

Exhibit 40 - Statement A  
**NATURE OF THE PROPOSAL**  
**PROPOSED ANTENNA SYSTEM**  
prepared for  
**Pacific and Southern Company, Inc.**  
WLTX-DT Columbia, South Carolina  
Facility ID 37176  
Ch. 17 1000 kW 500 m

*Pacific and Southern Company, Inc. ("Pacific")* is the permittee of WLTX-DT, Channel 17, Columbia, South Carolina (file number BPCDT-19991020ABB) and licensee of the paired analog WLTX(TV) Channel 19 facility (BLCT-19850719KF). The WLTX-DT Construction Permit ("CP") authorizes an effective radiated power ("ERP") of 1000 kW and an antenna height above average terrain ("HAAT") of 509 meters with a directional antenna system. The instant application proposes to modify the existing authorization to reduce the antenna height on the same antenna support structure with a similar directional antenna pattern, so as to decrease the HAAT to 500 meters.

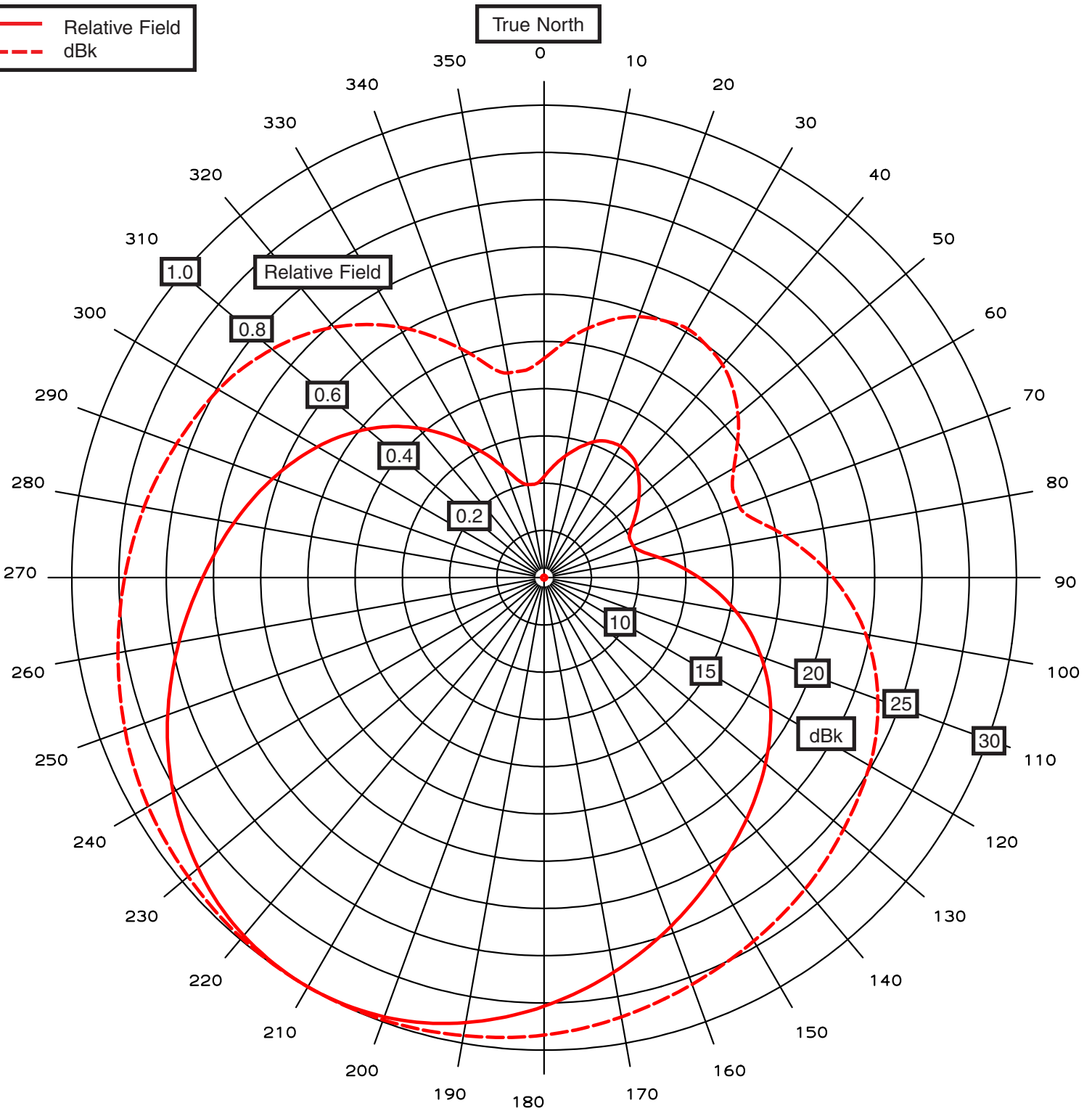
The proposed WLTX-DT antenna system will be mounted on an existing antenna supporting structure, having FCC Antenna Structure Registration number 1044489. The proposed antenna system will be side mounted. This antenna supporting structure is currently authorized for the paired analog TV station, WLTX(TV) and WMHK(FM), Columbia, South Carolina.

