

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of COMMUNITY TELEVISION, INC., licensee of noncommercial station WATC-DT, Channel 41 in Atlanta, Georgia, in support of this Request for Special Temporary Authority to operate with increased effective radiated power until such time as the authorized power can be achieved (as specified in BPEDT-20080619AIR). The increase in power is over and above that of the current authorized licensed power (specified in BLEDT-20070912AAT). No change in site location antenna make/model or effective antenna height is proposed herein.

It is proposed to mount a standard SWR omnidirectional antenna at the 52-meter level of the existing 60-meter tower on which the present WATC-DT antenna is mounted. Exhibit B provides an elevation pattern for the proposed antenna. Exhibit C is a map upon which the predicted service contours are plotted. As shown, the city of license is completely contained within the proposed 48 dBu service contour. An interference study is not needed as WATC-DT will be operating as authorized but with reduced power (as that of the authorized construction permit), limiting the station's interference effects. A power density calculation is provided in Exhibit D.

It is important to note that operation of the STA facility proposed herein will not result in the generation of predicted "loss" area, that is, area contained within the present analog or digital service contour that would not lie within the proposed STA facility contour. As shown in Exhibit E, the service contour of the facility proposed herein completely encompasses that of analog WATC(TV) (shut off as of February 17, 2009, pursuant to FCC approval) as well as the

EXHIBIT A

present WATC-DT facility. Therefore, no present analog or digital viewer of WATC programming will be disenfranchised by the STA facility.

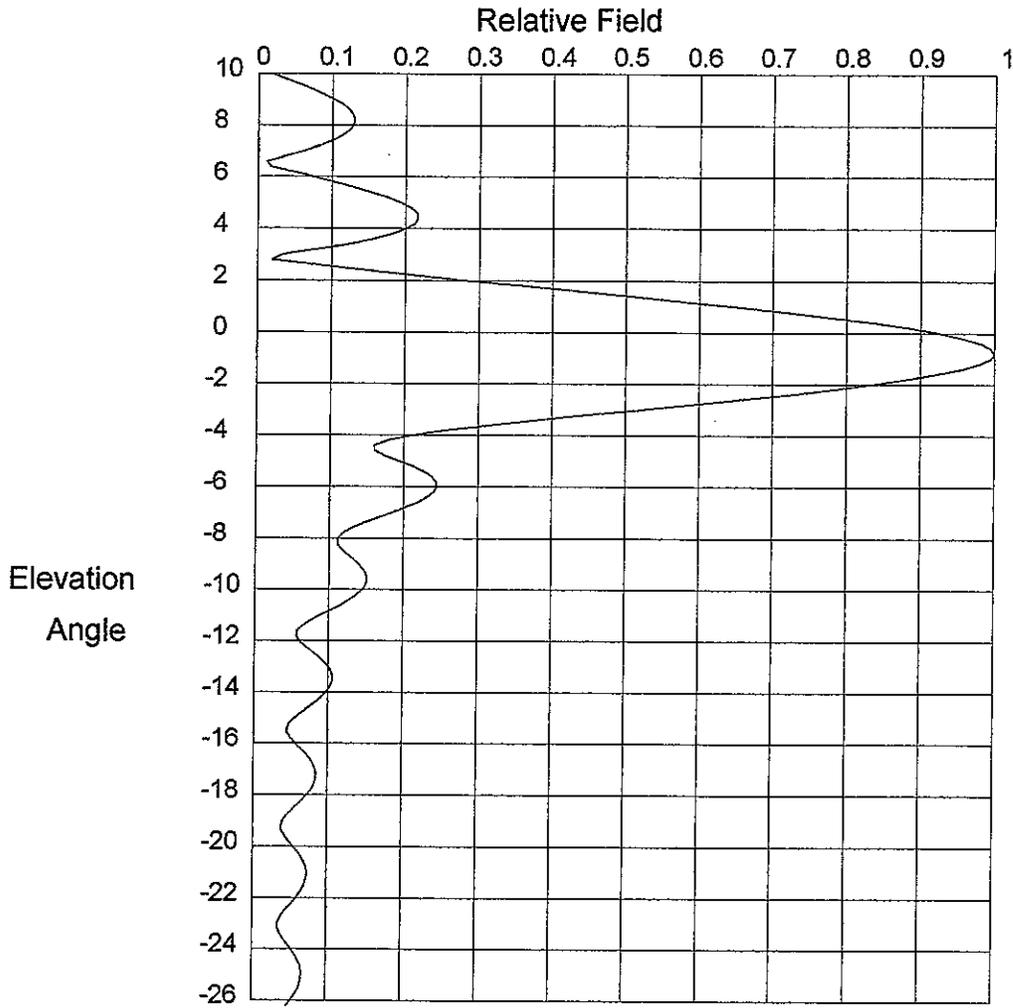
It is not expected that the proposed facility would cause objectionable interference to any other broadcast or non-broadcast station authorized to operate at or near the WATC-DT site. However, if such should occur, the owner of this station recognizes its obligation to take whatever corrective actions are necessary.

