

Engineering Statement
In Support of an
Application for a Construction Permit
WTWR-FM, Luna Pier, MI

General

We have been commissioned by Cumulus Licensing Corp. (“Cumulus”) to prepare the engineering portion of an application for a construction permit for radio station WTWR-FM. This application is to bring WTWR into compliance with the FCC’s Report and Order issued in MM Docket 02-115. In the Report and Order the FCC ordered WTWR to change its city of license to Luna Pier, Michigan and accordingly to file a Form 301.

Exhibits Explained

Exhibit E, Figure 1 is a channel spacing study showing that the proposed transmitter location is fully spaced to all other stations except WDFM in Defiance, Ohio. WTWR proposes to protect WDFM under §73.213(c).

Exhibit E, Figure 2 is a terrain-contour study demonstrating the values derived for HAAT and distance to the 70 and 60 dBu contours. Exhibit E, Figure 3 is a map demonstrating the contour distances shown in Exhibit E, Figure 2. Because the proposed F(50,50) 70 dBu contour only covers 76% of the community of license, a supplemental showing is proposed using the Tech Note 101 (Longley-Rice) methodology.

Exhibit E, Figure 4 is a map showing both the Longley-Rice and the F(50,50) 70 dBu contours. (The Longley-Rice 70 dBu contour includes a 5 dB clutter factor.) The Longley-Rice 70 dBu contour easily covers 100% of the community of Luna Pier.

Exhibit E, Figure 5 is a study that shows the disparity between the FCC and Longley-

Rice contour distances. There is at least 10% difference between the two contours for each radial.

In order for Cumulus to qualify for use of a supplemental method, the terrain from the transmitter site to the Longley-Rice 70 dBu contour must meet certain criteria regarding terrain variation. Exhibit E, Figure 6 is a delta-h study that demonstrates the extreme “flatness” of the terrain between the proposed site and the city of Luna Pier. Exhibit E, Figure 7 is a list of the parameters used in determining the location of the Longley-Rice 70 dBu contour.

WTWR and WDFM currently have existing overlap between their licensed facilities. Specifically, WTWR’s F(50,10) 48 dBu overlaps the WDFM F(50,50) 54 dBu. In the instant application, Cumulus proposes to reduce that overlap while creating no new overlap between the two stations. Because of this, WTWR is seeking consideration under §73.213(c). The situation is demonstrated in the map in Exhibit E, Figure 8. Exhibit E, Figure 9 is a sketch of the supporting structure. It shows all pertinent heights as well as the location of the proposed WTWR antenna with respect to the WKKO antenna, which is also located on this tower.

Human Exposure to Radiofrequency Radiation **(No Exhibits)**

The proposed FM facility was evaluated in terms of potential radiofrequency radiation exposure at ground level in accordance with the RF Worksheet #1 (FCC Worksheet 3, pages 5 and 6).

The proposed center of radiation was rounded to above ground level is 136 meters, with an ERP (both horizontally and vertically) of 3.4 kW. Also included the study was WKKO, which has the ERP of 50 kW at 154 meters above ground level. The power

density at 2 meters above ground level at the base of the tower for both facilities is 0.1999 mW/cm^2 (including other transmitters in the area but not on the same tower). The facility will be in compliance with the controlled/occupational limit and uncontrolled/general public limits.

A radiofrequency radiation warning sign is to be placed at the base of the tower with clearly visible instructions to workers who climb the tower. The sign shall instruct anyone working on the tower to reduce (or turn off) the FM transmitter, whichever is appropriate, in order to avoid harmful exposure to radiofrequency radiation. The facilities on the structure have an agreement to reduce or turn off transmitting equipment, whichever is necessary to prohibit harmful exposure to radiofrequency radiation.

Environmental Impact
(No Exhibits)

A grant of the proposed construction would not constitute a major action as defined in the Commission's Rules and Regulations.

During operation, the facility will produce no chemical or significant thermal pollution, and no ionizing radiation will be generated. Areas of high intensity radiofrequency fields will be confined to the immediate area of the transmitting antenna, far above the ground and away from any human and wildlife population.

The area is not officially designated as a wilderness area or wildlife preserve and is not pending consideration. The area has no significant value in American history, architecture, archaeology, or culture, which is listed in the Register of Historic Places, and it is not eligible for listing. It is not recognized either nationally or locally for special scenic or recreational value. Cumulus proposes to locate WTWR on an existing tower.

Conclusion

This statement/application has been prepared for Cumulus by utilizing the latest available information, cross-checked with the Federal Communications Commission and other sources. Therefore, it is submitted that the proposed is in compliance with the Commission's Rules and Regulations and other sources. Therefore, it is submitted that the engineering data compiled and demonstrated herein for the proposed is in compliance with Commission's Rules and Regulations at the time of this application's filing date.

We welcome the opportunity to discuss with the staff of the Federal Communications Commission the engineering data contained in this application. Should any questions arise concerning the information, please contact Reynolds Technical Associates.

The following pages are exhibits prepared and assembled in support of the proposed.

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Statement of the Consultants

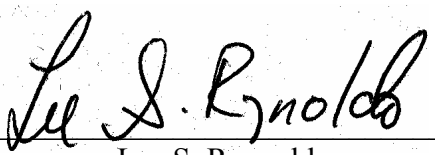
The instant engineering statement (amendment to a pending application) was prepared for Cumulus Licensing Corp. and supports an application for a construction permit of WTWR-FM, Luna Pier, Michigan. It was developed by Reynolds Technical Associates ("RTA") and may not be used for purposes other than submission to the Commission by Cumulus.

It may not be reproduced in its entirety, or in part, by anyone (other than from the Commission) without the written consent of RTA.

It is prepared for The Applicant under contractual agreement, and its certification by RTA is used accordingly. If The Applicant fails in its contractual obligation, RTA reserves the right to withdraw its certification.

The information in this application is compiled from the most recent Commission and outside data. RTA is not responsible for errors resulting from incorrect data or unpublished rule and procedure changes.

For RTA:



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