

Exhibit 7 - Statement A  
**CONSTRUCTED FACILITY**  
prepared for  
**WSET Incorporated**  
WSET-DT Lynchburg, Virginia  
Facility ID: 73988  
Ch. 13 28.7 kW 625 m

*WSET Incorporated* (“*WSETI*”) is the permittee of digital television station WSET-DT, Lynchburg, Virginia. *WSETI* has completed construction of the DTV facility authorized in the construction permit (“CP”) FCC File No. BMPCDT-20080620AIR. The instant statement has been prepared to report a minor change in the antenna specification.

The post-transition WSET-DT facility was constructed as authorized in the CP except that the antenna was changed from elliptical to horizontal polarization. The CP application reported the proposed use of an ERI ATW9V3-ETO-13 non-directional antenna with 0.75° of electrical beam tilt. The installed antenna is an ERI ATW9V3-HTO-13 non-directional antenna with 0.75° of electrical beam tilt. The authorized antenna radiation center and effective radiated power remains unchanged. A depiction of the antenna vertical plane (elevation) relative field pattern is provided in **Exhibit 7-Figure 1**.

### **Human Exposure to Radiofrequency Radiation**

The installed antenna was evaluated for human exposure to radiofrequency energy using the procedures outlined in the Commission’s OET Bulletin No. 65 (“OET-65”). OET-65 describes a means of determining whether a proposed facility exceeds the radiofrequency exposure guidelines adopted in §1.1310. Under present Commission policy, a facility may be presumed to comply with the limits specified in §1.1310 if it satisfies the exposure criteria set forth in OET-65. Based upon that methodology, and as demonstrated in the following, the proposed transmitting system will comply with the cited adopted guidelines.

The WSET-DT antenna that has been employed has a center of radiation 359 meters above ground level. An ERP of 28.7 kilowatts, horizontally polarized, is employed. Based on information provided by the antenna manufacturer, the antenna has a maximum vertical plane (elevation) relative field of 35.1 percent or less from 10 to 90 degrees below the horizontal plane (i.e.: below the antenna). Thus, a value of 35.1 percent relative field is used for this calculation. The “uncontrolled/general population” limit specified in §1.1310 for Channel 13 (center frequency 213 MHz) is 200 µW/cm².

OET-65's formula for television transmitting antennas is based on the NTSC transmission standards, where the average power is normally much less than the peak power. For the DTV facility in the instant proposal, the peak-to-average ratio is different than the NTSC ratio. The DTV ERP figure herein refers to the *average* power level. The formula used for calculating DTV signal density in this analysis is essentially the same as equation (9) in OET-65.

$$S = (33.4098) (F^2) (ERP) / D^2$$

Where:

<i>S</i>	=	power density in microwatts/cm <sup>2</sup>
<i>ERP</i>	=	total (average) ERP in Watts
<i>F</i>	=	relative field factor
<i>D</i>	=	distance in meters

Using this formula, the proposed facility would contribute a power density of 0.93 µW/cm<sup>2</sup> at two meters above ground level near antenna support structure, or 0.46 percent of the general population/uncontrolled limit. At ground level locations away from the base of the tower, the calculated RF power density is even lower, due to the increasing distance from the transmitting antenna.

§1.1307(b)(3) states that facilities at locations with multiple transmitters (such as the case at hand) are categorically excluded from responsibility for taking any corrective action in the areas where their contribution is less than five percent. Since the instant situation meets the five percent exclusion test at all ground level areas, the impact of the any other facilities using this site may be considered independently from this proposal. Accordingly, it is believed that the impact of the proposed operation should not be considered to be a factor at or near ground level as defined under §1.1307(b).

### **Safety of Tower Workers and the General Public**

As demonstrated herein, excessive levels of RF energy attributable to the WSET-DT operation will not be caused at publicly accessible areas at ground level near the antenna supporting structure. Consequently, members of the general public will not be exposed to RF levels in excess of the Commission's guidelines. Nevertheless, tower access will continue to be

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restricted and controlled through the use of a locked fence. Additionally, appropriate RF exposure warning signs will continue to be posted.

With respect to worker safety, it is believed that based on the preceding analysis, excessive exposure would not occur in areas at ground level. A site exposure policy will continue to be employed protecting maintenance workers from excessive exposure when work must be performed on the tower in areas where high RF levels may be present. Such protective measures may include, but will not be limited to, restriction of access to areas where levels in excess of the guidelines may be expected, power reduction, or the complete shutdown of facilities when work or inspections must be performed in areas where the exposure guidelines will be exceeded. On-site RF exposure measurements may also be undertaken to establish the bounds of safe working areas. The applicant will coordinate exposure procedures with all pertinent stations.

### **Conclusion**

Based on the preceding, it is believed that the instant proposal may be categorically excluded from environmental processing under Section 1.1306 of the Rules, hence preparation of an Environmental Assessment is not required.

