

## Exhibit #16

### R.F. EMISSIONS COMPLIANCE STATEMENT

Concerning the Application of  
The University of Wyoming  
To Construct a New FM Translator  
To Serve Worland, Wyoming  
Long Form – BNPFT20030314ASM

August 2003

Based on the formulas expressed in the OET Bulletin, No. 65, August 1997, "Evaluating Compliance with F.C.C. Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", published by the Federal Communication Commission's Office of Science and Engineering, the proposed facility is predicted to produce a worst-case maximum R.F. non-ionization radiation level at a position six feet above the tower base (head level - based on the C.O.R. of 30 meters above ground minus 2 meters) of 4.261 microwatts per square centimeter. This figure is without regard for the antenna's vertical elevation field value toward the nadir, which will cause a reduction in the predicted "worst case" calculations. 4.261 microwatts per square centimeter is 0.426 percent of the maximum standard value for the frequency in use for a controlled area and 2.13 percent of the maximum for an uncontrolled area.

There are two other sources of RF emissions on the tower, a mobile antenna (Freq. 811.8375 MHz, 100w ERP, 35 meters AG) and mobile relay antenna (856.8375 MHz, 150w ERP, 30 meters AG)<sup>1</sup>. According to OET #65, Section 2: Prediction Methods, RF power density (S) is calculated by the equation:

$$S = \text{EIRP}/4\pi R^2$$

Where EIRP = equivalent isotropically radiated power and R = antenna height above head (AG – 2 meters).

The maximum power density levels for the frequencies in question are 541 and 571  $\mu\text{W}/\text{cm}^2$  respectively, based on the equation for general population of  $f/1500$ , where  $f$  = frequency in MHz.

The use of this tower has been proposed in a total of eleven other translator applications for Worland. Only two others, BNPFT20030317JVC and BNPFT20030317JKI have been placed on the "singleton list" and are considered

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<sup>1</sup> Applications for these facilities are pending.

here. The other applications will be decided in the upcoming Auction 83.

The following table outlines all transmitting antennas and their contributions to the RF hazard level at head-height.

CALL	Power (kW)	Head Height above ground (m)	Maximum Pwr Density $\mu\text{W}/\text{cm}^2$	Pwr Density $\mu\text{W}/\text{cm}^2$	% of maximum (Uncontrolled)
AP227	0.05	28	200	4.261	2.13
Mobile	0.10	33	541	1.198	0.22
Mobile Relay	0.15	30	571	2.497	0.44
BNPFT20030317JKI Radio Assist	0.05	23	200	6.316	3.16
BNPFT20030317JVC Radio Assist	0.05	23	200	6.316	3.16
TOTAL				20.588	9.11

Since “worst case” calculations were used and since it is well known that the actual RF power density level is considerably reduced at vertical angles toward the nadir the applicant is confident that there will be no exposure at the transmitter site greater than the maximum.

The applicant will protect workers on the tower by either reducing ERP or terminating transmission. A sign will be posted warning workers of the antenna, with a phone number to contact someone to reduce or terminate power.

Consequently, it appears that the proposed FM station will be in full compliance with the Commission's human exposure to radiofrequency electromagnetic field rules and regulations.