

Technical Statement
and Exhibits
in support of
an Application for a
New Commercial FM Translator

FID #157502

Tulsa, OK

**LPFM PRECLUSION STUDY
NEW COMMERCIAL FM TRANSLATOR
CHANNEL 250
TULSA, OK**

The instant application proposes a site within the Spectrum Available Tulsa Market, which is listed in Appendix A. The proposed minor changes to the underlying short form application will not, however, preclude any new LPFM licensing opportunities.

The proposed facility will operate on FM channel 250. Therefore, it has the potential to affect LPFM operations on FM channels 247 through 253. The following report generated by the FCC LPFM Channel-Point Tool indicates that no protected LPFM Channel-Points exist anywhere within the Tulsa Grid on Channel 247, 248, 249, 250, 251, 252 and 253.

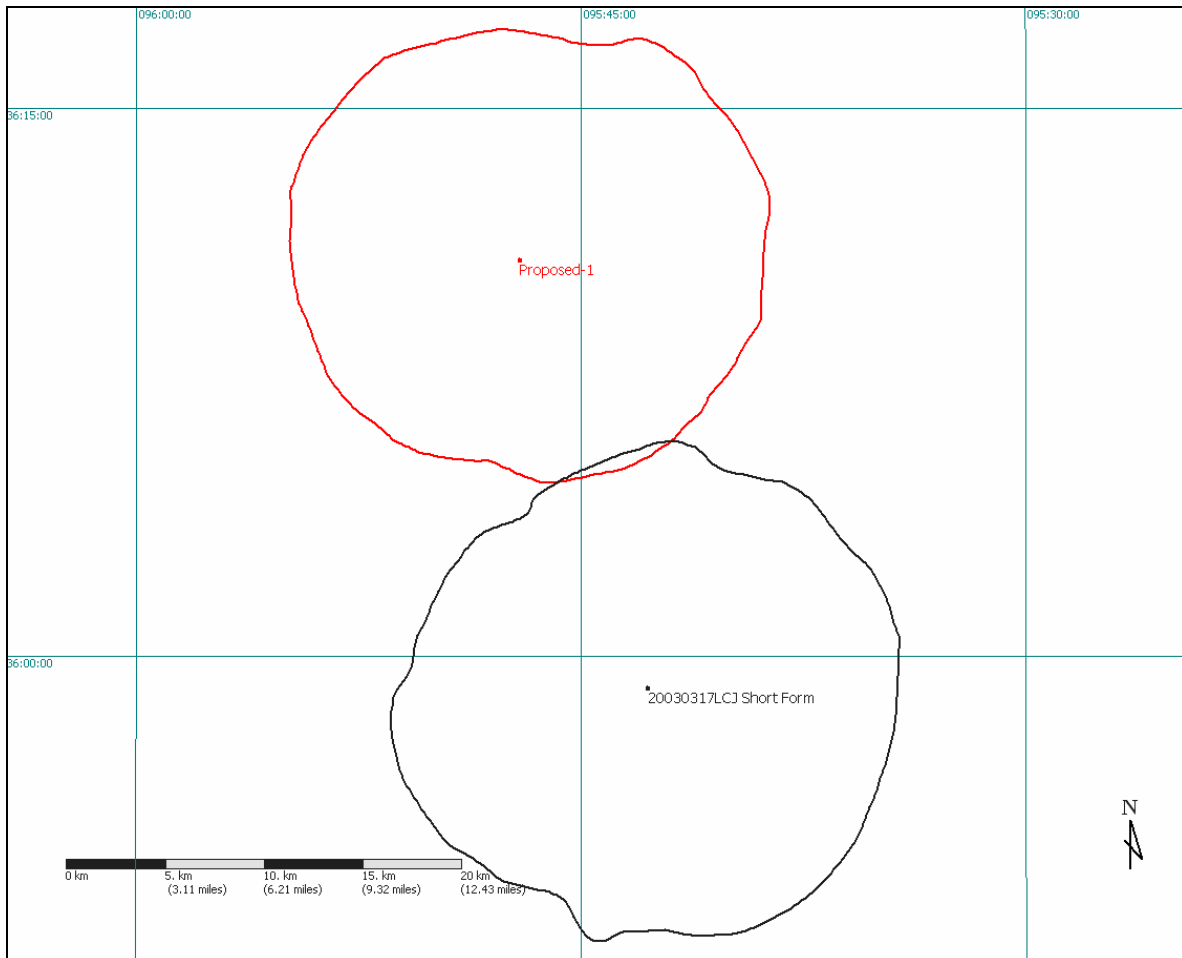
Tulsa, OK
Latitude 36-09-14
Longitude 095-59-33
Grid Size 31 x 31
Micro FM 100 Watts at 30m HAAT
Co-Channel and 1st Adjacent Protected
2nd Adjacent Channel Protected
3rd Adjacent Channel Not Protected
I.F. Protected
TV Channel 6 Protected
CP Records Protected
APP Records Protected
FM Translators Protected
TV Channel 6 Translators/LP Protected

Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail
200	0	220	0	240	0	260	0	280	218
201	0	221	0	241	0	261	0	281	0
202	0	222	0	242	0	262	0	282	0
203	0	223	0	243	0	263	0	283	0
204	0	224	0	244	0	264	0	284	0
205	0	225	0	245	0	265	0	285	0
206	0	226	0	246	0	266	0	286	0
207	0	227	0	247	0	267	0	287	0
208	0	228	138	248	0	268	0	288	0
209	0	229	0	249	0	269	0	289	0
210	0	230	0	250	0	270	0	290	0
211	0	231	0	251	0	271	0	291	0
212	0	232	0	252	0	272	0	292	0
213	0	233	0	253	0	273	0	293	0
214	0	234	126	254	0	274	0	294	0
215	0	235	33	255	0	275	0	295	0
216	4	236	0	256	0	276	0	296	0
217	0	237	0	257	0	277	0	297	0
218	0	238	0	258	0	278	0	298	4
219	0	239	0	259	0	279	0	299	7
								300	161
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**MINOR MODIFICATION ANALYSIS
NEW COMMERCIAL FM TRANSLATOR
CHANNEL 250
TULSA, OK**

The instant application proposes to change the output channel from Channel 247 to Channel 250. Since the proposed channel is third-adjacent to that proposed in the short form tech box, the proposed output channel change is a minor change and may be requested at this time.

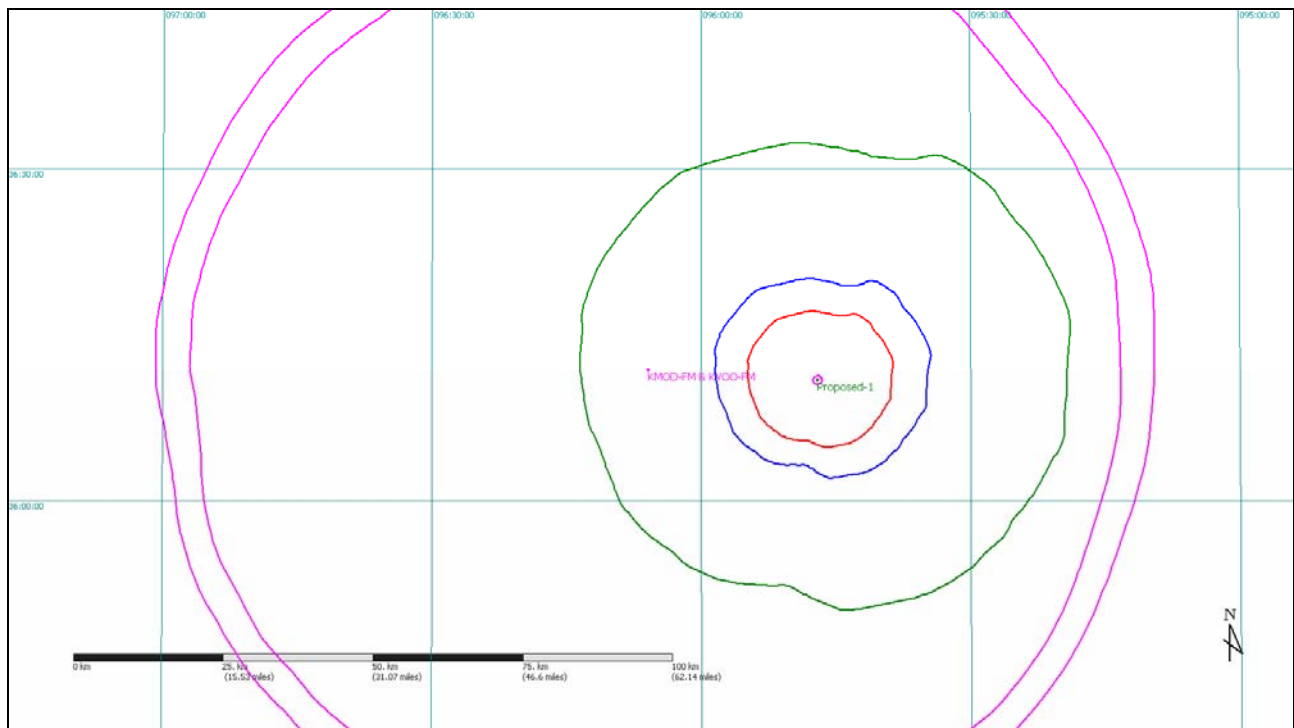
The instant application also proposes a different transmitter site. The following illustration demonstrates the 60 dBu service contour of the proposed facility (red) overlaps the short form facility's 60 dBu contour (black). Therefore, the proposed modification to the transmitter site for the facility is considered a minor change and may also be requested at this time.



**INTERFERENCE AND OVERLAP REQUIREMENTS
NEW COMMERCIAL FM TRANSLATOR
CHANNEL 250
TULSA, OK**

The following study illustrates that the proposed facility will not create prohibited overlap to any other licensed facility or pending application other than to second-adjacent KMOD-FM, Tulsa (FID #11957) and third-adjacent KVOO-FM, Tulsa (FID #68330). As more fully demonstrated below, the instant application may be processed pursuant to 47 C.F.R. § 74.1204(d) in regards to KMOD-FM and KVOO-FM.

On the following study, green contours represent co-channel interfering (40 dBu) to co-channel protected (60 dBu) contours. Blue contours represent first-adjacent channel interfering (54 dBu) to first-adjacent protected (60 dBu) contours. Magenta contours represent second and third-adjacent channel interfering (100 dBu) to second and third-adjacent protected (60 dBu) contours. Red contours represent co-channel protected (60 dBu) to co-channel interfering (40 dBu) contours.



The predicted F50,50 field strength of the licensed KMOD facility at the proposed translator site is 85.4 dBu. Therefore, the respective predicted interfering contour generated by this proposed modification is greater than 125.4 dBu. This interfering contour extends less than 40 meters from

the transmit antenna. Since the antenna will be mounted 75 meters above ground level, the interfering contour will not reach the ground.

The predicted F50,50 field strength of the licensed KVOO facility at the proposed translator site is 83.8 dBu. Therefore, the respective predicted interfering contour generated by this proposed modification is greater than 123.8 dBu. This interfering contour extends less than 49 meters from the transmit antenna. Since the antenna will be mounted 75 meters above ground level, the interfering contour will not reach the ground.

The tower is located within a fenced compound. The Applicant currently operates another translator at this facility. Site visits and satellite photographs of the area confirm that that no nearby structure extends within the area of predicted interference.



Since no population exists within the area of predicted interference, the Applicant respectfully submits that processing pursuant to 47 CFR § 74.1204(d) is appropriate in this instance.

**RF EXPOSURE ANALYSIS
NEW COMMERCIAL FM TRANSLATOR
CHANNEL 250
TULSA, OK**

The proposed facility was evaluated in terms of potential radio frequency radiation exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation."

The proposed facility will on an existing tower with a radiation centerline at seventy-five meters above ground level. The Application proposes an ERP of 115 watts operating with circular polarization. The facility will employ a directional single-bay Jampro JLCP antenna.

At 2 meters above the ground and 20 meters from the base of the tower supporting the antenna, this proposal will contribute 0.876 microwatts per square centimeter, or less than 0.436 percent of the allowable ANSI limit for uncontrolled exposure. This represents 0.0009 percent of the allowable limit for controlled exposure.

The tower is restricted from public access by a fence with a locked gate. Furthermore, signs are posted in the vicinity of the antenna, warning of potential radio frequency hazards at the site.

The applicant will reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to access the tower for maintenance or inspection.