

# 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.

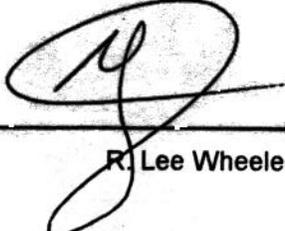
*Engineering Statement*  
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Sedalia Investment Group, LLC further pledges to reduce power or cease operation, as necessary, so as to protect any maintenance workers from occupational overexposure to excessive levels of non ionizing RF Radiation. In light 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

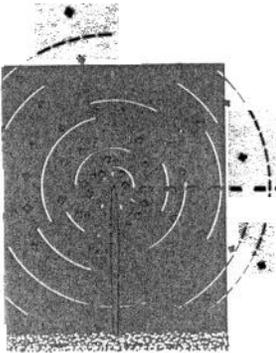
CLASS = C1  
 Current Spacings

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	RM10017	150 M			
KAYQ	LIC 249A	Warsaw	MO	85.12	182.5	200.0	-114.88
38 17 12	93 18 34	3.900 kW	BMLH19900518KB	73 M			
	Valkyrie Broadcasting, Inc						
KRLI	LIC 248C3	Malta Bend	MO	36.76	341.4	144.0	-107.24
39 21 59	93 24 12	3.400 kW	BLH19961106KC	268 M			
	Kanza, Inc.						
KNMOFM	LIC 249A	Nevada	MO	164.28	216.6	200.0	-35.72
37 51 37	94 22 54	3.000 kW	BLH19840919BY	90 M			
	Harbit Communications, Inc						
KPOWFM	LIC 246C3	La Monte	MO	41.80	178.6	76.0	-34.20
38 40 35	93 15 18	25.000 kW	BLH19981117KC	100 M			
	Sedalia Investment Group L						
KUDL	LIC 251C	Kansas City	KS	105.45	271.6	105.0	0.45
39 04 24	94 29 06	100.000 kW	BMLH20000524AAY	303 M			
	Entercom Kansas City Licen						
KFBDFM	CP 250C3	Waynesville	MO	146.25	146.9	144.0	2.25
37 56 50	92 21 18	10.000 kW	BPH19990521IN	157 M			
	Fidelity Broadcasting, Inc						
ALLO	VAC 250C3	Waynesville	MO	146.25	146.9	144.0	2.25
37 56 50	92 21 18	25.000 kW	RM	100 M			
RADD	ADD 246A	Warsaw	MO	79.28	187.5	75.0	4.28
38 20 41	93 23 10	6.000 kW	RM10017	100 M			
KFMZ	LIC 252C2	Columbia	MO	89.13	108.8	79.0	10.13
38 47 28	92 17 43	23.500 kW	BLH19910124KA	217 M			
	Contemporary Broadcasting,						
RADD	ADD 247C2	Moberly	MO	91.16	59.8	79.0	12.16
39 27 41	92 21 03	50.000 kW	RM9909	150 M			
KICKFM	LIC 250C2	Palmyra	MO	171.15	62.2	158.0	13.15
39 45 26	91 29 58	43.000 kW	BLH20001016ABT	162 M			
	Bick Broadcasting Company						
KOTMFM	LIC 249C3	Ottumwa	IA	228.94	16.7	211.0	17.94
41 01 28	92 28 56	19.000 kW	BLH19981009KE	112 M			
	Fmc Broadcasting, Inc.						
RADD	ADD 249C2	Potasi	MO	245.55	118.5	224.0	21.55
37 58 30	90 48 30	50.000 kW	RMbg-24	150 M			
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	Channel	Location	Dist	Azi	FCC	Margin	
N. Lat.	W. Lng.	Power	HAAT				
RADD	ADD 247C3	Madison	MO	101.68	66.6	76.0	25.68
39 24 37	92 10 58	25.000 kW	100 M				
		RM10017					
RADD	ADD 248A	Nevada	MO	161.10	215.5	133.0	28.10
37 52 06	94 20 01	6.000 kW	100 M				
		RM10017					
RADD	ADD 249A	Burlington	KS	229.74	245.4	200.0	29.74
38 10 08	95 39 07	6.000 kW	100 M				
		RM10017					
RADD	ADD 247C1	Summit	MO	115.04	271.5	82.0	33.04
39 04 20	94 35 45	100.000 kW	299 M				
		RM10017					
KFBDFM	LIC 250A	Waynesville	MO	166.06	144.7	133.0	33.06
37 49 42	92 10 27	3.000 kW	79 M				
		CN					
		Fidelity Broadcasting, Inc					
RDEL	DEL 249C3	Potasi	MO	245.55	118.5	211.0	34.55
37 58 30	90 48 30	25.000 kW	100 M				
		D					
		RMbg-24					
KHCR	LIC 249C3	Potosi	MO	249.91	118.4	211.0	38.91
37 57 31	90 45 47	6.000 kW	207 M				
		CN					
		Four Him Enterprises, L.l.					
		BLH19970428KA					
KIIC.C	CP 250C2	Lamoni	IA	201.59	346.2	158.0	43.59
40 48 52	93 50 15	50.000 kW	150 M				
		CN					
		Lifestyle Communications C					
		BMPH19981022IA					
KIIC	LIC 250C2	Lamoni	IA	201.59	346.2	158.0	43.59
40 48 52	93 50 15	50.000 kW	150 M				
		C					
		Lifestyle Communications C					
		BLH19990804KI					
KDAA	LIC 248A	Rolla	MO	178.25	132.3	133.0	45.25
37 57 50	91 45 54	6.000 kW	89 M				
		CN					
		Kdaa-kmoz, Llc					
		BLH19950417KA					
WBBAFM	APP 248B1	Pittsfield	IL	218.39	72.8	161.0	57.39
39 36 24	90 50 12	10.000 kW	228 M				
		CX					
		Brown Radio Group Inc					
		BPH20010208AAU					
KQMO	LIC 249A	Shell Knob	MO	258.06	187.8	200.0	58.06
36 44 55	93 39 32	2.100 kW	170 M				
		C					
		Magic Circle Radio, Inc.					
		BLH19990913AAC					
KQMO.C	CP 249A	Shell Knob	MO	258.09	187.8	200.0	58.09
36 44 54	93 39 32	2.100 kW	170 M				
		CN					
		Magic Circle Radio, Inc.					
		BMPH19981002ID					
WBBAFM	LIC 248B1	Pittsfield	IL	220.88	73.8	161.0	59.88
39 34 53	90 47 52	10.000 kW	93 M				
		CN					
		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

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

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

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

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

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

### **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.