ENGINEERING REPORT

FM Translator
New Station Construction
Permit Application

for

New FM Translator

as an AM Fill-In Translator for
WTRC(AM) – Elkhart, IN

"Long Form Application for FM Translator Auction Window 99"

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(Exhibit numbering is in response to FCC Online Form 349, Section III-A)

Discussion

This firm has been retained to prepare the required engineering report in support of a New Station Construction Permit Application for an FM Translator. This New Translator proposal requests an AMSL of 345 meters and an ERP of 0.250 kW (H&V) operating on CH270D. The Fill-In Translator will rebroadcast Class D Primary Station WTRC(AM) – Elkhart, IN (1340kHz); Facility ID No. 51728.

The Translator as proposed will be mounted on the existing tower bearing Antenna Structure Registration Number 10062620. A copy of the existing ASR has been included in ***Exhibit 13.1***.

The proposed 60 dBµ contour of the Fill-In Translator lies wholly inside the greater of the AM primary daytime 2.0 mV/m contour and a 25 mile radius around the AM site. A map of the proposed service area in relation to the primary station service contour has been included in ***Exhibit 13.2***.

It has been determined the Translator may be used in the area without interference to any existing FM broadcast station or facility. General allocation details are found in ***Exhibit 13.3***. It is believed sufficient clearance exists precluding the need for additional contour protection showings.

The applicant would like to note the existence of a §74.1204(d) Second/Third Adjacent Channel Given Interference Waiver Request toward WNSN(FM) – South Bend, IN (CH268B) as noted in ***Exhibit 13.4.*** Protection has been based on the worst case calculated 116.6 dBµ F(50:10) Interference Contour, corresponding to the worst case 76.6 dBµ F(50:50) Protected Contour. Protection has been demonstrated through a downward vertical radiation study. Full protection will be afforded the facility as the interference will not reach a seven meter artificial plane representing a standard two story home when taking into account the downward radiation characteristics of the antenna as supplied by the antenna manufacturer. The antenna manufacturer's specifications are included in ***Exhibit 13.5***.

The applicant certifies the proposed translator 34 dBu F(50:10) Interference contour does not enter Canadian territory. Documentation of the proposed 34 dBu F(50:10) Interference contour will be supplied upon request.

This translator is not within the affected distance of any TV Channel 6 stations.

The applicant would like to note use of the NED 03 second terrain database for terrain based showings contained here-in.

Discussion (continued)

RADIATION PROTECTION: The Commission requires an engineering study regarding compliance with the guidelines for human protection from radiofrequency radiation. This report section is in response to that provision of the Rules. The current Federal Communications Commission guidelines for RF radiation protection are set forth in OET Bulletin No. 65 (Edition 97-01), and the accompanying Supplement A, (Edition 97-01).

The FM Broadcast facility proposed in this application will not produce human exposure to radiofrequency radiation in excess of the applicable safety standards specified in §1.1307(b)(3) of the Commission's rules concerning RF contributors of less than 5%. ***Exhibit 17.1*** provides the details of the study that was made to demonstrate compliance. The facility is properly marked with signs, and entry is restricted by means of fencing with locked doors and/or gates. Any other means as may be required to protect employees and the general public will be employed.

In the event work would be required in proximity to the antenna such that the person or persons working in the area would be potentially exposed to fields in excess of the guidelines set forth in OET Bulletin No. 65 (Edition 97-01), the transmitter power will be reduced or the station will cease operation during the critical period.