The proposed transmitting antenna, a *Dielectric* model TFU26DSC-R-S270, is directional in the horizontal plane. This antenna will employ 0.75 degrees of electrical beam tilt. The ERP will be 1000 kilowatts, horizontally polarized. The antenna system will be installed in accordance with the manufacturer's instructions. Said installation will be supervised on-site by a competent technical representative of the applicant. The antenna's horizontal plane pattern, expressed in terms of relative field and power, is supplied as **Exhibit 40 - Figure 1**, properly oriented relative to True North. **Exhibit 40 - Figures 2 and 2A** present the theoretical vertical plane (elevation) pattern for the antenna system.

Exhibit 40 Statement A:  
prepared May 14, 2002 by  
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— Relative Field  
- - - dBk



**EXHIBIT 40 - FIGURE 1**  
**ANTENNA HORIZONTAL PLANE RADIATION PATTERN**

prepared May 2002 for  
**PACIFIC AND SOUTHERN COMPANY, INC.**  
WLTX-DT Columbia, South Carolina  
Facility ID: 37176  
Ch. 17 1000 kW 500 m

Cavell, Mertz & Davis, Inc.  
Manassas, Virginia



**EXHIBIT 40 - FIGURE 2**  
**ANTENNA VERTICAL (ELEVATION)**  
**PLANE RADIATION PATTERN**

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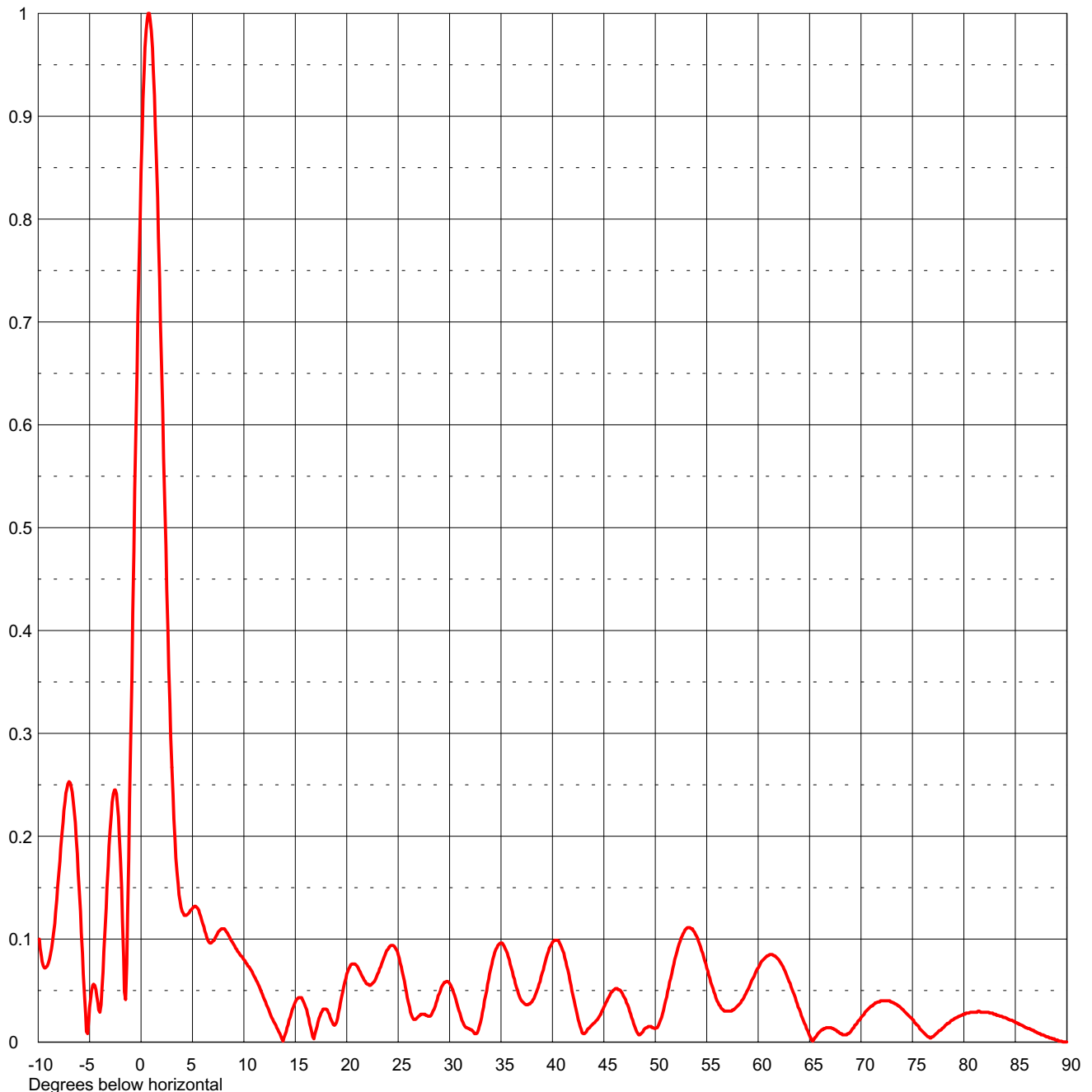
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**ELEVATION PATTERN**

