

Engineering Statement  
Not Constructed As Authorized  
**CBS Television Licenses LLC**  
WBZ-TV(Aux) Boston, Massachusetts  
Facility ID 25456  
Ch. 20 850 kW 350 m

*CBS Television Licenses LLC (CBS)* has completed construction of an auxiliary antenna for WBZ-TV Boston, Massachusetts and now seeks a license to cover this facility.<sup>1</sup> The facility was originally authorized for a horizontally-polarized effective radiated power (ERP) of 922 kW and a vertically polarized ERP of 275 kW. Instead, pursuant to §73.1690, the actual facility was constructed to operate at 850 kW ERP horizontally polarized, with no other changes. This Statement provides updates and corrections to the *Operating Constants* section of the License Application form<sup>2</sup>.

The attached coverage map **Figure 1** demonstrates that the proposed service contour will encompass the principal community of Boston. The attached **Table 1** shows the corrected ERP, losses, and transmitter output power.

The as-built facility uses an existing tower<sup>3</sup> with no change in overall height, marking specifications, or lighting specifications. Therefore, this application is categorically excluded from environmental processing. Since the total ERP will be reduced with no changes in antenna height or elevation pattern, there will be a net reduction in calculated radiofrequency exposure at all locations.

Tower access will continue to be controlled and appropriate RF exposure warning signs will continue to be posted. A site exposure policy is in effect that includes restriction of access, power reduction, or the complete shutdown of facilities when work must be performed where predicted RF levels would otherwise exceed appropriate guidelines. 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.

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<sup>1</sup> See Construction Permit 0000072329.

<sup>2</sup> Because the original ERP was grayed-out, it could not be corrected using the FCC's License and Management System.

<sup>3</sup> See Antenna Structure Registration 1004233.

Figure 1  
Proposed Facility Coverage Contours

WBZ-TV(Aux) Boston, MA  
Facility ID 25456  
Ch. 20 850 kW 350 m

WBZ-TV Proposed Aux Facility  
41 dBμ F(50, 90) Service Contour \*  
48 dBμ F(50, 90) Principal Community

\* - Dipole Corrected

Scale 1:1,250,000  
0 10 20 30 km

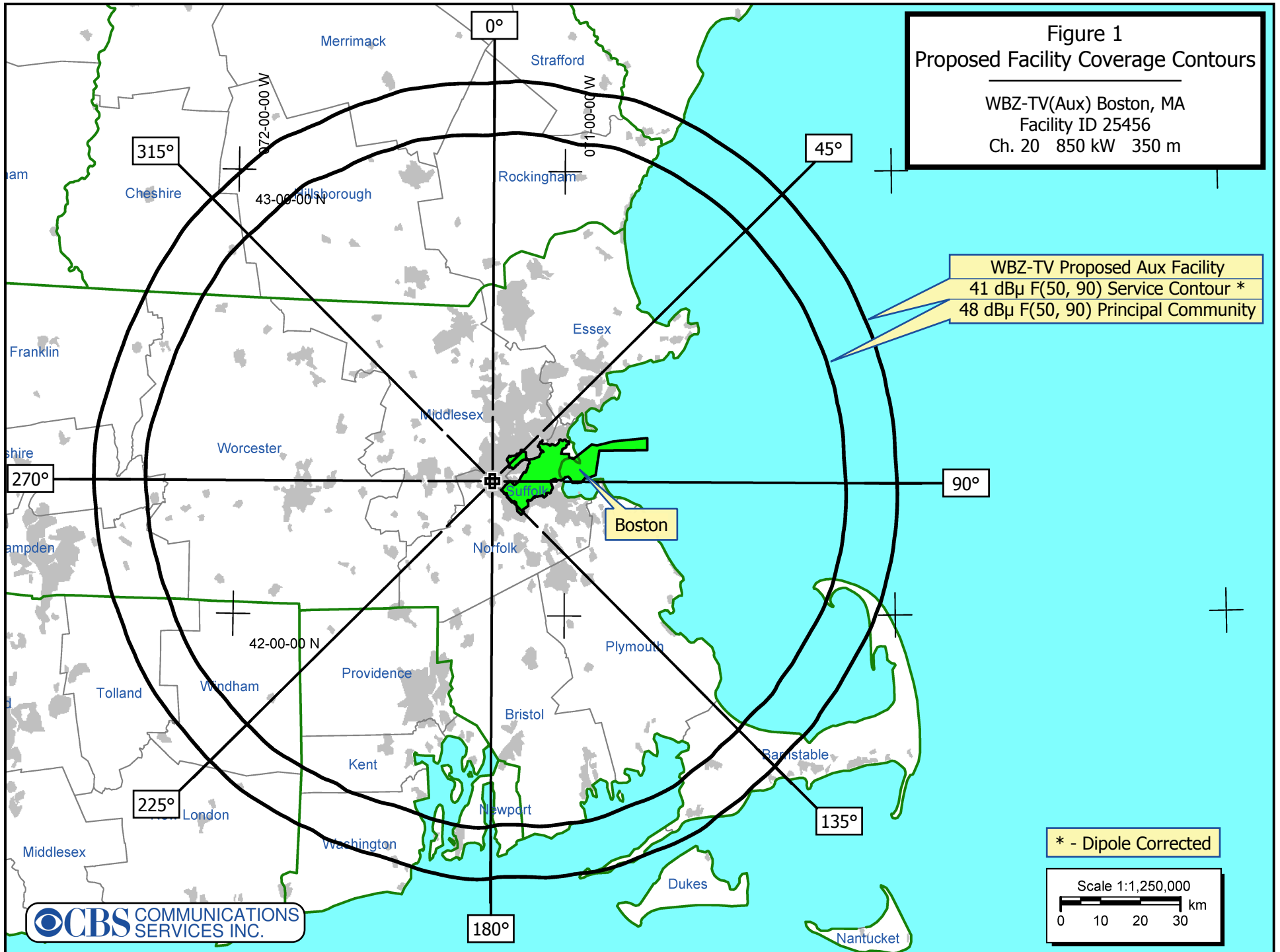


Table 1  
**System Gains and Losses**  
**CBS Television Licenses LLC**  
WBZ-TV (Post-Transition Aux) Boston, Massachusetts  
Facility ID 25456  
Ch. 20 850 kW 349.7 m

Updates License to Cover Construction Permit 0000072329 (922 kW ERP)

<b>Proposed Effective Radiated Power:</b>	<b>850.00 kW</b>	<b>29.29 dBk</b>
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**Antenna System**

Dielectric TUM-AP-O4-14 56H-2-B

RMS Power Gain:	26.600	14.25 dB
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<b>Antenna Input Power:</b>	<b>31.915 kW</b>	<b>15.04 dBk</b>
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**Line and Other Losses**

	Loss:	
Dielectric 8 3/16 - Inch Rigid Coaxial Line, 1250 Feet		1.02 dB
Dielectric Dual Chain Combiner		0.26 dB
Switches and Various Short Line Sections in Transmitter Room		
Transmitter Room Feed Line		0.10 dB
	<b>Total Loss:</b>	<b>1.38 dB</b>

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<b><u>Transmitter Power Output:</u></b>	<b>43.850 kW</b>	<b>16.42 dBk</b>
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