Alpha Media Licensee, LLC
KCLB (Facility ID 12131)

Technical Narrative

This Technical Statement was prepared on behalf of Alpha Media Licensee, LLC, licensee of station KCLB-FM, Channel 229B, Coachella, CA. Licensee needed to replace the existing ERI SHPX-5AE, 0.926 wave spaced antenna with a PSI FM-6C, 0.75 wave spaced antenna. This Form 302 application corrects the transmitter output power (TPO) for KCLB per §73.1690(c)(1) which allows for replacement of an omnidirectional antenna with one of the same or different number of antenna bays, provided that the height of the antenna radiation center is not more than 2 meters above or 4 meters below the authorized values.

The proposed operation was evaluated for human exposure to RF energy using procedures outlined in the FCC's OET Bulletin 65. Using FM Model it was determined that the proposed antenna reduces the maximum near field radiation from 49.26 µW/cm² to 13.62 µW/cm² due to the additional bay and bay spacing. See "Exhibit 1 - Previous Antenna" and "Exhibit 2 - Replacement Antenna".
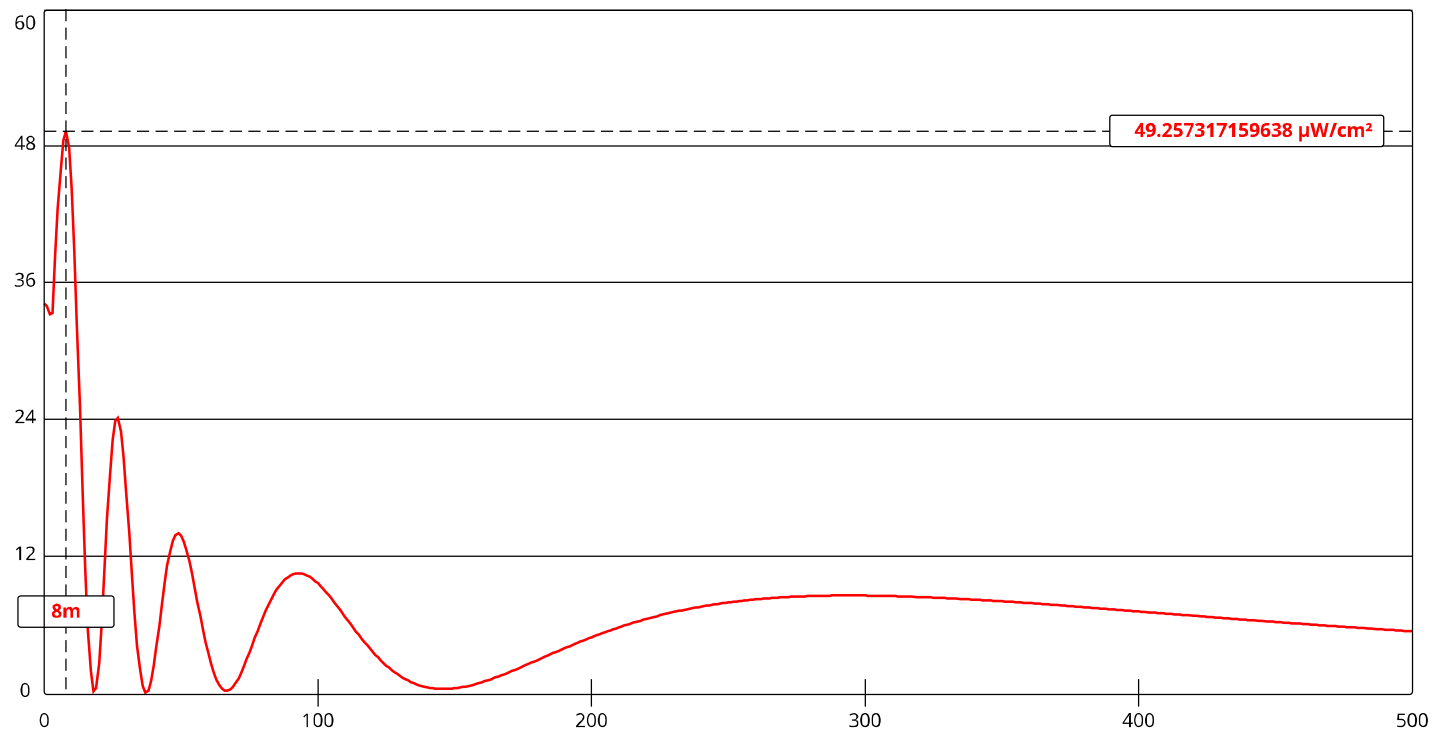
TPO Calculation

Line Efficiency:	0.936
Antenna Gain:	2.76
ERP:	26.5 kW
TPO:	10.26 kW (Rounded to 10.5 kW per 73.212)

