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ENGINEERING EXHIBIT EE-1:

APPLICATION FOR STATION LICENSE
LIVING FAITH MINISTRIES, INC.

WLFG-DT
DIGITAL TELEVISION CHANNEL 49
GRUNDY, VA

OCTOBER 2007

FCC FACILITY NUMBER
37808

ENGINEERING EXHIBIT
IN SUPPORT OF
APPLICATION FOR STATION LICENSE
DIGITAL TELEVISION STATION WLFG-DT
GRUNDY, VIRGINIA

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ENGINEERING STATEMENT

The technical exhibit, of which this narrative is part, was prepared on behalf of Living Faith Ministries, Inc., in support of an application for station license of Digital Television Station WLFG-DT, Grundy, Virginia. The FCC facility identification number is 37808.

The station has made a minor permissive change in the antenna under section 73.1690(c) of the Commission's rules. The authorized construction permit antenna is specified as an Andrew "AND ATW28HS5-ETO-49S," an omnidirectional 28-bay antenna employing 1.25 degrees of electrical beam tilt. The station has installed a Shively antenna model "SHI 2050-32BT(1.25)," an omnidirectional 32-bay antenna

employing 1.25 degrees of electrical beam tilt. As both antennas are omnidirectional (nondirectional) and no changes in the antenna center of radiation heights has occurred, or power output, the change is a permissive change under 47 C.F.R. §73.1690(c)(1).[1]

The construction permit antenna, and the "as-built" antenna employ the same amount of electrical beam tilt as authorized in the construction permit (1.25 degrees electrical beam tilt.)

TRANSMITTER POWER OUTPUT CALCULATIONS:

WLFG-DT is authorized to operate with a maximum effective radiated power of 1000 kilowatts (30.0 dBk) utilizing an omnidirectional antenna.

In order to achieve the authorized power the following R.F. system gains and losses were calculated for the equipment as installed by the applicant.

TPO - (L1+L2) X G = ERP

		POWER	dB OR dBk
Max ERP	ERP	1000 kW	30.000 dBk
Antenna Gain	G	23.3 Gain	13.674 db
Antenna Input	Ain	42.918 kW	16.326 dBk
Transmission Line Loss	L1	2.749 kW <loss>	0.27 db <loss>
Other System Losses	L2	4.406 kW <loss>	0.40 db <loss>
Transmitter Power Output	TPO	50.073 kW	16.996 dBk

[1] 47 C.F.R.

73.1690 (c): "The following FM, TV and Class A TV station modifications may be made without prior authorization from the Commission. "

. . . (c)(1) "Replacement of an omnidirectional antenna with one of the same or different number of antenna bays, provided that the height of the antenna radiation center is not more than 2 meters above or 4 meters below the authorized values. Any concurrent change in ERP must comply with §73.1675(c)(1), 73.1690(4), (c)(5), or (c)(7). Program test operations at the full authorized ERP may commence immediately upon installation pursuant to §73.1620(a)(1). "

FCC Form 302-DTV Section III (Engineering)

TECH BOX QUESTIONS AND ANSWERS

1.	**Channel**		49	
2.	**Operating Constants**			
	Transmitter power output:		50.073 kW	16.996 dBk
	Transmission line power loss			0.670 db
	Antenna input power			16.326 dBk
	Maximum antenna power gain			13.674 db
	Effective radiated power (average power)		1000 kW	30.00 dBk
3.	**Antenna Data**			
	Manufacturer:	Shively	SHI	
	Model:		2050-32BT(1.25)	

ENVIRONMENTAL CONSIDERATIONS

The facility was evaluated in terms of potential radiofrequency radiation exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields."

Power density contribution from the proposed operation was computed using the appropriate equations of the OST Bulletin. The maximum radiated power is 1000 kilowatts on digital Television Channel 49. Using a "worst-case" relative field pattern of 0.2 for values all values 10 degrees and greater below the horizon, the power density was computed at a level of 2 meters above ground to be 0.2226 mW/cm^2 or 10.23 % of the recommended limit of 2.277 mW/cm^2 for a controlled area at the base of the tower and 51.1% of the recommended limit of 0.4553 mW/cm^2 for an uncontrolled area.

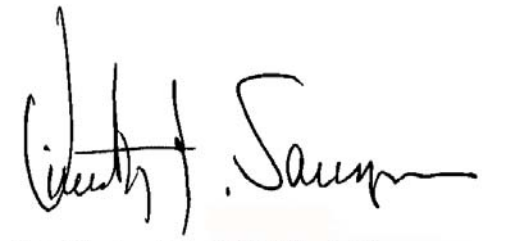
The minimum distance from the antenna was computed to be 17.7 meters for a controlled environment. As the minimum distance is more than 31 meters above ground level, no exposure in excess of the guidelines to workers is predicted to occur from this proposal at ground level.

The permittee/licensee/applicant will coordinate with other users of the site and will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of the FCC guidelines.

Suitable warning signs and a fence or other devices will be placed at the base of the tower to prevent unauthorized access. If work is required on the tower, the power to the antenna will be terminated or reduced as required. The applicant will fully comply with the provisions contained within the OET bulletin.

Inquiries concerning the technical portion of this application should be directed to the office of the undersigned.

16 October 2007



Timothy Z. Sawyer

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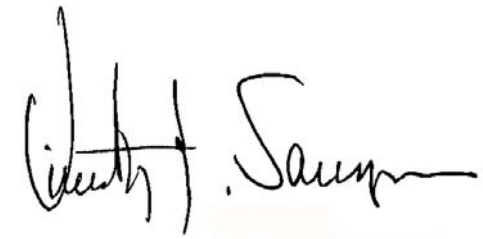
DECLARATION

I, Timothy Z. Sawyer, declare and that I have provided engineering services in the area of telecommunications since 1969. My qualifications are a matter of record with the Federal Communications Commission. I am a senior engineer with the firm of Mullaney Engineering, Inc., consulting radio telecommunications engineers with offices in Gaithersburg, Maryland.

The firm of Mullaney Engineering, Inc., has been retained by LIVING FAITH MINISTRIES, INC., to prepare the instant engineering exhibit in support of ***an Application for Station License - Digital Television Broadcast Station - WLFG-DT, Grundy, Virginia.*** (FCC Facility ID Number: 37808.)

All facts contained herein are true of my own knowledge except those stated to be on information and belief, and as to those facts, I believe them to be true. I declare under the penalty of perjury that the foregoing is true and correct.



Timothy Z. Sawyer
Executed on the 16th day of October 2007