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NORTHEASTERN PENNSYLVANIA TV ASSOCIATION

LICENSEE OF WVIA-DT

SCRANTON, PENNSYLVANIA

FAC ID# 47929

FCC FILE # BLEDT-20010109AAP

**APPLICATION FOR A MODIFICATION OF LICENSE TO COVER THE
TOWER REPLACEMENT AND INCREASE THE ERP AND HAAT FOR
WVIA-DT**

**PROPOSED ELIPTCAL ANTENNA PATTERNS AND TABULATIONS
EXHIBIT 34**

June 1, 2008

NORTHEASTERN PENNSYLVANIA TV ASSOCIATION

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ELLIPTICAL ANTENNA EXHIBIT 34

This application is for a modification of the License of WVIA-DT to increase power from 200 kW to 365 kW non-directional and to increase the HAAT from 487 to 509 meters.

Northeastern Pennsylvania Educational TV Association (NPETV), Licensee of WVIA-DT is currently in full compliance with the RFR energy requirements of 47 CFR 1.1310 at this multi-user site. The requested post transition operation of WVIA-DT is on Channel 41 with 365 kW non-directional, and with elliptical polarization¹. The Dielectric Communications elevation and vertically polarized component patterns and tabulations are attached hereto.

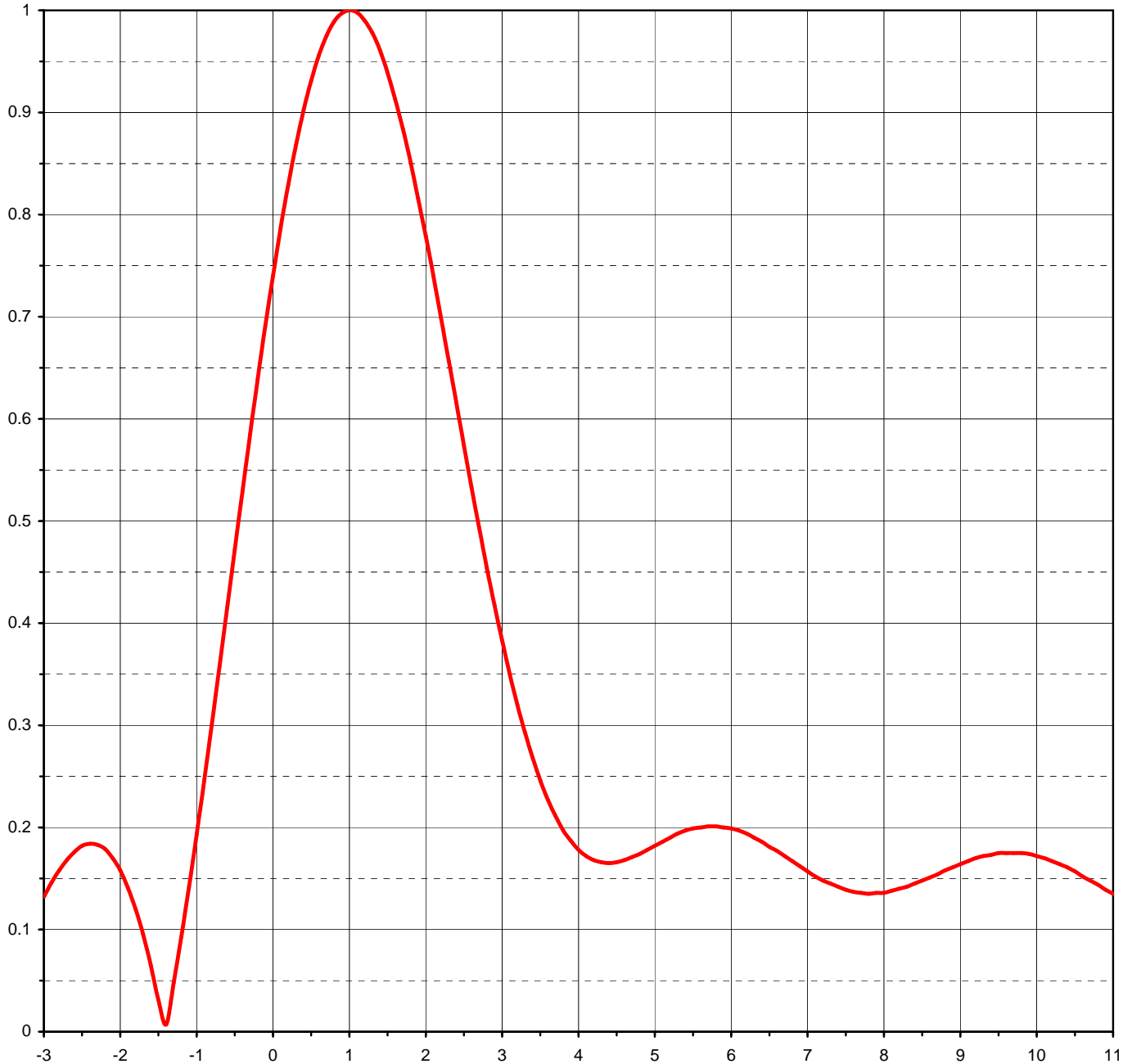
¹ The total radiated power is 365 kW horizontal and 50 kW vertical for a total of 415 kW.



