

Radiotechniques

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Exhibit 12 Figure 2
Overlap Study Narrative
BNPFT20030311AAD
August 2003

This exhibit shows compliance with FCC Rules and Regulations § 74.1204. This rule requires that FM Translators cause no interference to FM Broadcast Stations and Existing FM Translator Stations. This is initially established by showing that there is no overlap between the service contours of protected stations and the potentially interfering contours of the proposed translator.

Channel allocations are shown in Exhibit 12 Figure 1. This map shows the 54 dbu of CoChannel FM Class B station WSKQ, Newark, NJ in red. The proposed 34 dbu F(50,10) contour and the 54 dbu F(50,50) contours of the stations do not overlap. The 60 dbu contour of FM translator applications BNPFT20030311AAM, Palermo, NJ is shown also in red. The proposed 40 dbu F(50,10) contour and the 60 dbu F(50,50) contours of the translators do not overlap.

The 54 dbu or 60 dbu F(50,10) contours of protected first adjacent channel stations are shown in orange. Class B station WOGL, Philadelphia, PA, and translator applications BNPFT20030313BKW, Pleasantville, NJ, BNPFT20030310BLB, Hammonton, NJ, BNPFT20030317EOH, Marmora, NJ, BNPFT20030310ARH, Sea Isle City, NJ and BNPFT20030317EKZ, Bridgeton, NJ are shown with substantial clearance between their protected contour and the proposed 48 or 54 dbu F(50,10) as appropriate.

Second and Third Adjacent channel allocations are also shown in Exhibit 12 Figure 1. The translator is located just inside the 54 db μ V F(50,50) contour of second adjacent channel WIXM, Millville, NJ, and well inside the 60 db μ V F(50,50) contour of third adjacent WBBO, Ocean Acres, NJ.

The 54 dbu F(50,50) contour of WIXM is shown extending well beyond the proposed facility, while the 60 dbuV contour of WBBO extends well beyond the site. The second adjacent channel protection ratio is 40 db, so it is required that the 54 dbuV contour of WIXM is protected from the proposed 94 dbu contour of the translator. The 60 dbu of WBBO must be protected from the proposed 100 dbu contour of the translator.

Since the distance to this contour is below the minimum distances for the F(50,10) and F(50,50) curves the signal level existing on the ground in the vicinity of the translator was calculated

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using inverse distance, with an adjustment for ground reflections, as has been accepted by the FCC in recent applications. Exhibit 12 Table 1 is a tabulation of these calculations showing that at no point on the ground will the translator produce an interfering contour, thereby protecting WBBO and WIXM. Calculations are shown in Exhibit 12 Table 1 showing that the maximum signal on the ground remains below the 94 dbu level at all distances from the antenna. There is no overlap of the 94 db μ V or 100 db μ V as appropriate with the service contours of WIXM or WBBO.

There are several other second and third adjacent channel stations and proposals shown on Figure 1. None of these are of allocations consideration, as there is a large clearance between protected and possible interfering contours.

In conclusion, the proposed translator meets all the overlap requirements of § 74.1204 of the FCC rules and regulations.