

NONIONIZING RADIATION COMPLIANCE  
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Scripps Broadcasting Holdings, LLC  
Las Vegas, NV

The proposed KTNV-TV Channel 26 facilities will fully comply with the current FCC Standard with regard to human exposure to nonionizing radiation. The proposed KTNV-TV Channel 26 antenna is an elliptically polarized Dielectric TFU-27ETT/VP-R O4 nondirectional antenna which will operate with an average effective radiated power of 1000 kilowatts in the horizontal polarization and 250 kilowatts in the vertical polarization. This antenna will be top mounted on the KTNV-TV tower with its center of radiation located 67.7 meters above ground level. Equation (2), found on Page 30 of Supplement A to OET Bulletin 65, details the calculation technique used to determine the power density at the base of a TV broadcast tower. In this case, however, it is necessary to substitute the total proposed average DTV effective radiated power (1250 kilowatts) for the expression  $[0.4ERP_v + ERP_A]$  in this equation to compensate for the fact that DTV power levels are expressed in terms of average power, rather than peak power, as is the case for the visual portion of an analog TV signal. Using the vertical radiation pattern data for the proposed antenna, which was supplied by the antenna manufacturer and is detailed in the final page of this exhibit, and substituting these values into this equation yields a predicted maximum power density at two meters above ground level of  $6.48 \mu\text{W}/\text{cm}^2$ , which will occur at a depression angle of 54 degrees below horizontal and at a distance of 47.7 meters from the base of this tower. Since the maximum permitted power density for uncontrolled exposure on TV Channel 26 is  $361.3 \mu\text{W}/\text{cm}^2$ , this amounts to only 1.79% of the permitted level for uncontrolled exposure. Since this is less than 5% of the permitted level, the proposed facilities are excluded from environ-

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mental processing and need not be considered in conjunction with other co-located and nearby facilities to establish compliance with this standard for uncontrolled exposure.

KTNV-TV will also take appropriate steps to insure that workers who must climb this tower will not be exposed to power densities exceeding the permitted levels for controlled exposure. This will include a reduction in power or the cessation of operation, as appropriate, at any time that workers must be on this tower in any area where the total power density exceeds the permitted level for controlled exposure.

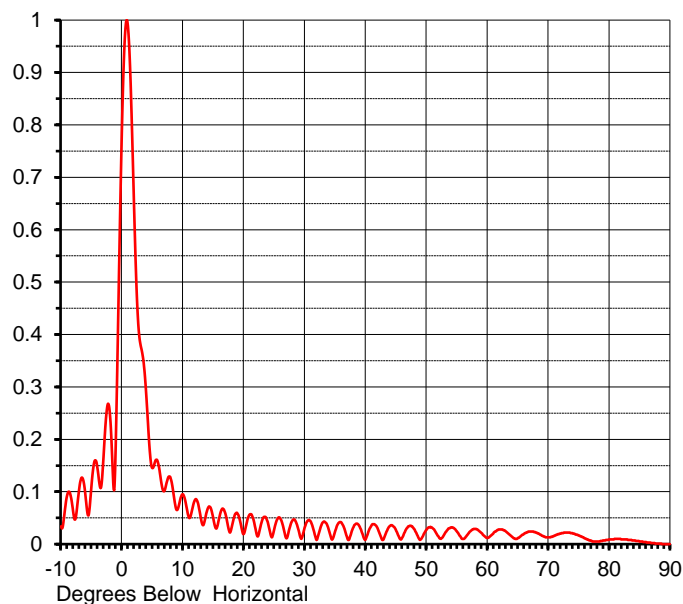
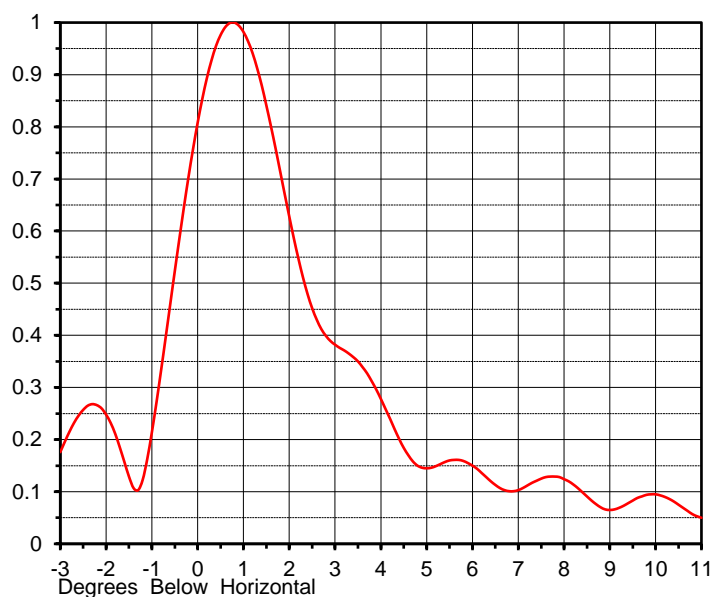
Because the modifications proposed in the attached application will fully comply with the FCC standard regarding human exposure to nonionizing radiation and don't involve any tower modifications which would qualify as a major environmental action, it isn't necessary to undertake any further environmental studies or submit an environmental assessment for these proposed facilities.

