

Exhibit 1

Transmitter Output Power Calculation

Date 2024-03-04

File No. TBD

Facility ID 131376 WFAQ Mukwonago WI 101.3 MHz

Channel 267 **ERP** 0.100 kW

Antenna Scala **Model** FMVMP Dipole **Bays:** 2 **Spacing:** Full Wave

Antenna Power Gain 1.1* 0 dB

Antenna Input Power 0.100 kW For 0.100 kW ERP

Transmission Line Losses

Manufacturer Andrew LDF50 Series **Type** ½ inch Foam Dielectric

Loss per 100 feet -0.665 dB At: 101.3 MHz

Transmission Line Length 80 ft

Transmission Line Loss -0.542 dB

Efficiency 88.5%

Additional System Losses

Connectors: N Type .02 dB x 8 = .16dB

Power Splitter: .53 dB

Interbay Connection Cable: KMR 400, 20 ft x 2 : .6dB

Connection Cable Transmitter to Wattmeter: KMR 400, 10 ft: .1dB

Bird 43 Wattmeter Insertion Loss: .1dB

Total System Losses -2.03 dB

System Efficiency 67.58%

Transmitter Output: 0.160 kW for 0.100 kW ERP @ 13 meters Height Above Ground (HAG)

* Antenna Power Gain notes- the pattern shall be produced by means of a Scala broadband dipole broadcast element mounted at a 45 degree slant orientation to achieve horizontal and vertical polarization, and is a composite of the current horizontal and vertical broadcast patterns as notified by Scala. The maximum antenna gain for a single element will be .0 dBd or the common horizontal or vertical maximum antenna gain of 1.0 dBd (power gain factor of 1.2) adjusted by 1.0 dBd (power gain split in half to .6) for dual broadcast in the horizontal and vertical planes (0 dBd = 1.0 dBd - 1.0 dBd). The maximum gain for multiple bay options would therefore also be adjusted by 1.1 dBd to account for operation in the horizontal and vertical planes.