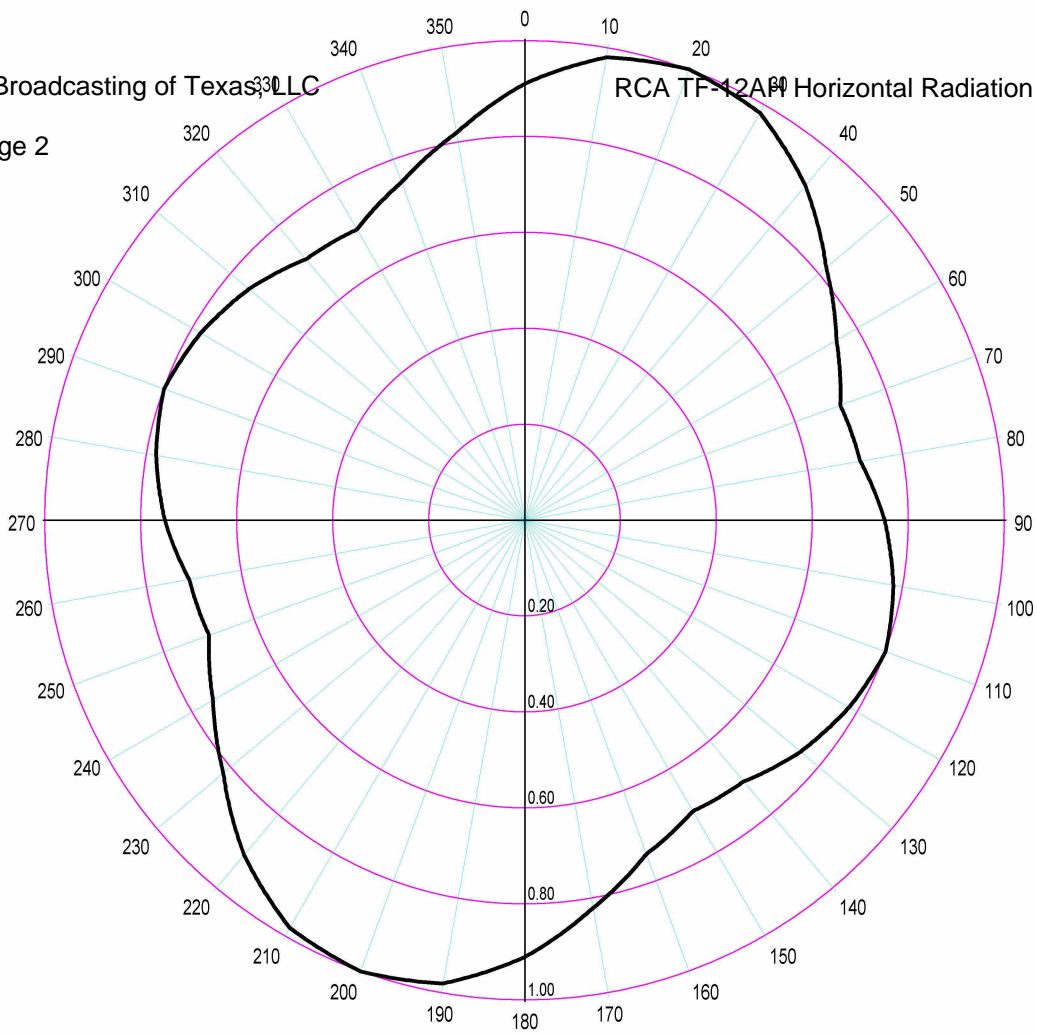


Description of Antenna System

The directional RCA TF-12AH super-turnstile antenna currently installed and in use for Analog transmissions at KGNS will be re-used with no structural changes to the existing antenna mounting height, or the supporting tower.

Page 2 of this exhibit details the antenna's horizontal radiation pattern as presently licensed and operated, adjusted for the proposed ERP values.

Note that due to the age of this antenna, the manufacturer's original design data is no longer available. The antenna's radiation pattern has been previously documented with the Commission, and that data is repeated in this application.



