

# WHEELER BROADCAST CONSULTING

## *Engineering Statement*

Form 301-FM  
Sedalia Investment Group, LLC  
KPOW-FM, La Monte, MO

This consultant has been retained by Sedalia Investment Group, LLC, Licensee of KPOW-FM in La Monte, Missouri, for the purpose of preparing Form 301-FM in application for a 1 step, Class C1, upgrade to its presently authorized facilities.

KPOW is licensed to operate on Channel 246 C3. As of this filing, KPOW-FM will have been ordered to Channel 249 C2 via a Rule Making, RM-10017, Docket 00-129. A full search of the Commission's June 21, 2001 FM database reveals that Channel 249 C1 has become available at La Monte, MO as a result of the series of channel substitutions set forth in RM-10017. A copy of the database search is included in this report as Exhibit 1. As shown in Exhibit 1, KPOW-FM will be fully spaced to all co-channel and adjacent channel radio stations once the channel substitutions at Warsaw, MO, Malta Bend, MO, and Nevada, MO are completed<sup>1</sup>. Inasmuch as the proposed site is fully compliant with the minimum spacing requirements of 47 CFR 73.207 and the principal community coverage requirements of 47 CFR 73.315, the proposed site is suitable as the allocation reference location.

The proposed transmitter site is not located in any environmentally sensitive area nor in any area of historical significance. The construction will be limited to the erection of the proposed tower structure and a small transmitter shelter at its base. Sufficient three phase power is presently in place along route YY which is adjacent to the site so no significant utility construction will be required. An analysis of non ionizing RF Radiation has been prepared and, even when the worst case formulas prescribed by OST Bulletin Number 65 are employed the power density at the tower base was found to be well below current ANSI maximums. A copy of that analysis is included in this report as Exhibit 2.

3718 W. 52nd TERRACE  
SHAWNEE MISSION, KS  
66205 913.831.1622

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<sup>1</sup> Channel 246 A is being substituted for Channel 249 A at Warsaw, MO, Channel 248 A is being substituted for Channel 249 A at Nevada, MO, and Channel 280 C3 is being substituted for Channel 248 C3 at Malta Bend, MO. See RM10017.

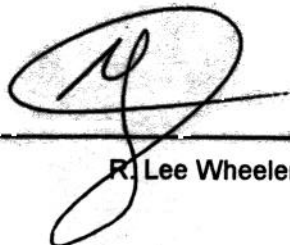
*Engineering Statement*  
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Sedalia Investment Group, LLC further pledges to reduce power or cease operation, as necessary, so as to protect any maintenance workers from occupational overexposure to excessive levels of non ionizing RF Radiation. In light of the above facts, the proposed operation is excluded from environmental processing under 47 CFR 1.1306.

The Central Regional Offices of the FAA have been notified of the proposed tower construction via Form 7460-1 and, upon receipt of the No Hazard determination, Form 854R will be filed with the Commission for tower registration.

All information contained in this report is true and accurate to the best of my belief. Having had numerous matters before the Commission, my qualifications are a matter of record.

6/21/01  
Date

  
\_\_\_\_\_  
R. Lee Wheeler

Wheeler Broadcast Consulting  
3718 W. 52nd Terrace Shawnee Mission KS 66205  
Matthewson Broadcasting Company  
La Monte MO

Exhibit 1

REFERENCE  
39 03 10 N  
93 16 01 W

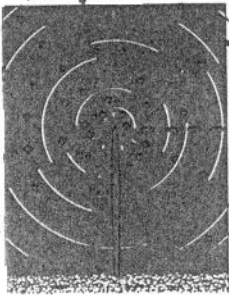
CLASS = C1  
Current Spacings

DISPLAY DATES  
DATA 06-21-01  
SEARCH 06-21-01

----- Channel 249 - 97.7 MHz -----

Call	Channel	Location	Dist	Azi	FCC	Margin
N. Lat.	W. Lng.	Power	HAAT			
RADD	ADD 249C2	La Monte	MO	29.10	160.1	224.0 -194.90
38 48 23	93 09 08	50.000 kW	150 M			
		RM10017				
KAYQ	LIC 249A	Warsaw	MO	85.12	182.5	200.0 -114.88
38 17 12	93 18 34	3.900 kW	73 M			
		Valkyrie Broadcasting, Inc	BMLH19900518KB			
KRLI	LIC 248C3	Malta Bend	MO	36.76	341.4	144.0 -107.24
39 21 59	93 24 12	3.400 kW	268 M			
		Kanza, Inc.	BLH19961106KC			
KNMOFM	LIC 249A	Nevada	MO	164.28	216.6	200.0 -35.72
37 51 37	94 22 54	3.000 kW	90 M			
		Harbit Communications, Inc	BLH19840919BY			
KPOWFM	LIC 246C3	La Monte	MO	41.80	178.6	76.0 -34.20
38 40 35	93 15 18	25.000 kW	100 M			
		Sedalia Investment Group L	BLH19981117KC			
KUDL	LIC 251C	Kansas City	KS	105.45	271.6	105.0 0.45
39 04 24	94 29 06	100.000 kW	303 M			
		Entercom Kansas City Licen	BMLH20000524AAY			
KFBDFM	CP 250C3	Waynesville	MO	146.25	146.9	144.0 2.25
37 56 50	92 21 18	10.000 kW	157 M			
		Fidelity Broadcasting, Inc	BPH19990521IN			
ALLO	VAC 250C3	Waynesville	MO	146.25	146.9	144.0 2.25
37 56 50	92 21 18	25.000 kW	100 M			
		RM				
RADD	ADD 246A	Warsaw	MO	79.28	187.5	75.0 4.28
38 20 41	93 23 10	6.000 kW	100 M			
		RM10017				
KFMZ	LIC 252C2	Columbia	MO	89.13	108.8	79.0 10.13
38 47 28	92 17 43	23.500 kW	217 M			
		Contemporary Broadcasting,	BLH19910124KA			
RADD	ADD 247C2	Moberly	MO	91.16	59.8	79.0 12.16
39 27 41	92 21 03	50.000 kW	150 M			
		RM9909				
KICKFM	LIC 250C2	Palmyra	MO	171.15	62.2	158.0 13.15
39 45 26	91 29 58	43.000 kW	162 M			
		Bick Broadcasting Company	BLH20001016ABT			
KOTMFM	LIC 249C3	Ottumwa	IA	228.94	16.7	211.0 17.94
41 01 28	92 28 56	19.000 kW	112 M			
		Fmc Broadcasting, Inc.	BLH19981009KE			
RADD	ADD 249C2	Potasi	MO	245.55	118.5	224.0 21.55
37 58 30	90 48 30	50.000 kW	150 M			
		RMbg-24				
KCSX	LIC 247C3	Moberly	MO	98.24	64.1	76.0 22.24
39 26 02	92 14 24	25.000 kW	100 M			