Proposal Number	C-02260		
Date	17-Jan-08		
Call Letters	WVIA-DT	Channel	41
Location	Scranton , PA		
Customer			
Antenna Type	TFU-28GTH/VP-R O4		

ELEVATION PATTERN

RMS Gain at Main Lobe	23.00 (13.62 dB)	Beam Tilt	1.00 deg
RMS Gain at Horizontal	12.60 (11.00 dB)	Frequency	635.00 MHz
Calculated / Measured	Calculated	Drawing #	28G230100



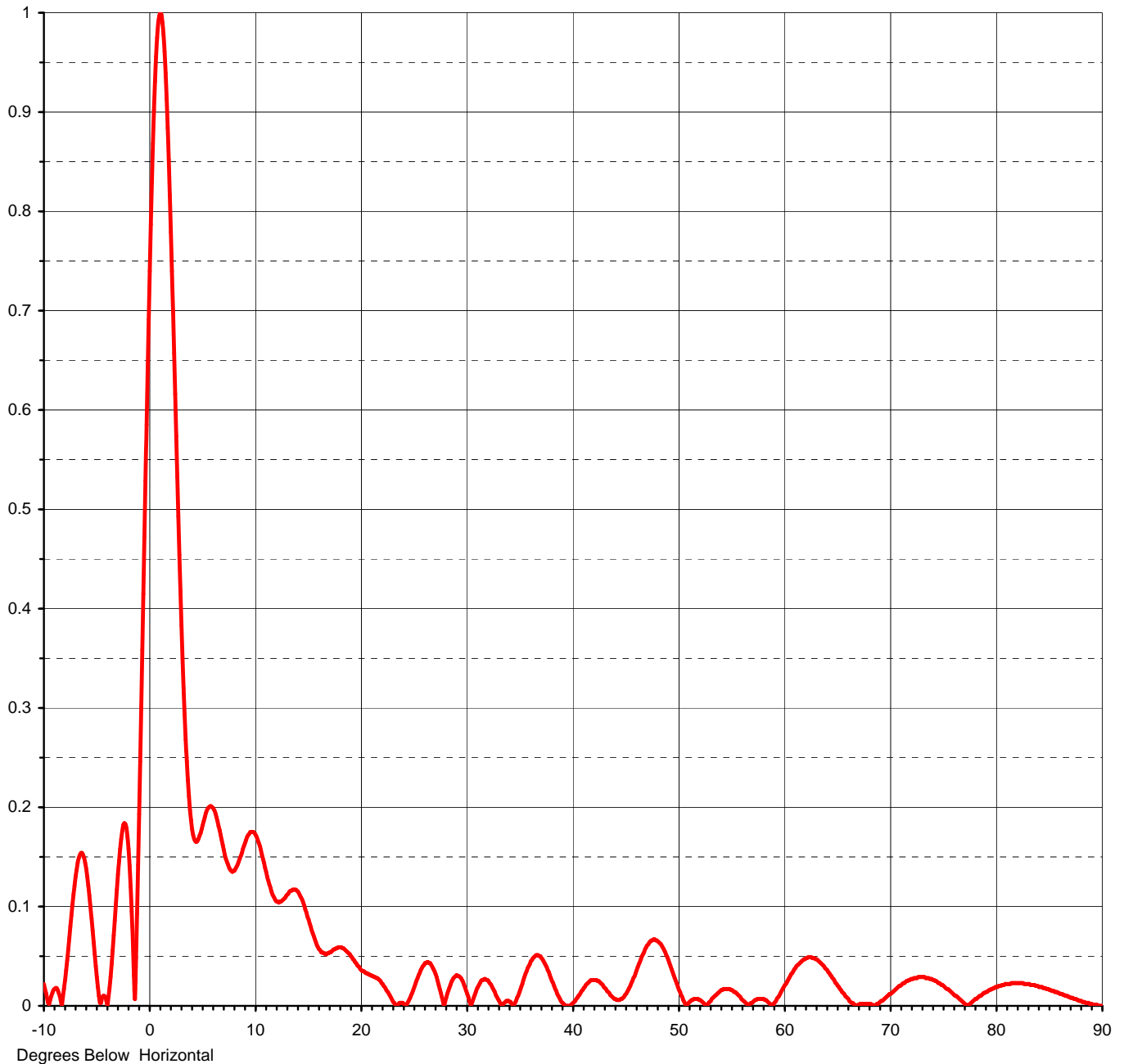
Degrees Below Horizontal



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ELEVATION PATTERN

RMS Gain at Main Lobe	23.00 (13.62 dB)	Beam Tilt	1.00 deg
RMS Gain at Horizontal	12.60 (11.00 dB)	Frequency	635.00 MHz
Calculated / Measured	Calculated	Drawing #	28G230100-90