| Azim | Rel.FS ERP [kW] | | dBk |
|------|-----------------|--------|--------|
| 0.0 | 0.910 | 16.562 | 12.191 |
| 5.0 | 0.945 | 17.861 | 12.519 |
| 10.0 | 0.980 | 19.208 | 12.835 |
| 15.0 | 0.990 | 19.602 | 12.923 |
| 20.0 | 1.000 | 20.000 | 13.010 |
| 25.0 | 0.990 | 19.602 | 12.923 |
| 30.0 | 0.980 | 19.208 | 12.835 |
| 35.0 | 0.945 | 17.861 | 12.519 |
| 40.0 | 0.910 | 16.562 | 12.191 |
| 45.0 | 0.865 | 14.965 | 11.751 |
| 50.0 | 0.820 | 13.448 | 11.287 |
| 55.0 | 0.785 | 12.325 | 10.908 |
| 60.0 | 0.750 | 11.250 | 10.512 |
| 65.0 | 0.725 | 10.513 | 10.217 |
| 70.0 | 0.700 | 9.800 | 9.912 |
| 75.0 | 0.705 | 9.941 | 9.974 |
| 80.0 | 0.710 | 10.082 | 10.035 |
| 85.0 | 0.730 | 10.658 | 10.277 |

| Azim | Rel.FS ERP [kW] | | dBk |
|-------|-----------------|--------|--------|
| 90.0 | 0.750 | 11.250 | 10.512 |
| 95.0 | 0.765 | 11.705 | 10.684 |
| 100.0 | 0.780 | 12.168 | 10.852 |
| 105.0 | 0.790 | 12.482 | 10.963 |
| 110.0 | 0.800 | 12.800 | 11.072 |
| 115.0 | 0.790 | 12.482 | 10.963 |
| 120.0 | 0.780 | 12.168 | 10.852 |
| 125.0 | 0.765 | 11.705 | 10.684 |
| 130.0 | 0.750 | 11.250 | 10.512 |
| 135.0 | 0.730 | 10.658 | 10.277 |
| 140.0 | 0.710 | 10.082 | 10.035 |
| 145.0 | 0.705 | 9.941 | 9.974 |
| 150.0 | 0.700 | 9.800 | 9.912 |
| 155.0 | 0.720 | 10.368 | 10.157 |
| 160.0 | 0.740 | 10.952 | 10.395 |
| 165.0 | 0.780 | 12.168 | 10.852 |
| 170.0 | 0.820 | 13.448 | 11.287 |
| 175.0 | 0.865 | 14.965 | 11.751 |

| Azim | Rel.FS ERP [kW] | | dBk |
|-------|-----------------|--------|--------|
| 180.0 | 0.910 | 16.562 | 12.191 |
| 185.0 | 0.945 | 17.861 | 12.519 |
| 190.0 | 0.980 | 19.208 | 12.835 |
| 195.0 | 0.990 | 19.602 | 12.923 |
| 200.0 | 1.000 | 20.000 | 13.010 |
| 205.0 | 0.990 | 19.602 | 12.923 |
| 210.0 | 0.980 | 19.208 | 12.835 |
| 215.0 | 0.945 | 17.861 | 12.519 |
| 220.0 | 0.910 | 16.562 | 12.191 |
| 225.0 | 0.865 | 14.965 | 11.751 |
| 230.0 | 0.820 | 13.448 | 11.287 |
| 235.0 | 0.785 | 12.325 | 10.908 |
| 240.0 | 0.750 | 11.250 | 10.512 |
| 245.0 | 0.725 | 10.513 | 10.217 |
| 250.0 | 0.700 | 9.800 | 9.912 |
| 255.0 | 0.705 | 9.941 | 9.974 |
| 260.0 | 0.710 | 10.082 | 10.035 |
| 265.0 | 0.730 | 10.658 | 10.277 |

| Azim | Rel.FS ERP [kW] | | dBk |
|-------|-----------------|--------|--------|
| 270.0 | 0.750 | 11.250 | 10.512 |
| 275.0 | 0.765 | 11.705 | 10.684 |
| 280.0 | 0.780 | 12.168 | 10.852 |
| 285.0 | 0.790 | 12.482 | 10.963 |
| 290.0 | 0.800 | 12.800 | 11.072 |
| 295.0 | 0.790 | 12.482 | 10.963 |
| 300.0 | 0.780 | 12.168 | 10.852 |
| 305.0 | 0.765 | 11.705 | 10.684 |
| 310.0 | 0.750 | 11.250 | 10.512 |
| 315.0 | 0.730 | 10.658 | 10.277 |
| 320.0 | 0.710 | 10.082 | 10.035 |
| 325.0 | 0.705 | 9.941 | 9.974 |
| 330.0 | 0.700 | 9.800 | 9.912 |
| 335.0 | 0.725 | 10.513 | 10.217 |
| 340.0 | 0.750 | 11.250 | 10.512 |
| 345.0 | 0.785 | 12.325 | 10.908 |
| 350.0 | 0.820 | 13.448 | 11.287 |
| 355.0 | 0.865 | 14.965 | 11.751 |