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**ENGINEERING REPORT**

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**Sanger, TX, Channel 225D FM Translator Application**

**EXHIBIT 1: LPFM PRECLUSION STUDY**

Iglesia Evangelica Apostoles Y Profetas Nazareth, Inc. ("Applicant") submits this technical minor amendment for its pending 1983 application for a new FM translator station at Sanger, TX. The pending application file number is BNPFT-20030314AGC.

The corresponding minor amendment includes a site change of 5.0 kilometers to the north of the proposed site. The site change is deemed a minor change pursuant to Section 74.1233(a) of the FCC Rules. This Exhibit 1 addresses only the LPFM Preclusion Study requirements of the technical amendment. (The other technical requirements of this amendment are address in a separate document of this on-line filing.)

**LPFM PRECLUSION STUDY RESULTS**

This Engineering Report demonstrates that this application meet the FCC's requirements for this Auction 83 FM translator pursuant to *Creation of a Low Power FM Service, Amendment of Service Rules and Eligibility Rules for FM Broadcast Translator Stations*, Fifth Order on Reconsideration and Sixth Report and Order, FCC 12-144 (re;. December 4, 2012) ("Fifth Order on Reconsideration"). Additionally, the FCC's LPFM spectrum availability program,

[http://www.fcc.gov/Bureaus/MB/Databases/source\\_code/lpfm6.20121206.zip](http://www.fcc.gov/Bureaus/MB/Databases/source_code/lpfm6.20121206.zip)

("LPFM6"), is used as support for this Engineering Report.

An LPFM Preclusion Study is required by this application (based on the location of the herein proposed transmitter site) to the following *Spectrum Limited* Arbitron Metro Market:

Dallas-Ft. Worth, TX –

Mrkt # 5; 30 min. grid centered at N 32-46-53 W 96-47-34 (d,m,s; NAD 27).

(Note that there are no Spectrum Available Metro Markets located within 39 km of the proposed site.)

### *Metro Area Preclusion Study Results*

The nearest point in the Dallas-Ft. Worth Metro Grid is located more than 44 kilometers from the proposed 225D transmitter site; therefore, since this distance is greater than 39 kilometers, no grid study to the Dallas-Ft. Worth Metro Grid is required.

As required by the Fifth Order on Reconsideration, this FM translator will not preclude the future use of a LPFM application from a potential LPFM channel/point located within the 30-minute Dallas-Ft. Worth Grid.

### *Transmitter Site Test Study Results*

Figure 1, attached, is the LPFM6 output file for a study centered at the herein proposed translator site. From this site, the center location is shown to be available for future LPFM on channels 225 and 260. Therefore, since at least one channel exists (besides 260) for future LPFM at the proposed transmitter site, the transmitter site test for this application is successfully passed.

FIGURE 1 (3 Pages)

Sanger, TX  
 Latitude 33-24-52  
 Longitude 097-11-32  
 Grid Size 11 x 11  
 Micro FM 100 Watts at 30m HAAT  
 Co-Channel and 1st Adjacent Protected  
 2nd Adjacent Channel Not Protected  
 3rd Adjacent Channel Not Protected  
 I.F. Not Protected  
 TV Channel 6 Protected  
 CP Records Protected  
 APP Records Protected  
 FM Translators Protected  
 TV Channel 6 Translators/LP Protected  
 Auc83 FX App Records Not Protected

Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail
200	0	220	0	240	0	260	66	280	0
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	117	245	0	265	0	285	0
206	0	226	9	246	0	266	0	286	0
207	0	227	0	247	0	267	0	287	0
208	0	228	0	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	0	254	0	274	0	294	0
215	0	235	0	255	0	275	0	295	0
216	0	236	0	256	0	276	0	296	53
217	0	237	0	257	0	277	0	297	28
218	0	238	0	258	0	278	0	298	0
219	0	239	0	259	0	279	0	299	0
-----									300
Total									273

Total allotments, least preclusive spacing:	5
Total allotments, most preclusive spacing:	4
Sanger, TX	Sanger, TX
Latitude 33-24-52	Latitude 33-24-52

Longitude 097-11-32  
Least preclusive siting  
Availability of Channel 225 (X)

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+-----+-----+
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|-----O-----|
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+-----+-----+
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Longitude 097-11-32  
Most preclusive siting  
Availability of Channel 225 (X)

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```

Point #049 at 33-23-52 097-10-32  
Sanger, TX  
Latitude 33-24-52  
Longitude 097-11-32  
Least preclusive siting  
Availability of Channel 226 (X)

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+-----+-----+
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```

Point #016 at 33-23-52 097-07-32  
Sanger, TX  
Latitude 33-24-52  
Longitude 097-11-32  
Most preclusive siting  
Availability of Channel 226 (X)

```
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```

Point #121 at 33-29-52 097-16-32  
Sanger, TX  
Latitude 33-24-52  
Longitude 097-11-32  
Least preclusive siting  
Availability of Channel 260 (X)

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Point #107 at 33-26-52 097-15-32  
Sanger, TX  
Latitude 33-24-52  
Longitude 097-11-32  
Most preclusive siting  
Availability of Channel 260 (X)

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+	—	—	—	+

Point #061 at 33-24-52 097-11-32  
Sanger, TX  
Latitude 33-24-52  
Longitude 097-11-32  
Most preclusive siting  
Availability of Channel 296 (X)

Sanger, TX  
Latitude 33-24-52  
Longitude 097-11-32  
Most preclusive siting  
Availability of Channel 297 (X)

Point #075 at 33-27-52 097-12-32