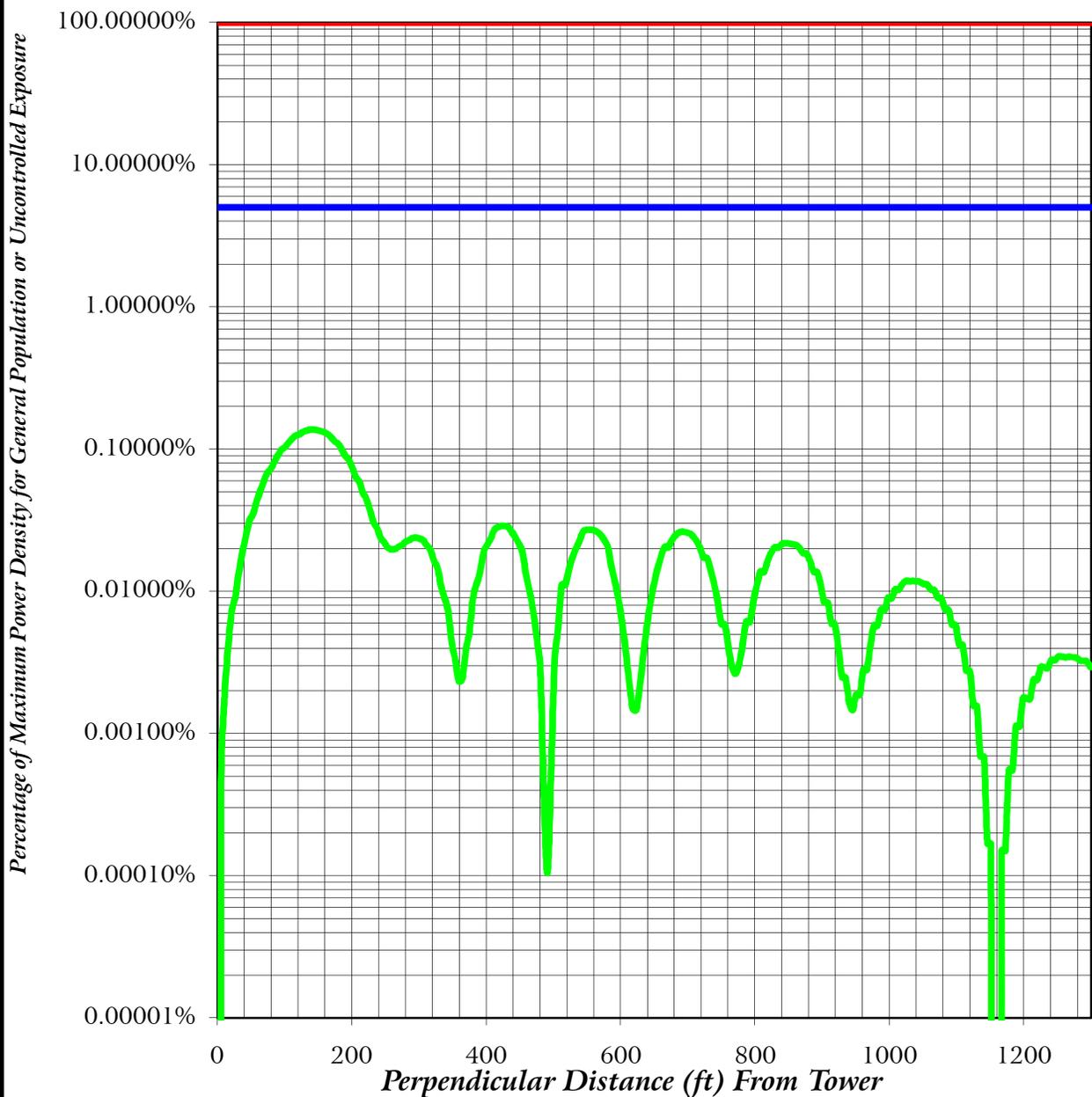


Exhibit E2

FAR FIELD EXPOSURE TO RF EMISSIONS



- Maximum Allowable General Population or Uncontrolled Exposure
- 5 % of Maximum General Population or Uncontrolled Exposure
- Percentage of Maximum General Population or Uncontrolled Exposure

KESSLER & GEHMAN

TELECOMMUNICATIONS CONSULTING ENGINEERS
507 N.W. 60th Street, Suite C
Gainesville, Florida 32607

**WPAN-DT
FORT WALTON BEACH, FL**

20081104

EXHIBIT E3

METHODOLOGY AND EXPLANATION OF
ENVIRONMENTAL IMPACT / RADIO FREQUENCY RADIATION
HAZARD ANALYSIS

A theoretical analysis has been conducted of the human exposure to radio frequency radiation (“RFR”) using the calculation methodology described in *OET Bulletin 65, Edition 97-01*. The RFR analysis is conducted pursuant to the following methodology:

Terrain¹ extraction is compiled from the proposed tower site to radial lengths of 0.25 miles in 0.001 mile increments for 360 radials. The power density is calculated for each terrain point at 6 feet above ground level using the elevation and azimuth pattern of the proposed broadcast antenna. The power density calculations are conducted using the lower edge of the proposed channel frequency. To account for ground reflections, a coefficient of 1.6 was included in the calculation.

The resulting cylindrical polar analysis is then summarized into a coordinate plane graph using the following methodology:

Starting from the origin the maximum calculated RFR value is determined among the 360 degree radials for each 0.001 mile increment, the value is then converted into a percentage of the maximum allowable general population or uncontrolled exposure and plotted as a function of perpendicular distance from the tower.

¹ Terrain extraction is based upon a 3 arc second point spacing terrain database.