

## **EXHIBIT 29.1**

### **COMPLIANCE WITH RADIOFREQUENCY RADIATION GUIDELINES**

The instant application for WUPK, Marquette, MI has been evaluated for human exposure to non-ionizing radiofrequency radiation at the transmitter site. The site will house multiple transmitters. The potential for human exposure to non-ionizing radiofrequency radiation at the proposed transmitter site has been evaluated with regards to §1.1307(b)(3) concerning the five percent (5%) contribution rule for multiple transmitter sites.

The WUPK facility will operate on 94.1 MHz with a maximum effective radiated power (ERP) of 4.4 kW circular polarization. The facility will operate with a two element ERI antenna mounted 70 meters above ground level (AGL). EPA Type 3 elements were assumed.

This site has been evaluated for compliance with the FCC guidelines concerning human exposure to radiofrequency radiation. The standards employed are detailed in OET Bulletin No. 65 (Edition 97-01).

Software packages were used to determine the individual contribution of the station. FM radiofrequency radiation levels were predicted using both the array pattern, the calculations of which are based on the number of bays in the antenna and wavelength spacing between the bays, and the element pattern. The element pattern is determined by using measured element data prepared by the EPA and published in "An Engineering Assessment of the Potential Impact of Federal Radiation Protection Guidance on the AM, FM and TV Services," by Paul C. Gailey and Richard Tell - April 1985, U.S. Environmental Protection Agency, Las Vegas, NV. The programs use formulas that were originally published in OST Bulletin No. 65, 1985.

The result of the evaluations for the station is shown in both graphical and tabular forms at the end of this report. The tabulation lists the portion of the tabular output for the station showing the region of maximum radiofrequency radiation. The locations of maximum predicted power density have been highlighted using ***bold italic*** type. The FM graphical display has been scaled to show the best definition of the data curve.

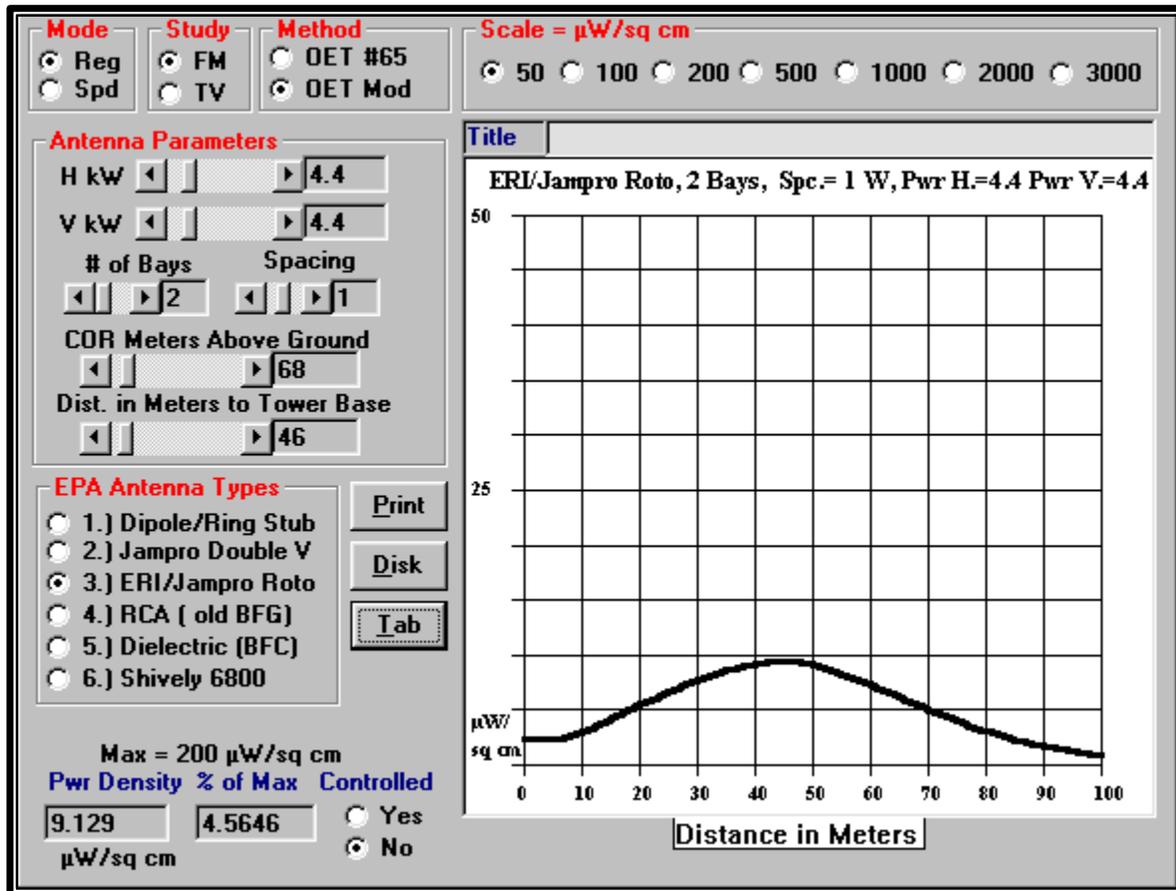
To evaluate the total exposure to non-ionizing radio-frequency radiation with regards to the five percent contribution exclusion rule, it is necessary to express the individual contribution as a decimal fraction of the maximum permissible limit. If the resulting contribution is less than or equal to 0.05 (5.0%), the exposure is concluded to be within the guidelines of OET Bulletin No. 65 (Edition 97-01) and §1.1307(b)(3). The maximum predicted exposure of  $9.13 \mu\text{W}/\text{cm}^2$  will occur at 45 to 46 meters from the base of the tower. This level represents 4.6% of the  $200 \mu\text{W}/\text{cm}^2$  limit for the more restrictive uncontrolled environment where members of the general public may be exposed to radiofrequency radiation. Protection of the more restrictive uncontrolled limit implies protection of the controlled limit.