**EXHIBIT 7 - FIGURE 1  
ANTENNA VERTICAL PLANE  
(ELEVATION) RELATIVE  
FIELD PATTERN**

prepared October 2009 for  
**WSET Incorporated**  
WSET-DT Lynchburg, Virginia  
Facility ID 73988  
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**Cavell, Mertz & Associates, Inc.**  
Manassas, Virginia

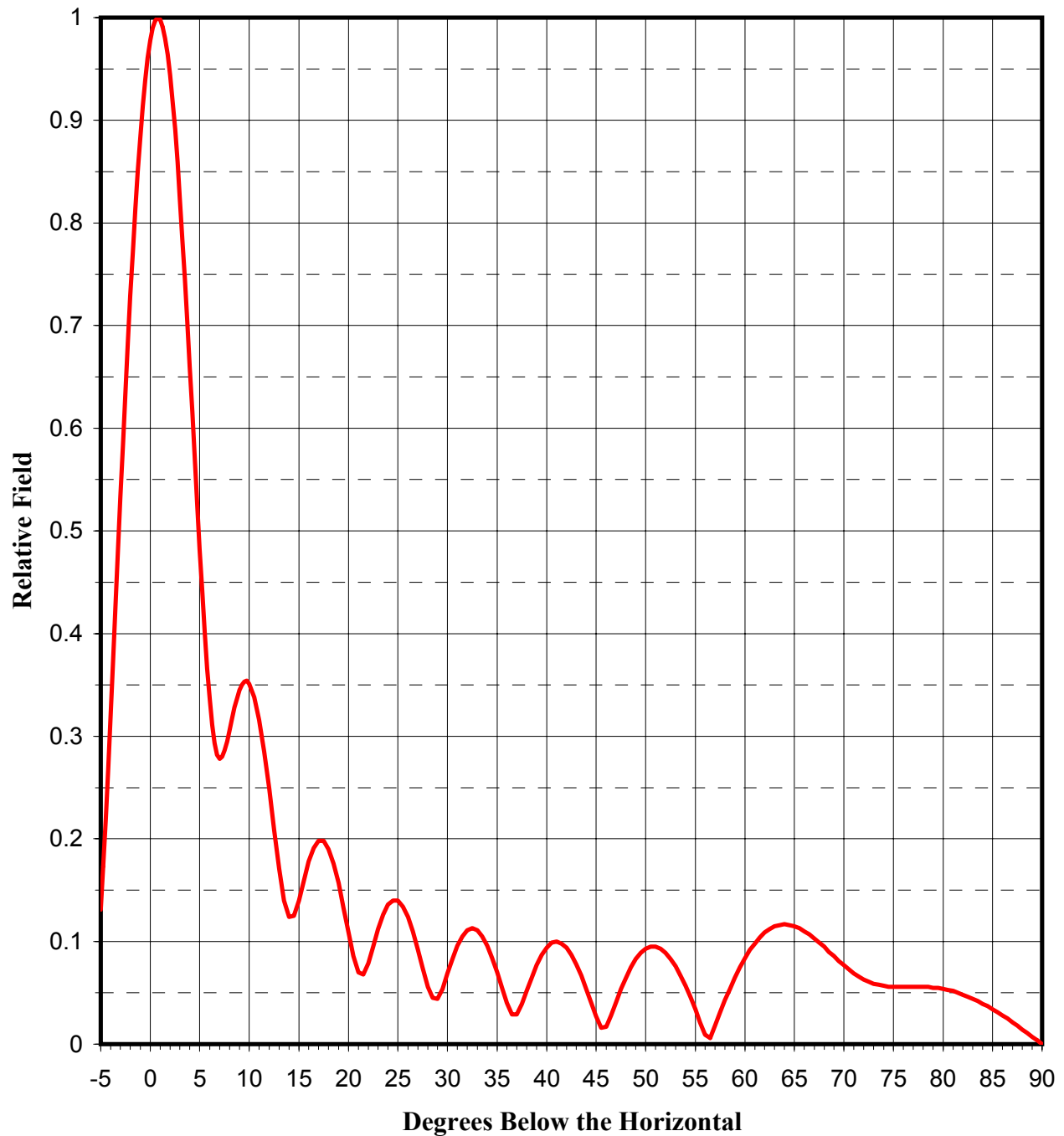


Exhibit 7 - Table 1  
**ANTENNA / LINE SYSTEM GAINS AND LOSSES**  
prepared October 2009 for  
**WSET Incorporated**  
WSET-TV Lynchburg, Virginia  
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License to Cover Constuction Permit BMPCDT-20080620AIR

<b>Authorized Effective Radiated Power:</b>		<b>28.7 kW</b>	<b>14.6 dBk</b>
<hr/>			
<b><u>Antenna System</u></b>			
ERI	Max Power Gain:	9.00	9.54 dB
ATW9V4-HTO-13			
<b>Antenna Input Power:</b>		<b>3.19 kW</b>	<b>5.06 dBk</b>
<hr/>			
<b><u>Line Losses</u></b>			
8 3/16" Rigid Line	Efficiency:	0.87	
Length 1225 ft	Loss:		0.60 dB
<b>Total Losses:</b>			<b>0.60 dB</b>
<hr/>			
<b><u>Transmitter Power Output:</u></b>		<b>3.66 kW</b>	<b>5.66 dBk</b>