



ENGINEERING STATEMENT

IN SUPPORT OF

APPLICATION FOR MINOR CHANGE TO CONSTRUCTION PERMIT

WPTO

OXFORD, OH

Background

Greater Dayton Public Television, Inc. (GDPT) is the licensee of WPTO which has been authorized to operate its post-incentive auction facility on Ch. 29 (LMS File No. 0000038543) at Oxford, OH, with an ERP of 535 kW at an HAAT of 274.0m. The tower is located at the following coordinates:

39° 07' 27.0'' N (NAD 83)
84° 31' 18.0'' W

The current WPTO Construction Permit specifies a horizontally polarized Dielectric TFU-24DSB-H antenna; however, in an effort to improve reception, WPTO elected to upgrade to an antenna with a vertically polarized component. The overall gain of the antenna was reduced by the addition of the vertical polarization and the new WPTO Ch. 29 transmitter is not large enough to compensate for the loss in antenna gain. As such, the new Ch. 29 facility will only be capable of an ERP of 500 kW.

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Accordingly, in the instant application, GDPT seeks to modify the WPTO Construction Permit to specify an ERP of 500 kW and a Dielectric TFU-24DSB/VP-H (C) antenna with elliptical polarization. All other facility parameters will remain the same as those authorized on the current Construction Permit.

Coverage

The entire principal community of Oxford, OH is well within the predicted F(50,90) 48 dBu contour based on the proposed directional 500 kW ERP. The proposed facility is still larger (maximized) than the assigned post-incentive auction facility. Therefore, despite the reduction in ERP, the proposed facility is predicted to have a larger service population than that of the assigned post-incentive auction facility.

Environmental/RFR

This report addresses only the conditions specified in 47CFR1.1307 that deal with Radio Frequency Radiation. Any other non-RFR conditions that might require the preparation of an EA are beyond the scope of this report; since the structure is existing and registered, such conditions should not be an issue requiring further consideration.

The location of the proposed post-incentive auction facility is a multi-used site and it is assumed to be currently "in compliance" with FCC guidelines for human exposure to RFR (as defined in OET-65). The worst-case ground level RFR contributed to the site by this proposal in public areas is calculated to be 0.008446 mW/cm², which is less than 5% of the MPE for public exposure (0.375333 mW/cm²) at Ch. 29 (560-566 MHz). Per Section 1.1307(b) of the FCC Rules, the proposed operation would be categorically excluded from taking corrective action in areas

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with levels above the MPE limit where the contribution to the RFR from the proposed facility is less than 5%.

GDPT agrees to comply with the Commission's requirements regarding power adjustments or cessation of operation as may be necessary to ensure a compliant environment for worker access. Workers will be trained on RFR issues and encouraged to wear personal RFR monitors when on the structure. The tower base is enclosed by a locked security fence and appropriate signage warning of potential RFR hazards is posted.

Certification

I hereby certify that the foregoing report or statement was prepared by me but may include work performed by others under my supervision or direction. The statements of fact contained therein are believed to be true and correct based on personal knowledge, information and belief unless otherwise stated; with respect to facts not known of my own personal knowledge, I believe them to be true and correct based on their origin from sources known to me to be generally reliable and accurate. I have prepared this document with due care and in accordance with applicable standards of professional practice.

A handwritten signature in black ink, appearing to read "Ben Pidek", is written over a horizontal line.

Benjamin L. Pidek, P.E.
May 6, 2020

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