

**MINOR CHANGE APPLICATION**  
**REQUEST FOR CHANNEL DISPLACEMENT**  
**LAKE MURRAY BROADCASTING, INC.**  
**WLXM-LP LPFM RADIO STATION**  
**CH 291L1 - 106.1 MHZ - 0.015 KW**  
**LEXINGTON, SOUTH CAROLINA**  
**May 2011**

**TECHNICAL STATEMENT**

This technical statement and associated exhibits were prepared on behalf of Lake Murray Broadcasting, Inc. ("LMB"), licensee of LPFM station WLXM-LP, Channel 300L1, Lexington, South Carolina. LMB is herein requesting permission to change from Channel 300L1 to Channel 291L1, with a minute increase in height above ground and slight decrease in effective radiated power.<sup>1</sup> The change channel is requested due to substantial interference from co-channel station WLNK, Channel 300C, Charlotte, North Carolina.

WLXM-LP had been on Channel 299L1, but had to vacate due to interference to/from full service FM station WNKT, Channel 298C2, Eastover, South Carolina. The move to Channel 300 was proposed as a minor change for WLXM-LP in order to restore the service of the LPFM station. While it initially was only minutely impacted by the signal of WNKT into the Lexington, South Carolina area, the level of interference from WNKT has increased. Based on the location of the full service station and atmospheric conditions in this area of the country, at times WNKT is reducing the viable signal of WLXM-LP to within a visual distance of the station's transmitter site (less than 0.5 mile).

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1) Based on the proposed height, the power of the proposed WLXM-LP was calculated at 15 watts, which yields the same distance to the 60 dBu contour as a maximum LPFM station. The height increase is to raise the antenna center of radiation higher above the water tank to reduce the effect of signal deflection off the top of the tank.

A search was undertaken to identify a rule compliant non-adjacent channel to which WLXM-LP could be relocated, unfortunately, without success.<sup>2</sup> LMB has identified a channel which, while not meeting the FCC spacing requirements for LPFM stations, will not cause interference to other full service or secondary facilities, and is sufficiently quiet in the Lexington, South Carolina area to allow the signal of WLXM-LP to be heard. Channel 291L1 can be implemented at the licensed WLXM-LP site, provided the Commission waives §73.807 of the rules with respect to WTCB, Channel 294C1, Orangeburg, South Carolina and WEKL, Channel 289C0, Augusta, Georgia.<sup>3</sup> See Exhibit A for request for waiver.

The proposed antenna for WLXM-LP will continue to be located atop an existing water tower that is less than 200 feet above ground. Therefore, the Federal Aviation Administration was not notified of this proposal. As the water tower is less than 200 feet above ground, no tower registration is necessary.<sup>4</sup>

As the proposed WLXM-LP antenna is to be located atop an existing water tower, the worksheets associated with FCC Form 318 to certify compliance with the radio frequency exposure rules could not be used. Therefore, attached as Exhibit B is a study which shows this proposal complies with the Commission's radio frequency limitations.

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- 2) This is due in part to the number of full service stations providing service into the Columbia, South Carolina; Greenville, South Carolina; and Augusta, Georgia areas.
  - 3) As a result of action in the LCRA, LPFM stations will be exempt from third adjacent channel relationships, thus the spacing between WLXM-LP and WTCB will no longer be an issue.
  - 4) A review of the water tower was made using the Commission's TOWAIR program.

The foregoing was prepared on behalf of Lake Murray Broadcasting, Inc., by Graham Brock, Inc., its Technical Consultants. All information contained herein is true and accurate to the best of our belief and knowledge.<sup>5</sup> All exhibits prepared to certify this instant application were forwarded to the applicant and are available for submission to the Commission on request.

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5) The undersigned has reviewed only the radio frequency radiation portion of the environmental analysis. All data regarding FM facilities was extracted from the CDBS database based on the date indicated on the included spacing study. We assume no liability for errors or omissions in that database which may be adverse to the requests contained herein.