TECHNICAL EXHIBIT

APPLICATION FOR CONSTRUCTION PERMIT
FOR NON-RESERVED CHANNEL
TRANSLATOR STATION
K252EH

PARK CITY, UTAH
CH 255D 99 WATTS -139 M

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INTRODUCTION

This technical exhibit has been prepared on behalf of Phasor Physics, Inc., in support of an application for a minor change amendment for an existing, commercial translator station.

This proposal would not be subject to environmental processing in accordance with Section 1.1306. It is believed that this proposal conforms to all applicable rules and regulations of the FCC.

Proposed Station Data

Output Frequency: 98.9 MHz.
Input Frequency: 88.1 MHz.
Channel: 255
ERP: 99 watts
Class: D

Proposed Antenna Location

The geographic coordinates (NAD 27) of the proposed site are as follows:

North Latitude: 40-41-00 N
West Longitude: 111-31-23 W

Transmitting Antenna

ANTENNA: Scala CL-FM directional antenna.

Interference

The proposed station is co-located in a remote area.

Overlap with the pertinent contours of the proposed station and any first, second, third adjacent and IF channel stations, is shown in Table 1.

The pertinent interfering contours of the proposed station and KBEE, Salt Lake City, UT are shown in Figure 2; the 60 dBu contour of KBEE is shown both as the F(50,50) and a Longley-Rice derived matrix based contour. Figure 3 shows the path profile between KBEE and the proposed station. Figure 8 shows the terrain of the pertinent area. These figures show that there is a significant variance between the predicted 60 dBu F(50,50) contour and the actual 60 dBu contour due to extreme terrain. 47 CFR § 74.1204 (d) states that *"…In addition, an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable."* Due to extreme intervening terrain blocking the signal of KBEE, no actual interference will occur.

The pertinent interfering contours of the proposed station and KJMY-2, Park City, UT, are shown in Figure 4. Although contour overlap occurs, the area of overlap is entirely over unpopulated area. As demonstrated on the quadrangle maps in Figure 5, there are no populated structures or highways within the contours. The contours encompass a road, but it is a dirt road for access to the transmitter site. Hence, in accordance with 47 CFR § 74.1204 (d) and in FCC 02-244, a lack of population has been demonstrated within the area of interference.

The pertinent interfering contours of the proposed station and K256AE, Salt Lake City, UT are shown in Figure 6. This figure shows that there is no prohibited contour overlap.

The pertinent interfering contours of the proposed station and KJMY, Bountiful, UT, are shown in Figure 7. Although contour overlap occurs, the area of overlap is entirely over unpopulated area. As demonstrated on the quadrangle maps in Figure 5, there are no populated structures or highways within the contours. The contours encompass a road, but it is a dirt road for access to the transmitter site. Hence, in accordance with 47 CFR § 74.1204 (d) and in FCC 02-244, a lack of population has been demonstrated within the area of interference.

Regarding IF channel spacing, 47 CFR § 74.1204 (g) states that *"...translator stations will be treated the same as Class A stations..."* Table 1 shows that the pertinent FM translator stations have the required spacing with the proposed station.

Unattended Operation

The proposed station will comply with all rules and requirements regarding unattended operation.

Multiple Translators

The applicant certifies that it does not have any interest in an FM translator that serves substantially the same area and that rebroadcasts the same signal as the proposed translator.

Environmental Considerations

The station will operate with an effective radiated power of 99 watts from a single-bay directional antenna, mounted on an existing tower.

As the ERP of the proposed station is less than 100 watts, it is in compliance with 47 CFR § 1.1307 (b) (4) (i).

Callsign	ST	City	Freq	CHAN	ERP_w	CLS	STAT	Dist_km	Sep	Clr
KJMY	UT	BOUNTIFUL	99.5	258	39000	C	LIC	54.45	0	-17.01 dB
KBEE	UT	SALT LAKE CITY	98.7	254	40000	C	LIC	54.46	0	-17.57 dB
KJMY-FM2	UT	PARK CITY	99.5	258	1000	D	LIC	19.47	0	-16.10 dB
K256AE	UT	PROVO	99.1	256	250	D	LIC	56.91	0	-1.87 dB
KADQ-FM	WY	EVANSTON	98.3	252	98000	C	APP	49.2	0	0.60 dB
KNYN	WY	FORT BRIDGER	99.1	256	27500	C1	LIC	90.61	0	4.03 dB
KCPW-FM	UT	SALT LAKE CITY	88.3	202	2000	A	CP	25.13	10	15.1
KADQ-FM	WY	EVANSTON	98.3	252	1200	C2	LIC	90.54	0	19.55 dB
K201AE	UT	COALVILLE, ETC.	88.1	201	135	D	LIC	19.42	0	19.4
KCPW-FM	UT	SALT LAKE CITY	88.3	202	2350	A	LIC	32.22	10	22.2
K252DB	UT	RURAL UTAH COUNTY	98.3	252	46	D	LIC	70.73	0	25.03 dB
KPGR	UT	PLEASANT GROVE	88.1	201	115	A	LIC	39.44	10	29.4
K252DI	UT	SALT LAKE CITY	98.3	252	160	D	LIC	33.89	0	29.31 dB
K252AI	WY	EVANSTON, ETC.	98.3	252	33	D	LIC	90.59	0	35.96 dB
NEW	UT	MOUNT PLEASANT	99.1	256	250	D	APP	128.15	0	37.98 dB
KIFX	UT	ROOSEVELT	98.5	253	3200	C2	LIC	155.21	0	38.24 dB

TABLE 1: Pertinent first, second, third adjacent, and IF channel stations spaced with proposed station.