Since the maximum contribution of 4.6% for the uncontrolled environments is less than the 5.0% as set for by §1.1307(b)(3), the facility is in compliance with FCC guidelines. §1.1307(b)(3) states that facilities contributing less than five percent of the exposure limit at locations with multiple transmitters are categorically excluded from responsibility for taking any corrective action in the areas where its contribution is less than five percent. Since this instant application meets the five percent exclusion test at all ground level areas, the impact of the proposed facility may be considered independently from other facilities operating at or nearby this site. It is believed the impact of the proposed operation should not be considered to be a factor at ground level as defined under §1.1307(b)(3).

In addition to the protection afforded by the proposed antenna height above ground, the facility is properly marked with signs, and entry to the facility is restricted by means of fencing with locked doors and/or gates. Any other means that may be required to protect employees and the general public will be employed.

In the event work is required in proximity to the antenna(s) such that the person or persons working in the area will be potentially exposed to fields in excess of the current guidelines, an agreement signed by all broadcast parties at the site will be in effect for the offending transmitter(s) to reduce power, or cease operation during the critical period.

**PLOT OF TOTAL POWER DENSITY  
WUPK – Marquette, MI  
Using a 2-Bay EPA Type 3 Antenna Mounted 70 meters AGL**



The “Dist to COR” value shown on the above graph represents the height of the antenna center of radiation above an observer on the ground who is assumed to be 2 meters in height.

**PLOT OF TOTAL POWER DENSITY**  
**WUPK – Marquette, MI**  
**Using a 2-Bay EPA Type 3 Antenna Mounted 70 meters AGL**

Environment = Uncontrolled, Maximum = 200 uW/sq cm

HORZ. DISTANCE FROM FM RADIATOR Vs POWER DENSITY (Microwatt/Square cm)

ERI/Jampro Roto, 2 Spc.= 1 W, Pwr H.=4.4 Pwr V.=4.4 COR= 68M

Dist(Meters)	PD (H)	PD (V)	Total(uW/cm2)	Percent Max.
25	3.27	3.01	6.29	3.1
26	3.37	3.15	6.52	3.3
27	3.47	3.28	6.75	3.4
28	3.55	3.41	6.96	3.5
29	3.64	3.53	7.16	3.6
30	3.71	3.64	7.36	3.7
31	3.78	3.75	7.53	3.8
32	3.86	3.85	7.71	3.9
33	3.99	3.92	7.90	4.0
34	4.11	3.98	8.08	4.0
35	4.21	4.03	8.24	4.1
36	4.31	4.08	8.39	4.2
37	4.40	4.11	8.52	4.3
38	4.48	4.14	8.63	4.3
39	4.55	4.17	8.72	4.4
40	4.62	4.20	8.83	4.4
41	4.69	4.24	8.93	4.5
42	4.74	4.26	9.01	4.5
43	4.79	4.28	9.07	4.5
44	4.82	4.29	9.11	4.6
<b>45</b>	<b>4.84</b>	<b>4.29</b>	<b>9.13</b>	<b>4.6</b>
<b>46</b>	<b>4.85</b>	<b>4.28</b>	<b>9.13</b>	<b>4.6</b>
47	4.85	4.26	9.11	4.6
48	4.83	4.22	9.05	4.5
49	4.78	4.16	8.94	4.5
50	4.71	4.09	8.81	4.4
51	4.65	4.02	8.66	4.3
52	4.57	3.94	8.51	4.3
53	4.49	3.86	8.35	4.2
54	4.40	3.77	8.18	4.1
55	4.31	3.68	7.99	4.0
56	4.21	3.59	7.81	3.9
57	4.11	3.50	7.61	3.8
58	4.02	3.39	7.40	3.7
59	3.92	3.27	7.19	3.6
60	3.82	3.16	6.98	3.5
61	3.71	3.05	6.76	3.4
62	3.60	2.93	6.53	3.3
63	3.49	2.82	6.31	3.2
64	3.38	2.71	6.09	3.0
65	3.26	2.60	5.86	2.9
66	3.15	2.49	5.64	2.8
67	3.03	2.38	5.41	2.7
68	2.92	2.27	5.19	2.6
69	2.78	2.19	4.96	2.5
70	2.64	2.10	4.74	2.4