Since no change in overall height or location of the existing tower is proposed herein, the FAA has not been notified of this application. Due to the diminutive height of the tower and its proximity to the nearest airport runway, FCC antenna structure registration is not required. This conclusion is supported by the Commission's TOWAIR Program.

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

  
KYLE T. FISHER

May 26, 2009



## Elevation Pattern

Scale: Linear

Units: Field, Relative

### Systems With Reliability L.L.P.

CLIENT: *Superior Broadcasting*

Date: 4/6/2006

ANTENNA TYPE: SWED160I/41

FREQUENCY: 641

PATTERN POL.: Horizontal

DIRECTIVITY(Peak): 17.271/12.373 dBd

Beam Tilt (Deg.) : -75

DIRECTIVITY(Horiz): 14.79/11.70 dBd

Null Fill(s)(%) : 15, 10, 5

#### EXHIBIT B

ANTENNA ELEVATION PATTERN

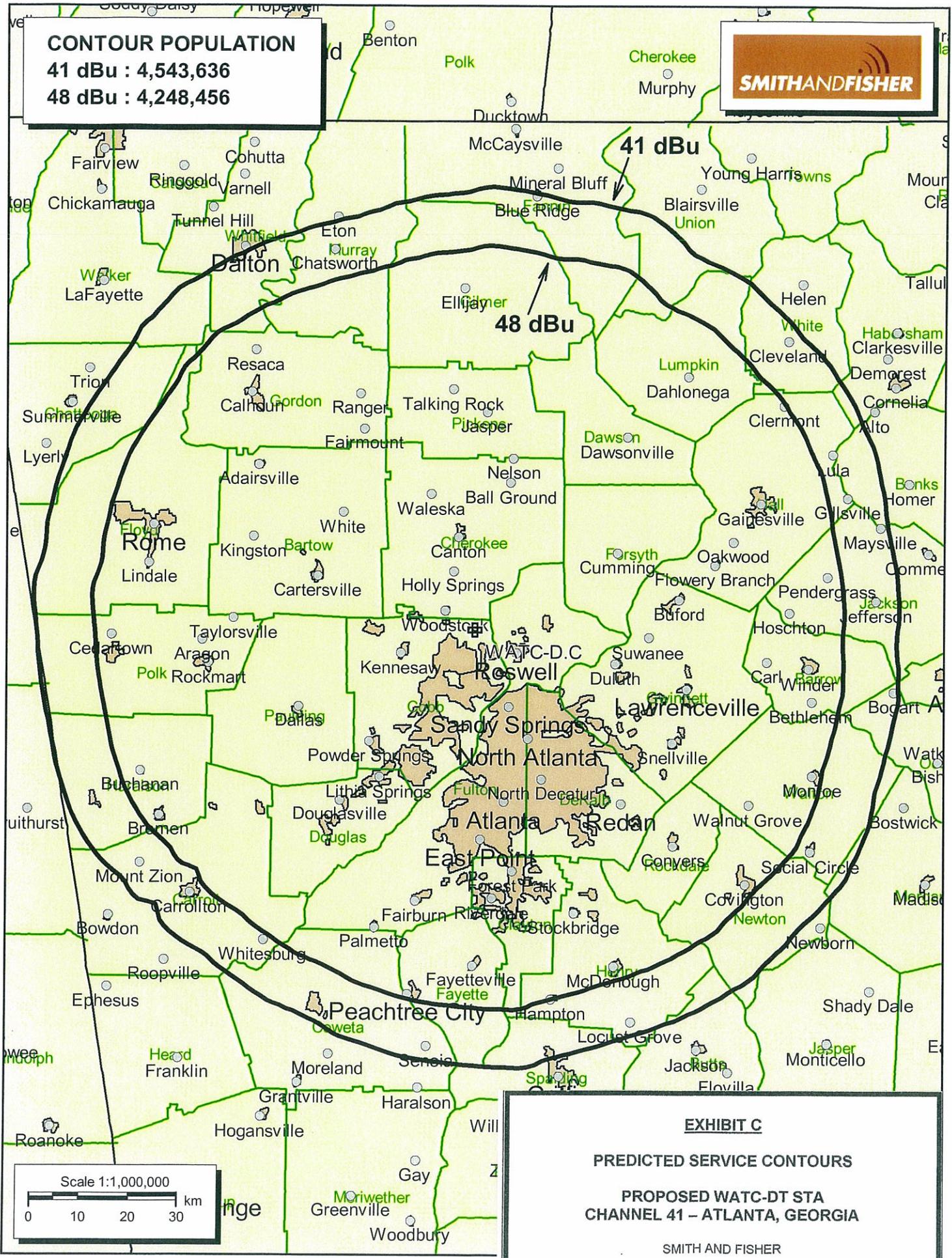
PROPOSED WATC-DT  
CHANNEL 41 - ATLANTA, GEORGIA

