

Exhibit 11
CONSTRUCTION PERMIT MODIFICATION
ENGINEERING STATEMENT

prepared for
North Nicholasville Road Property Owners Association, Inc.
 WLXU(LP) Lexington, Kentucky
 93.9 MHz Ch. 230L1 49 W 43.1 m

North Nicholasville Road Property Owners Association, Inc. ("NNPOA") is the permittee for new Low-Power FM station WLXU(LP), Lexington, Kentucky. *NNPOA* seeks herein to modify the pending Construction Permit (FCC File BMPL-20151202CTE) to specify a different Height Above Average Terrain (HAAT).

As demonstrated below, the proposed facility satisfies all of the pertinent Commission Rules and policies now in effect regarding LPFM allocation and environmental matters. The HAAT was calculated using 3-second USGS terrain data. The following table shows the calculations for HAAT for each of the eight radials resulting in an overall average HAAT of 43.1 meters.

| Bearing (deg) | Distance (km) | HAAT (m) |
|---------------|---------------|----------|
| ----- | ----- | ----- |
| 0.0 | 6.63 | 59.4 |
| 45.0 | 5.35 | 38.9 |
| 90.0 | 5.22 | 37.1 |
| 135.0 | 4.69 | 30.0 |
| 180.0 | 5.05 | 34.9 |
| 225.0 | 5.27 | 37.9 |
| 270.0 | 6.47 | 56.5 |
| 315.0 | 6.12 | 50.5 |

Average HAAT for radials shown: 43.1 m

As shown in the following spacing study, the proposed facility meets the minimum separation requirements for LPFM stations shown in §73.807 to authorized cochannel, first-adjacent, and second-adjacent channel facilities.

| REFERENCE | | | | | | | DISPLAY DATES | |
|------------------------------------|---------|-------|------------------------------|----|-------|--------|---------------|----------|
| 38 03 55.7 N. | | | CLASS = L1 | | | | DATA | 11-19-15 |
| 84 29 13.2 W. | | | Current Spacings to 3rd Adj. | | | | SEARCH | 11-19-15 |
| ----- Channel 230 - 93.9 MHz ----- | | | | | | | | |
| Call | Channel | | Location | | Azi | Dist | FCC | Margin |
| WRVG-LP | LIC | 229L1 | Georgetown | KY | 339.7 | 16.82 | 13.5 | 3.3 |
| WSEK | LIC | 230C2 | Burnside | KY | 178.6 | 101.17 | 90.5 | 10.7 |
| WNNF | LIC | 231B | Cincinnati | OH | 359.4 | 116.66 | 96.5 | 20.2 |

Exhibit 11
CONSTRUCTION PERMIT MODIFICATION
ENGINEERING STATEMENT
(page 2 of 4)

A review of translator stations within 10 km of the proposed site revealed no translator having an input channel on the same or adjacent channel as that proposed in the instant application. The proposed site is located 430 km from the U.S.-Canadian border, which is beyond the “border area” specified in the Canadian Agreement.¹ The nearest FCC monitoring station is 467 km distant at Powder Springs, GA. This distance exceeds by a great margin the threshold minimum distance specified in §73.1030 that would suggest consideration of the monitoring station. There are no AM broadcast stations within 3.2 km (2 miles) of the proposed site according to information extracted from the Commission’s engineering database.

It is therefore believed that the proposed facility satisfies all of the pertinent Commission Rules and Policies now in effect regarding allocation matters.

Environmental Considerations

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. Because an existing structure will be used and no change in current structure marking or lighting requirements is anticipated, it is believed that this application may be categorically excluded from environmental processing pursuant to §1.1306 of the Commission’s rules.

Human Exposure to Radiofrequency Radiation

The proposed facility will operate with an antenna height of 43.4 meters above ground and 43.1 meters above average terrain. To compensate for this excessive height, a commensurate ERP reduction to 49 Watts is anticipated.

The proposed operation was evaluated for human exposure to radiofrequency energy using the procedures outlined in the Commission's OET Bulletin No. 65 (“OET 65”). OET 65

¹ *Agreement between the Government of Canada and the Government of the United States of America Relating to the FM Broadcasting Service and the Associated Working Arrangement*, publication date June, 1997.

Exhibit 11
CONSTRUCTION PERMIT MODIFICATION
ENGINEERING STATEMENT
(page 3 of 4)

describes a means of determining whether a proposed facility exceeds the radiofrequency exposure guidelines adopted in §1.1310. Under present Commission policy, a facility may be presumed to comply with the limits specified in §1.1310 if it satisfies the exposure criteria set forth in OET 65. Based upon that methodology, and as demonstrated in the following, the proposed transmitting system will comply with the cited adopted guidelines.

For the purpose of this study, “public access” will be considered at the base of the support structure at a location two-meters above ground. The general population/uncontrolled maximum permitted exposure (“MPE”) limit specified in §1.1310 for Channel 230 (93.9 MHz) is 200 $\mu\text{W}/\text{cm}^2$.

The formula used for calculating FM signal density in this analysis is shown on the following page and essentially the same as equation (10) in OET 65.

$$S = (33.4098) (F^2) (ERP) / D^2$$

Where:

S = power density in microwatts/ cm^2

ERP = total (average) ERP in Watts

F = relative field factor

D = distance in meters

Presuming a worst-case vertical-plane elevation pattern of 100 percent relative field, it was determined that the proposed facility would contribute an RF power density no greater than of $1.9 \mu\text{W}/\text{cm}^2$ or one percent of the general population/uncontrolled limit at locations two meters above ground level locations near the base of the tower. At other locations, the calculated RF power density would be even lower, due to the increasing distance from the transmitting antenna.

§1.1307(b)(3) states that facilities at locations with multiple emitters are categorically excluded from responsibility for taking any corrective action in the areas where their contribution is less than five percent. Since the instant situation meets the five percent exclusion test at all ground level areas, the impact of any other facilities near this site may be considered

Exhibit 11
CONSTRUCTION PERMIT MODIFICATION
ENGINEERING STATEMENT
(page 4 of 4)

independently from this proposal. Accordingly, it is believed that the impact of the proposed operation should not be considered to be a factor at ground level as defined under §1.1307(b).

With respect to worker safety, *NNPOA* will establish or participate in a site exposure policy, including controlled access and appropriate RF exposure warning signs. This site exposure policy will be designed to protect maintenance workers from excessive exposure when work must be performed near the antenna in areas where high RF levels may be present. Such protective measures may include, but will not be limited to, restriction of access to areas where levels in excess of the guidelines may be expected, power reduction, or the complete shutdown of facilities when work or inspections must be performed in areas where the exposure guidelines would otherwise be exceeded.

Based on the preceding, the proposed facility will comply with §1.1307(b).