Call N. Lat.	Channel W. Lng.	Location	Power	Dist HAAT	Azi	FCC	Margin
RADD 39 24 37	ADD 247C3 92 10 58	Madison	MO 25.000 kW RM10017	101.68 100 M	66.6	76.0	25.68
RADD 37 52 06	ADD 248A 94 20 01	Nevada	MO 6.000 kW RM10017	161.10 100 M	215.5	133.0	28.10
RADD 38 10 08	ADD 249A 95 39 07	Burlington	KS 6.000 kW RM10017	229.74 100 M	245.4	200.0	29.74
RADD 39 04 20	ADD 247C1 94 35 45	Summit	MO 100.000 kW RM10017	115.04 299 M	271.5	82.0	33.04
KFBDFM 37 49 42	LIC 250A 92 10 27	Waynesville CN	MO 3.000 kW	166.06 79 M	144.7	133.0	33.06
Fidelity Broadcasting, Inc BMLH19950221KB							
RDEL 37 58 30	DEL 249C3 90 48 30	Potasi D	MO 25.000 kW RMbg-24	245.55 100 M	118.5	211.0	34.55
KHCR 37 57 31	LIC 249C3 90 45 47	Potosi CN	MO 6.000 kW	249.91 207 M	118.4	211.0	38.91
Four Him Enterprises, L.l. BLH19970428KA							
KIIC.C CP 40 48 52	250C2 93 50 15	Lamoni CN	IA 50.000 kW	201.59 150 M	346.2	158.0	43.59
Lifestyle Communications C BMPH19981022IA							
KIIC 40 48 52	LIC 250C2 93 50 15	Lamoni C	IA 50.000 kW	201.59 150 M	346.2	158.0	43.59
Lifestyle Communications C BLH19990804KI							
KDAA 37 57 50	LIC 248A 91 45 54	Rolla CN	MO 6.000 kW	178.25 89 M	132.3	133.0	45.25
Kdaa-kmoz, Llc BLH19950417KA							
WBBAFM APP 39 36 24	248B1 90 50 12	Pittsfield CX	IL 10.000 kW	218.39 228 M	72.8	161.0	57.39
Brown Radio Group Inc BPH20010208AAU							
KQMO 36 44 55	LIC 249A 93 39 32	Shell Knob C	MO 2.100 kW	258.06 170 M	187.8	200.0	58.06
Magic Circle Radio, Inc. BLH19990913AAC							
KQMO.C CP 36 44 54	249A 93 39 32	Shell Knob CN	MO 2.100 kW	258.09 170 M	187.8	200.0	58.09
Magic Circle Radio, Inc. BMPH19981002ID							
WBBAFM LIC 39 34 53	248B1 90 47 52	Pittsfield CN	IL 10.000 kW	220.88 93 M	73.8	161.0	59.88
Brown Radio Group Inc BLH19890821KE							



# WHEELER BROADCAST CONSULTING

Exhibit 2

## *Analysis of Non Ionizing RF Radiation*

In accordance with the order of Docket 79-144, as adopted January 1, 1986, the following analysis of human exposure to non ionizing RF radiation has been performed. All calculations were made using the worst case formulas prescribed by OST Bulletin Number 65 at a height 2 meters above the tower base.

### I. Facilities

KPOW-FM  
97.7 MHz  
100 kW H & V  
288.3 m AGL

### II. Calculations

KPOW-FM

$$s = \frac{(0.64) (EIRP)}{\pi R^2}$$

$$s = \frac{(0.64)(1.64)(100,000 + 100,000)W(1000) \text{ mW/W}}{\pi ((286.3)(100\text{cm/m}))^2}$$

$$s = 0.0815 \text{ mW/cm}^2$$

$$\text{ANSI Max} = 0.2 \text{ mW/cm}^2$$

$$\% \text{ of ANSI Max} = 40.76\%$$

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### **III Conclusion**

As the above calculations indicate, the worst case power density at the tower base falls well below ANSI maximums. This effectively precludes inadvertent passive overexposure by members of the public. Further precautions are to be put in place as well. The site is to be posted with signs warning of hazards due to high voltage and RF Radiation so as to discourage trespassers from putting themselves at risk. Additionally plans will be developed, based on the downward radiation characteristics of the FM broadcast antenna, so as to establish minimum safe distances at various power levels so as to protect agents and employees of the licensee from occupational overexposure. Tower maintenance will be performed only after sufficient power reductions are made so as to protect workers or work will be scheduled at night when a complete cessation of the operation can be accomplished.