SMITH AND FISHER

**CONTOUR POPULATION**

**41 dBu : 4,543,636**

**48 dBu : 4,248,456**



**EXHIBIT C**

**PREDICTED SERVICE CONTOURS**

**PROPOSED WATC-DT STA  
CHANNEL 41 - ATLANTA, GEORGIA**

SMITH AND FISHER

EXHIBIT D

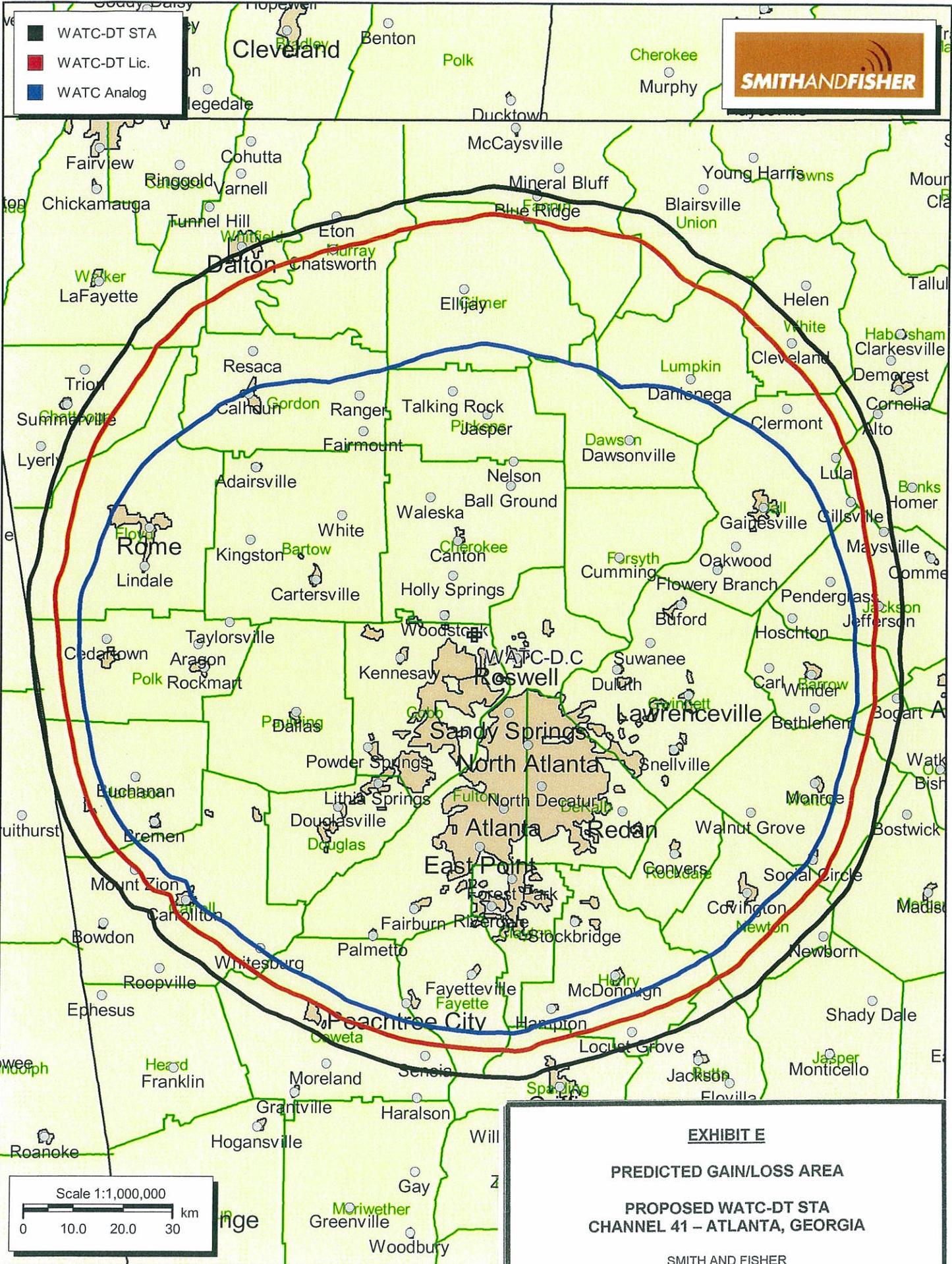
POWER DENSITY CALCULATION  
PROPOSED WATC-DT  
CHANNEL 41 – ATLANTA, GEORGIA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Atlanta facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 330 kw, an antenna radiation center 52 meters above ground, and the elevation pattern of the SWR antenna, maximum power density two meters above ground of  $0.0048 \text{ mw/cm}^2$  is calculated to occur 15 meters from the base of the tower. Since this is only 1.1 percent of the  $0.42 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 41 (632-638 MHz), a grant of this proposal may be considered a minor environmental action with respect to public and occupational ground-level exposure to nonionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive nonionizing radiation.



- WATC-DT STA
- WATC-DT Lic.
- WATC Analog



**EXHIBIT E**  
**PREDICTED GAIN/LOSS AREA**  
**PROPOSED WATC-DT STA**  
**CHANNEL 41 - ATLANTA, GEORGIA**  
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