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Amendment for **NEW-LP**
KANSAS CITY, MO
AOT DELTA, INC.
BNPL-20131114BTE

73.827(a) SHOWING – TRANSLATOR INPUT SIGNALS

Translator K279BI is rebroadcasting primary station KCFX as a fill-in service.
 KCFX operates on channel 266C0.
 The proposed LPFM station would operate on channel 263L1.
 The proposed LPFM station is on the third adjacent channel from KCFX.

K279BI, KCFX and the proposed LPFM station are all co-located on the same tower.

ANTENNA LOCATIONS ON TOWER

K279BI	351 m AGL
KCFX	341 m AGL
Proposed LPFM Station	37m AGL

Because the proposed LPFM station is within 2km of a translator that receives an input signal on a third adjacent channel, it is in a potential interference area per 73.827(a) of the Commission’s Rules.

Based on vertical distance, KCFX is 304 meters from the proposed LPFM station.
 KCFX operates 97 kW ERP.
 Based on the free space equation, KCFX places a 137.130 dBu field strength at the LPFM site.
 The proposed LPFM station operates 0.089 kW ERP.

73.827(a)(1) states that interference will not occur due to an undesired to desired ratio of less than 34 dB at the translator’s receive antenna which per note (a) in 73.827 is assumed that the translator’s receive antenna is co-located with the transmit antenna.

Based on the free space equation, the 171.130 dBu contour of the proposed LPFM station extends 18.3 centimeters from the radiation center of the proposed LPFM antenna. The interference contour from the LPFM station would not reach the translator antenna.

Based on this showing, we find that the proposed LPFM station would not cause interference to the input of translator K279BI and therefore complies with 73.827 of the Commission’s Rules.

Report prepared by
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 January 28, 2014