

Exhibit 11
NEW LPFM STATION
ENGINEERING STATEMENT
 prepared for
Marconi Broadcasting Foundation
 New(LP) Cranston, Rhode Island
 101.1 MHz Ch. 266L1 100 W 24.8 m

Marconi Broadcasting Foundation (“*Marconi*”) is the applicant for a new Low-Power FM station at Cranston, Rhode Island. As demonstrated below, the proposed facility satisfies all of the pertinent Commission Rules and policies now in effect regarding LPFM allocation and environmental matters.

Allocations Considerations

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 and first-adjacent channel facilities.

REFERENCE						DISPLAY DATES		
41 46 59.8 N.	CLASS = L1 Int = L1					DATA	10-01-13	
71 27 32.0 W.	Current Spacings to 2nd Adj.					SEARCH	10-15-13	
----- Channel 266 - 101.1 MHz -----								
Call	Channel	Location		Azi	Dist	FCC	Margin	
WWBB	LIC-D 268B	Providence	RI	54.2	16.60	67.0	-50.4	
WZLX	LIC 264B	Boston	MA	26.2	69.93	67.0	2.9	
WKNL	LIC-Z 265A	New London	CT	236.4	68.43	56.0	12.4	

In keeping with §73.807(e)(1), a spacing waiver is requested with respect to second adjacent station WWBB(FM) Ch. 268B, Providence, RI. The WWBB field strength at the proposed site, calculated using the FCC’s contour-method, is 82.9 dBμ. According to §73.215(a)(2), the interfering field strength for a second-adjacent, undesired station must be 40 dB greater than that of the desired station field strength. Therefore, to comply with §73.215(a)(2) with respect to WWBB, a field strength of less than 122.9 dBμ would be necessary.

Field strengths from the proposed facility were calculated at points two-meters above ground level in the vicinity of the antenna support structure. The calculations, summarized in the attached **Table 1**, considered the antenna vertical-plane elevation pattern as well as slant-

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distance, free-space losses. As shown, the maximum ground-level field LPFM strength is 107.3 dB μ , far less than the 122.9 dB μ field strength necessary to meet the required desired to undesired ratio.

A review of translator stations within 10 km of the proposed site revealed no translator having an input channel on the adjacent channel as that proposed in the instant application. The proposed site is located 360 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 353 km distant at Belfast, ME. 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 no change in structure height is proposed, no change in current structure marking and lighting requirements is anticipated. Therefore, it is believed that this application may be categorically excluded from environmental processing pursuant to §1.1306 of the Commission’s rules.

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.

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Human Exposure to Radiofrequency Radiation

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 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.

The proposed RFS model CPF500-1 antenna center of radiation is to be centered at 49 meters above ground. 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 266 (101.1 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/cm²

ERP = total (average) ERP in Watts

F = relative field factor

D = distance in meters

According to information provided by RFS, the model CPF500-1 antenna vertical-plane elevation pattern has a maximum 25 percent relative field at depression angles below the horizon. Using the above formula and the relative field value of 0.25, it was determined that the proposed facility would contribute an RF power density of 0.2 $\mu\text{W}/\text{cm}^2$ or 0.1 percent of the general population/uncontrolled limit at locations two meters above ground level locations near

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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.

With respect to worker safety, *Marconi* will establish 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).

TABLE 1
GROUND LEVEL FIELD STRENGTH
AT POINTS 2 METERS AGL (SEE TEXT)

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Marconi Broadcasting Foundation
NEW(LP) Cranston, RI

Cavell, Mertz & Associates, Inc.
Manassas, Virginia