## ELEVATION PATTERN

Proposal No. **C-71732-3**  
 Date **22-Apr-22**  
 Call Letters **KTNV**  
 Channel **26**  
 Frequency **545 MHz**  
 Antenna Type **TFU-27ETT/VP-R 04**

RMS Directivity at Main Lobe **24.8 ( 13.94 dB )**  
 RMS Directivity at Horizontal **16.2 ( 12.10 dB )**  
**Calculated**

Beam Tilt **0.75 deg**  
 Pattern Number **27E248075**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.034	10.0	0.095	30.0	0.033	50.0	0.028	70.0	0.013
-9.0	0.094	11.0	0.050	31.0	0.042	51.0	0.030	71.0	0.016
-8.0	0.059	12.0	0.085	32.0	0.009	52.0	0.013	72.0	0.020
-7.0	0.109	13.0	0.045	33.0	0.042	53.0	0.021	73.0	0.022
-6.0	0.091	14.0	0.066	34.0	0.024	54.0	0.032	74.0	0.020
-5.0	0.115	15.0	0.047	35.0	0.026	55.0	0.023	75.0	0.016
-4.0	0.141	16.0	0.053	36.0	0.041	56.0	0.010	76.0	0.011
-3.0	0.176	17.0	0.056	37.0	0.010	57.0	0.023	77.0	0.006
-2.0	0.248	18.0	0.033	38.0	0.033	58.0	0.029	78.0	0.005
-1.0	0.214	19.0	0.057	39.0	0.033	59.0	0.021	79.0	0.007
0.0	0.808	20.0	0.020	40.0	0.010	60.0	0.012	80.0	0.009
1.0	0.982	21.0	0.057	41.0	0.037	61.0	0.022	81.0	0.010
2.0	0.628	22.0	0.023	42.0	0.028	62.0	0.028	82.0	0.009
3.0	0.382	23.0	0.046	43.0	0.012	63.0	0.024	83.0	0.008
4.0	0.278	24.0	0.037	44.0	0.035	64.0	0.014	84.0	0.007
5.0	0.145	25.0	0.030	45.0	0.025	65.0	0.012	85.0	0.005
6.0	0.150	26.0	0.048	46.0	0.013	66.0	0.020	86.0	0.004
7.0	0.103	27.0	0.011	47.0	0.034	67.0	0.024	87.0	0.002
8.0	0.124	28.0	0.046	48.0	0.028	68.0	0.022	88.0	0.001
9.0	0.065	29.0	0.025	49.0	0.009	69.0	0.016	89.0	0.000
								90.0	0.000

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