Exhibit 1 - Previous Antenna

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FM Model

The FM Model calculator determines the potential exposure from radiofrequency (RF) electromagnetic fields produced by FM broadcast station antennas at ground level. The FM Model software was originally developed by the FCC in 1997 as a standalone executable program and this improved version provides more precise predictions and runs via a JavaScript enabled web browser. The FM Model is originally based on measured data published in 1985 by the EPA (http://nepis.epa.gov/Exe/ZyNET.exe/2000ED2W.TXT?ZyActionD=ZyDocument&Client=EPA&Index=1981+Thru+1985&Docs=&Query=&Time=&EndTime=& SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=& File=D%3A\zyfiles\Index%20Data\81thru85\Txt\00000003\2000ED2W.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h|-& MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=p|f&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS& BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL).   ▼ Show More....
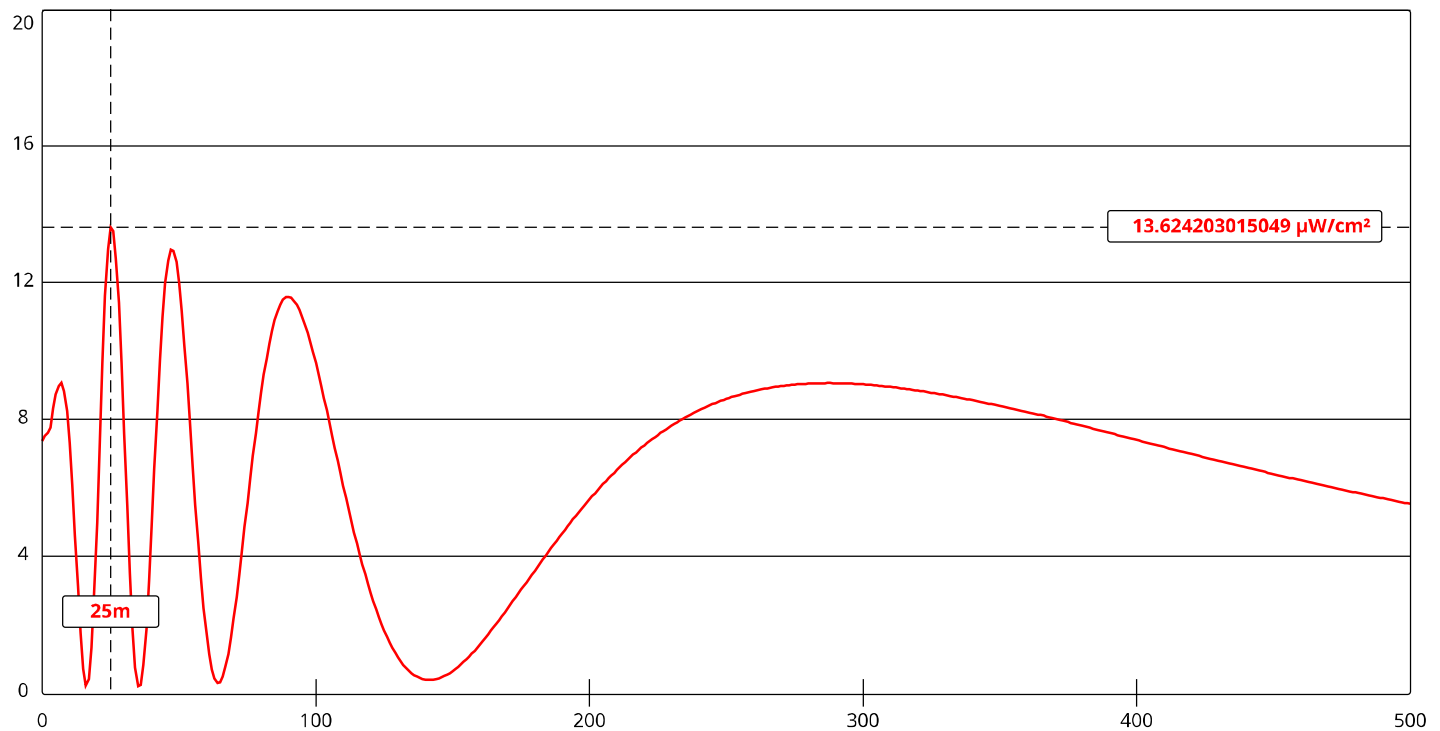

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Channel Selection	Channel 237 (95.3 MHz)		
Antenna Type +	EPA Type 3: Opposed U Dipole		
Height (m)	34	Distance (m)	500
ERP-H (W)	26500	ERP-V (W)	26500
Num of Elements	5	Element Spacing (λ)	0.926
Num of Points	500	Apply	

Exhibit 2 - Replacement Antenna

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Commission

FM Model

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Channel Selection	Channel 237 (95.3 MHz)		
Antenna Type **+**	EPA Type 2: Opposed V Dipole		
Height (m)	34	Distance (m)	500
ERP-H (W)	26500	ERP-V (W)	26500
Num of Elements	6	Element Spacing (λ)	0.75
Num of Points	500	Apply	