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Proposal Number **C-02260**
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Call Letters **WVIA-DT** Channel **41**
Location **Scranton , PA**
Customer
Antenna Type **TFU-28GTH/VP-R O4**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **28G230100-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.022	2.4	0.616	10.6	0.157	30.5	0.002	51.0	0.003	71.5	0.025
-9.5	0.002	2.6	0.533	10.8	0.148	31.0	0.017	51.5	0.007	72.0	0.027
-9.0	0.017	2.8	0.454	11.0	0.139	31.5	0.026	52.0	0.006	72.5	0.028
-8.5	0.010	3.0	0.383	11.5	0.119	32.0	0.026	52.5	0.002	73.0	0.029
-8.0	0.026	3.2	0.320	12.0	0.106	32.5	0.018	53.0	0.004	73.5	0.028
-7.5	0.080	3.4	0.268	12.5	0.105	33.0	0.007	53.5	0.010	74.0	0.026
-7.0	0.130	3.6	0.227	13.0	0.111	33.5	0.002	54.0	0.015	74.5	0.023
-6.5	0.154	3.8	0.197	13.5	0.116	34.0	0.005	54.5	0.017	75.0	0.020
-6.0	0.138	4.0	0.178	14.0	0.116	34.5	0.001	55.0	0.016	75.5	0.016
-5.5	0.088	4.2	0.168	14.5	0.107	35.0	0.013	55.5	0.013	76.0	0.011
-5.0	0.029	4.4	0.165	15.0	0.090	35.5	0.029	56.0	0.007	76.5	0.007
-4.5	0.008	4.6	0.168	15.5	0.073	36.0	0.042	56.5	0.002	77.0	0.002
-4.0	0.001	4.8	0.174	16.0	0.059	36.5	0.050	57.0	0.003	77.5	0.002
-3.5	0.056	5.0	0.182	16.5	0.053	37.0	0.050	57.5	0.007	78.0	0.007
-3.0	0.132	5.2	0.190	17.0	0.053	37.5	0.041	58.0	0.007	78.5	0.010
-2.8	0.158	5.4	0.197	17.5	0.057	38.0	0.028	58.5	0.004	79.0	0.014
-2.6	0.176	5.6	0.200	18.0	0.059	38.5	0.015	59.0	0.001	79.5	0.017
-2.4	0.184	5.8	0.201	18.5	0.057	39.0	0.004	59.5	0.009	80.0	0.019
-2.2	0.179	6.0	0.199	19.0	0.052	39.5	0.000	60.0	0.019	80.5	0.021