RMS Gain at Main Lobe  
RMS Gain at Horizontal  
Calculated / Measured

**22.5 (13.52 dB)**  
**16.1 (12.07 dB)**  
**Calculated**

Beam Tilt **0.75 Degrees**  
Frequency **491.00 MHz**  
Drawing # **26Q225075-90**



Remarks:



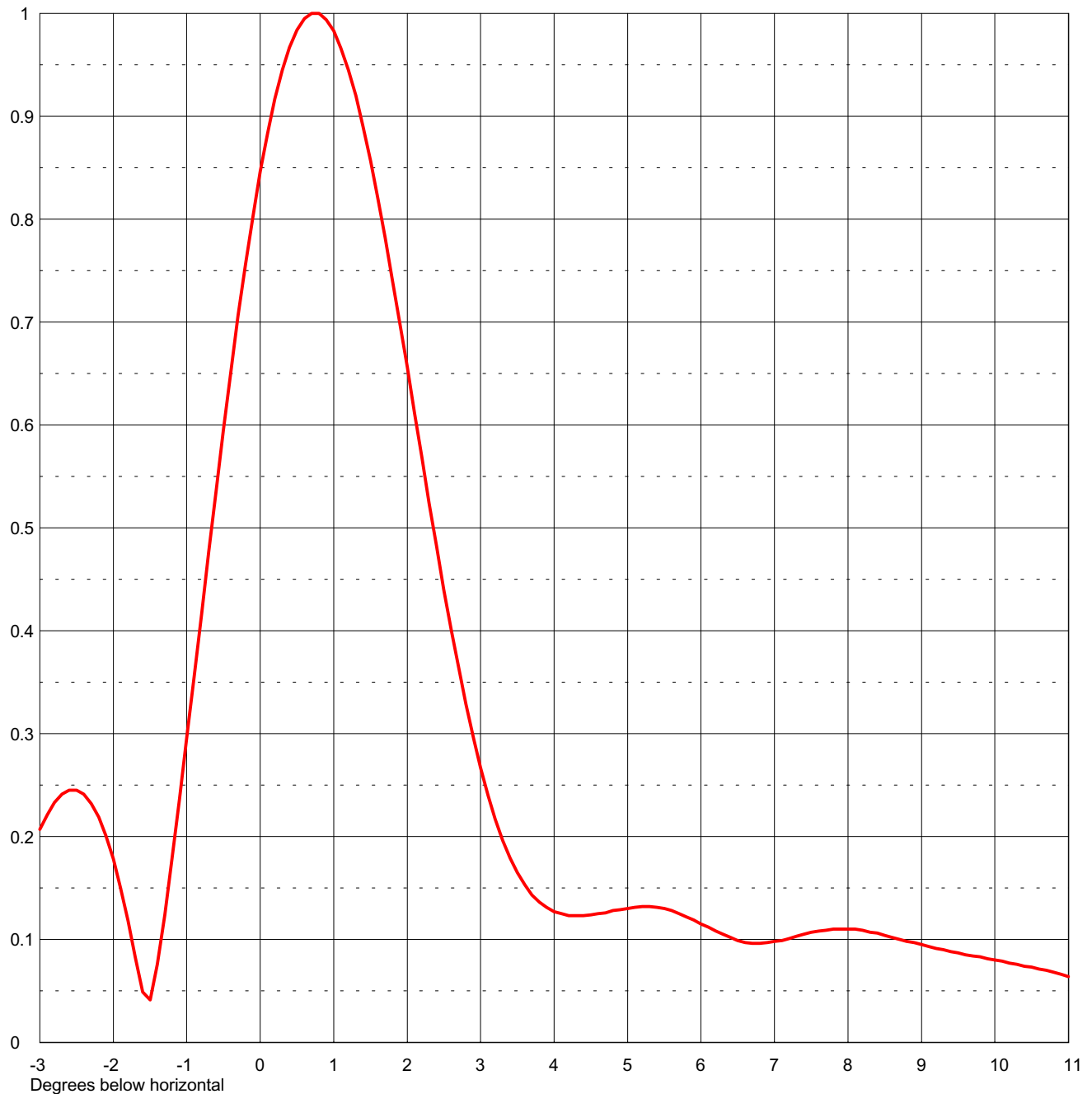
**EXHIBIT 40 - FIGURE 2A**  
**ANTENNA VERTICAL (ELEVATION)**  
**PLANE RADIATION PATTERN DETAIL**

prepared May 2002 for  
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Ch. 17 1000 kW 500 m

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Manassas, Virginia

**ELEVATION PATTERN**

RMS Gain at Main Lobe	<b>22.5 (13.52 dB)</b>	Beam Tilt	<b>0.75 Degrees</b>
RMS Gain at Horizontal	<b>16.1 (12.07 dB)</b>	Frequency	<b>491.00 MHz</b>
Calculated / Measured	<b>Calculated</b>	Drawing #	<b>26Q225075</b>



Remarks: