

**KGSR Channel 227C
Facility ID No. 23604
Cedar Park, Texas
Auxiliary License at ASR 1052705
Amendment to BXPB-20180326ABQ
Exhibit 35
FCC Form 301, Section III-B
Comprehensive Technical Exhibit
April 16, 2018**

TECHNICAL NARRATIVE

The applicant, Emmis Austin Radio Company, L.P. ("Emmis Austin"), requests authority to operate an FM auxiliary station authorized under Broadcast License BMLH-20140306AHQ for KGSR, Channel 227C, Facility ID No. 23604, licensed to Cedar Park, Texas.

Specifically, this amendment to application BXPB-20180326ABQ makes a coordinate correction to the original application. Emmis Austin seeks to operate with 100 kW at 388 m HAAT from an existing tower associated with ASR number 1052705. The transmit antenna will be an ERI Model G5CPS-10AC ten bay full wave circularly polarized omnidirectional antenna with a center of radiation of 381 meters height above ground level.

The proposed KGSR auxiliary station will not result in extension of the licensed main facility FCC F(50,50) 60 dBu contour in any direction as required in Section 73.1675(a). A contour map demonstrating compliance of Section 73.1675(a) is attached as an exhibit with this application.

Compliance with environmental processing is demonstrated in Section III – Engineering - Environmental Protection Agency - Exhibit 35 as Compliance with RF Exposure Limits and Section 106 and FM Model for Windows.

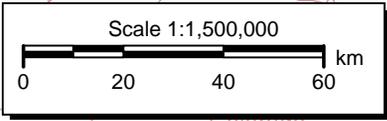
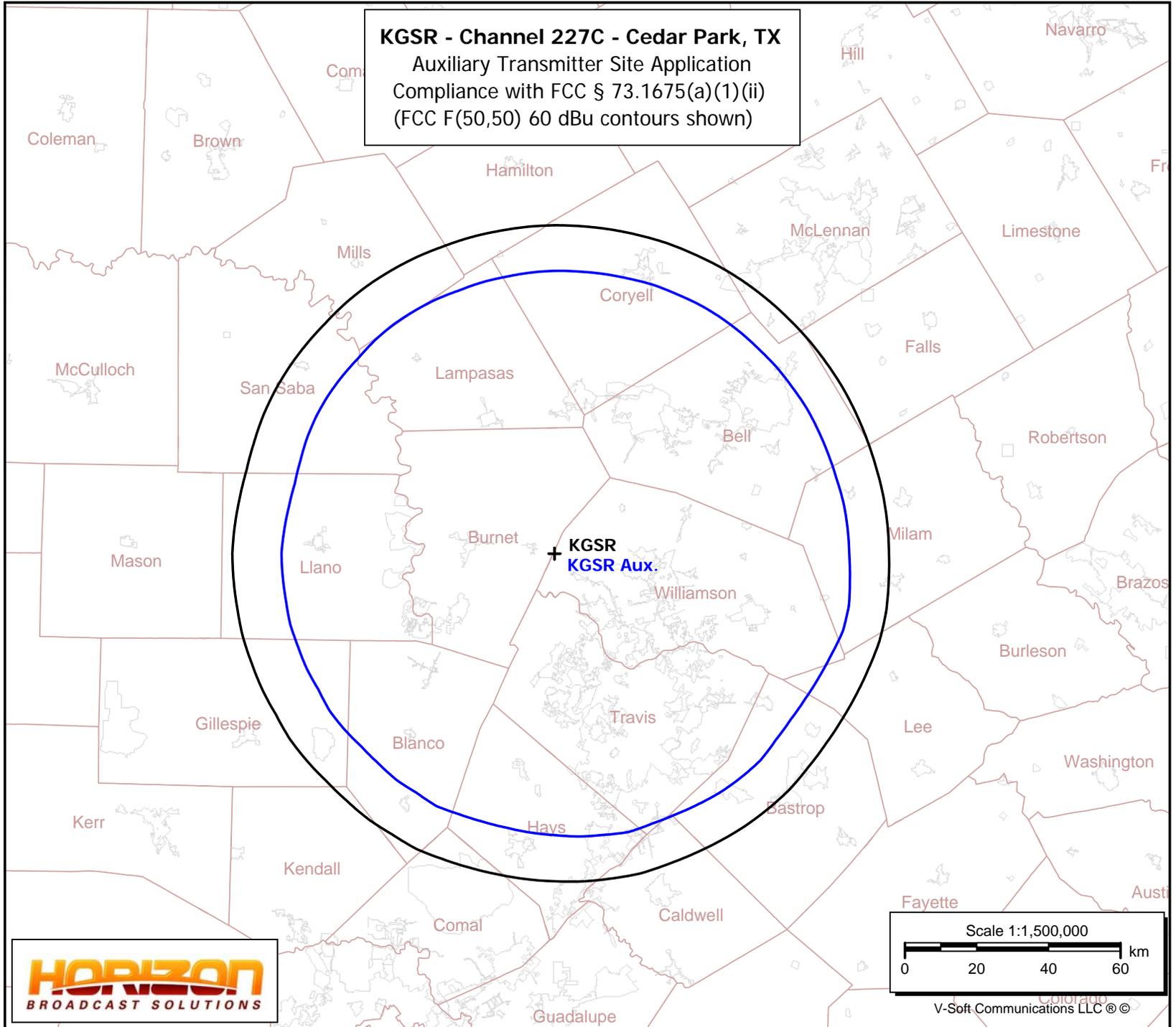
KGSR

Cedar Park, TX
BMLH20140306AHQ
Latitude: 30-43-34 N
Longitude: 097-59-24.30 W
ERP: 100.00 kW
HAAT: 587.0 m
Channel: 227
Frequency: 93.3 MHz
AMSL Height: 928.0 m
Elevation: 346.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

KGSR Aux.

Latitude: 30-43-34 N
Longitude: 097-59-24.30 W
ERP: 100.00 kW
HAAT: 388 m
Channel: 227
Frequency: 93.3 MHz
AMSL Height: 727.0 m
Elevation: 346.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

KGSR - Channel 227C - Cedar Park, TX
Auxiliary Transmitter Site Application
Compliance with FCC § 73.1675(a)(1)(ii)
(FCC F(50,50) 60 dBu contours shown)



V-Soft Communications LLC ©

**Human Exposure to Radiofrequency Electromagnetic Field
&
Section 106 Compliance
(Environmental)**

A study has been made to determine whether this proposal is in compliance with 47 C.F.R. 1.1307 of the Commission's rules and with OET Bulletin #65, dated August 1997, regarding human exposure to radio frequency radiation in the vicinity of broadcast towers. Emmis Austin Radio Broadcasting Company, L.P., licensee of KGSR seeks requests authority to operate an FM auxiliary station authorized under Broadcast License BMLH-20140306AHQ for KGSR, Channel 227C, Facility ID No. 23604, licensed to Cedar Park, Texas. The transmitting site is an existing tower 598 meters in overall height. This tower is registered with the FCC's Antenna Structure Registration (ASR) #1052705. The tower is located at 30° 43' 34" N ~ 97° 59' 24.3" W (NAD 27). The proposed antenna is a side mounted ERI Model G5CPS-10AC ten bay full wave circularly polarized antenna. The KGSR auxiliary facility will operate with 100 kilowatts ERP at 381 meters above ground level and 388 meters HAAT. The use of existing transmitting locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of § 1.1306 of the FCC Rules. The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number 65. The ERI antenna is included in the Antenna Types in the OET's updated FM Model Program under Type 3 Opposed "U" dipole. Using the Commission's FM Model Program, the maximum calculated signal density near the tower at two meters above ground level attributable to the proposed facility is 3.294 $\mu\text{W}/\text{cm}$ at 92.2 meters, which is 1.647 percent of the general population/uncontrolled maximum permitted exposure limit. This is well below the five percent threshold limit described in 1.1307(b) regarding sites with multiple emitters, which excludes applicant from responsibility for taking any corrective action in areas where the proposal's contribution is less than five percent.

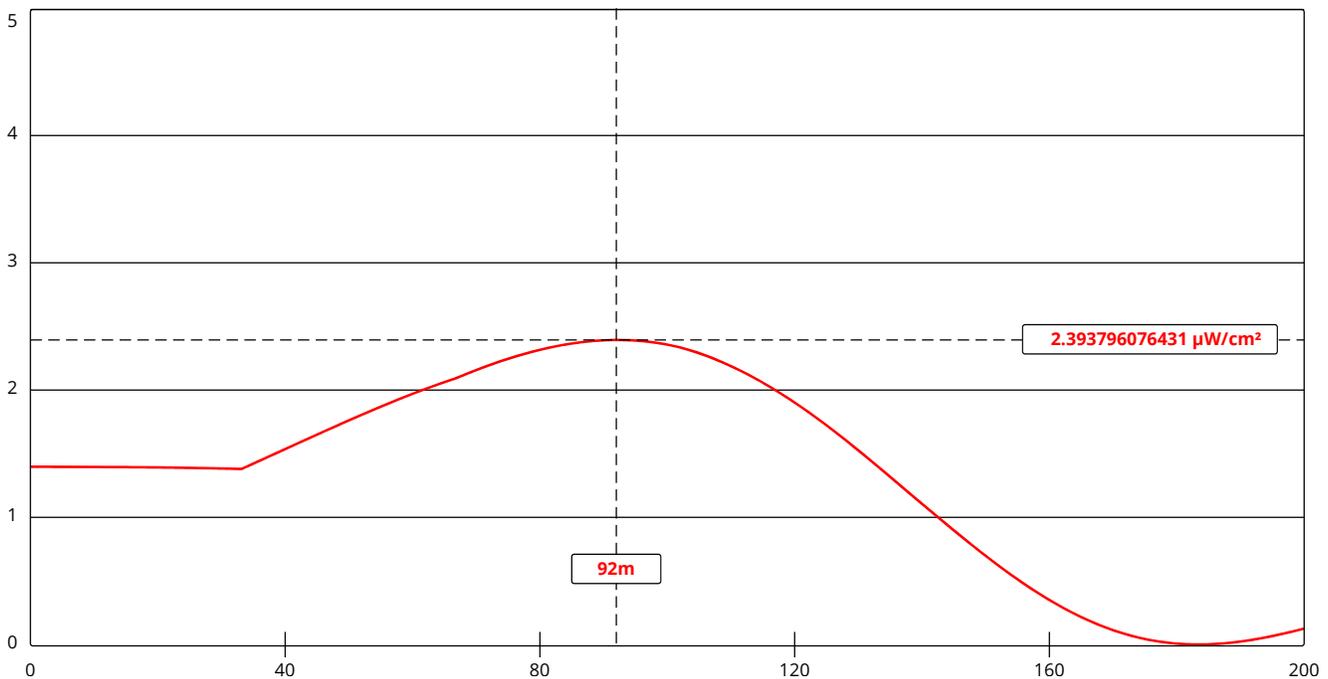
The applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.



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FM Model

The FM Model calculator determines the potential exposure from radiofrequency (RF) electromagnetic fields produced by FM broadcast station antennas at ground level. The FM Model software was originally developed by the FCC in 1997 as a standalone executable program and this improved version provides more precise predictions and runs via a JavaScript enabled web browser. The FM Model is originally based on measured data [published in 1985 by the EPA](#) (<http://nepis.epa.gov/Exe/ZyNET.exe/2000ED2W.TXT?ZyActionD=ZyDocument&Client=EPA&Index=1981+Thru+1985&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&OField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntOFieldOp=0&ExtOFieldOp=0&XmlQuery=&File=D%3A\zyfiles\Index%20Data\81thru85\Txt\00000003\2000ED2W.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h|-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=p|f&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL>). [▼ Show More....](#)



[View Tabular Results +](#)

Channel Selection	Channel 227 (93.3 MHz) ▼		
Antenna Type +	EPA Type 3: Opposed U Dipole ▼		
Height (m)	<input type="text" value="381"/>	Distance (m)	<input type="text" value="200"/>
ERP-H (W)	<input type="text" value="100000"/>	ERP-V (W)	<input type="text" value="100000"/>
Num of Elements	<input type="text" value="10"/>	Element Spacing (λ)	<input type="text" value="1"/>
Num of Points	<input type="text" value="500"/>	Apply	