-2.0	0.158	6.2	0.194	19.5	0.044	40.0	0.002	60.5	0.028	81.0	0.022
-1.8	0.120	6.4	0.186	20.0	0.037	40.5	0.008	61.0	0.037	81.5	0.023
-1.6	0.065	6.6	0.177	20.5	0.033	41.0	0.016	61.5	0.043	82.0	0.023
-1.4	0.007	6.8	0.167	21.0	0.031	41.5	0.023	62.0	0.047	82.5	0.023
-1.2	0.093	7.0	0.157	21.5	0.028	42.0	0.026	62.5	0.049	83.0	0.022
-1.0	0.193	7.2	0.148	22.0	0.023	42.5	0.025	63.0	0.047	83.5	0.021
-0.8	0.301	7.4	0.142	22.5	0.015	43.0	0.019	63.5	0.043	84.0	0.019
-0.6	0.415	7.6	0.137	23.0	0.006	43.5	0.013	64.0	0.037	84.5	0.018
-0.4	0.529	7.8	0.135	23.5	0.001	44.0	0.007	64.5	0.028	85.0	0.016
-0.2	0.639	8.0	0.136	24.0	0.003	44.5	0.006	65.0	0.020	85.5	0.014
0.0	0.740	8.2	0.140	24.5	0.004	45.0	0.011	65.5	0.013	86.0	0.012
0.2	0.829	8.4	0.145	25.0	0.016	45.5	0.020	66.0	0.007	86.5	0.010
0.4	0.902	8.6	0.151	25.5	0.031	46.0	0.033	66.5	0.002	87.0	0.008
0.6	0.956	8.8	0.158	26.0	0.041	46.5	0.047	67.0	0.001	87.5	0.007
0.8	0.989	9.0	0.164	26.5	0.043	47.0	0.059	67.5	0.002	88.0	0.005
1.0	1.000	9.2	0.170	27.0	0.035	47.5	0.066	68.0	0.002	88.5	0.003
1.2	0.990	9.4	0.173	27.5	0.017	48.0	0.066	68.5	0.000	89.0	0.002
1.4	0.961	9.6	0.175	28.0	0.004	48.5	0.060	69.0	0.004	89.5	0.001
1.6	0.913	9.8	0.175	28.5	0.021	49.0	0.049	69.5	0.008	90.0	0.000
1.8	0.852	10.0	0.174	29.0	0.030	49.5	0.034	70.0	0.012		
2.0	0.779	10.2	0.170	29.5	0.028	50.0	0.019	70.5	0.017		
2.2	0.699	10.4	0.164	30.0	0.015	50.5	0.006	71.0	0.021		

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Customer			
Antenna Type	TFU-28GTH/VP-R O4		

AZIMUTH PATTERN/VERTICAL POLARIZATION

Gain	1.40	(1.46 dB)
Calculated / Measured		Calculated

Frequency	635.00 MHz
Drawing #	TFU-04-VP

