



ENGINEERING STATEMENT
OF
JOHN F.X. BROWNE, P.E.
IN SUPPORT OF AN APPLICATION FOR
MINOR MODIFICATION OF CONSTRUCTION PERMIT
WEWS-DT
CLEVELAND, OH

Background

Scripps Howard Broadcasting Company (Scripps) is the licensee of WEWS (ABC affiliate) which has been authorized to operate its post-transition DTV facility on Channel 15 (BMPCDT-20080620AGC) at Cleveland, OH, with an ERP of 1000 kW at RCAMSL of 578.2m. The tower is located at the following coordinates:

(NAD27)
41° 22' 26" N
81° 43' 04" W

Scripps had intended to build its maximized post-transition facility at the height listed above (RCAMSL of 578.2m) after removal of a stacked Channel 15 DTV directional antenna and analog Channel 5 antenna; however, due to significant structural shortcomings with its existing tower, it became impractical to extend the tower to achieve this height. Given the tower structural issues, Scripps completed the build-out of its post-transition DTV facility at the maximum achievable RCAMSL height of 561.1m (approximately 17m less than the height specified in its existing authorization). The station reports that there is no practical way to



increase the antenna height on the existing structure; therefore, Scripps is seeking to modify its existing authorization to specify the lower height ^{1/}.

Site

The proposed facility is located within the Canadian border zone; however, the only parameter of its present authorization that Scripps is seeking to change is the height of the facility and that will be lower than the authorized facility. As the proposed facility will not extend the noise-limited contour beyond that of the presently authorized facility in any direction, coordination with the Canadian government should not be necessary.

Antenna System and Tower

WEWS is proposing to use an omni-directional Dielectric TFU-30GTH/VP-R O6 antenna for its post-transition facility. The antenna has been placed on the tower (ASR#1014861, at the coordinates specified above). The structure has a new overall height of 572.1m AMSL (with appurtenances) which is 22.4m lower than the previous overall tower height of 594.5m AMSL and the antenna has center of radiation of 561.1m AMSL (with a calculated HAAT of 301m). Construction of the WEWS post-transition facility was recently completed and Scripps is in the process of notifying the FAA of the reduction in height of the existing structure and amending the ASR accordingly.

The proposed WEWS facility will incorporate both horizontal (1000 kW) and vertical polarization (203 kW). The vertically polarized radiation component will not exceed the authorized horizontally polarized component in any azimuth.

^{1/} WEWS has filed a request for Special Temporary Authorized (BDSTA-20091125AAY) to operate with a reduced facility until the modification of its existing authorization proposed in the instant application is granted by the Commission.



Coverage & Service

The entire principal community of Cleveland, OH is well within the predicted F(50,90) 48 dBu contour based on the proposed 1000 kW ERP.

The proposed facility is predicted to provide slightly less coverage than the presently authorized facility (1.13% population loss); however, the population is not actually "lost" as the authorized facility was not constructed or operated. Prior to the Commission's initiation of the DTV transition in June 2004, Scripps had been operating a DTV facility (BLCDT-20020304ACC) with less power and height (870 kW ERP with a RCAMSL of 556m) than either of the presently authorized post-transition facility, the Appendix B facility, or the facility Scripps is proposing in the instant application.

During the transition process, Scripps "elected" the larger coverage of its allotted 1996 DTV facility (which then became its Appendix B facility) rather than its pre-transition facility coverage; however, like the presently authorized facility, the Appendix B facility was not constructed. In June 2008, Scripps filed an application for a "maximized" facility which was subsequently granted in November 2008 (which is the presently authorized facility). The authorized facility coverage area was only slightly larger than the Appendix B facility coverage area in some azimuths, but did allow WEWS to use an omni-directional antenna rather than the directional antenna, the use of which would have been required to match the Appendix B coverage footprint.

Prior to the end of the transition, the WEWS analog Channel 5 antenna was stacked on top of its DTV Channel 15 antenna at the top of the tower. In order to complete the build-out of its post-transition facility, Scripps had to remove the stacked antennas and install a new Channel 15 antenna. Since Scripps no longer had a backup antenna for its Channel 5 analog facility, it continued analog operation on this antenna until the end of the transition in June 2009 and this is the reason that the post-transition facility had not been constructed until recently. WEWS has been operating under a "phased-transition" STA since June 2009 while completing construction of its post-transition facility so no facility larger than its pre-transition

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facility has, at any time, provided DTV service to the Cleveland area. The table below gives the population predicted to receive service based on an OET-69 Longley Rice coverage analysis for each of the facilities discussed above (WEWS pre-transition facility, Appendix B facility, presently authorized facility and constructed post-transition facility):

OET-69 Longley Rice Population Information for WEWS Facilities	
Facility	Population
Pre-Transition Channel 15 (RCAMSL - 556m)	4,014,003
Appendix B (RCAMSL - 584m)*	4,147,000
Authorized Post-Transition Channel 15 (RCAMSL - 578m)*	4,147,428
Post-Transition Channel 15 (As-Constructed, RCAMSL – 561.1m)	4,100,450

* - never constructed or provided service

Figure 1, attached hereto, is a map depicting the noise-limited contour of the pre-transition facility (green), presently authorized post-transition facility (black) and the facility proposed in the instant application. As is depicted on the map, although the proposed facility has a smaller coverage area than the presently authorized facility, it has a larger coverage area than the pre-transition facility (which is the only digital facility WEWS has constructed and operated prior to the facility proposed in the instant application).

While a facility matching the authorized parameters was neither constructed nor provided any service, as noted above, there is some potential loss when compared to the coverage area of the proposed facility (1.18% or 49,939 persons). A more detailed analysis of the potential 1.18% loss in predicted population served shows that only 0.79% (32,848 persons) of the loss would occur in the Cleveland DMA.

Furthermore, a significant portion of the predicted loss area is served by the coverage area of other ABC affiliate stations. Figure 2, attached hereto, is a map depicting the noise-limited contour coverage (black) of the authorized facility, the noise-limited contour coverage of the proposed facility (red) and the overlapping noise-limited contour coverage of other surrounding ABC affiliate stations (blue). As is shown on the map, only two small potential loss areas not covered by other ABC affiliates remain and these areas contain only 0.16%

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(6,733 persons) of the authorized facility service population; therefore, while the coverage of the proposed facility actually provides more service than any previous WEWS digital facility has provided, the potential loss between the proposed facility and the authorized facility is de minimis.

The facility proposed in the instant application is predicted to provide service to 98.9% of the WEWS Appendix B population which meets the Commission's requirement for post-transition facilities (at least 95% coverage of Appendix B population).

Interference

Although the proposed facility is smaller than the presently authorized facility, interference studies were conducted with the proposed parameters using software that emulates the software used by the FCC (OET-69 analysis). The results of the study indicate that there are no post-transition domestic stations or Class A stations that would receive more than 0.5% new interference.

Furthermore, Canadian coordination is not required as the noise-limited contour of the proposed facility is reduced toward Canada compared to the noise-limited contour of the presently authorized facility (which has already been approved by Canada).

Environmental/RFR

The proposed construction does not require preparation of an Environmental Assessment as it does not involve any of the factors listed in Section 1.1306.

The additional ground level RFR contributed to the site by this proposal in public areas is calculated to be 0.006427 mW/cm² which is less than 5% of the MPE for public exposure

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(0.32 mW/cm²) at the proposed frequency and, therefore, the proposal is excluded from further consideration.

Scripps 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.

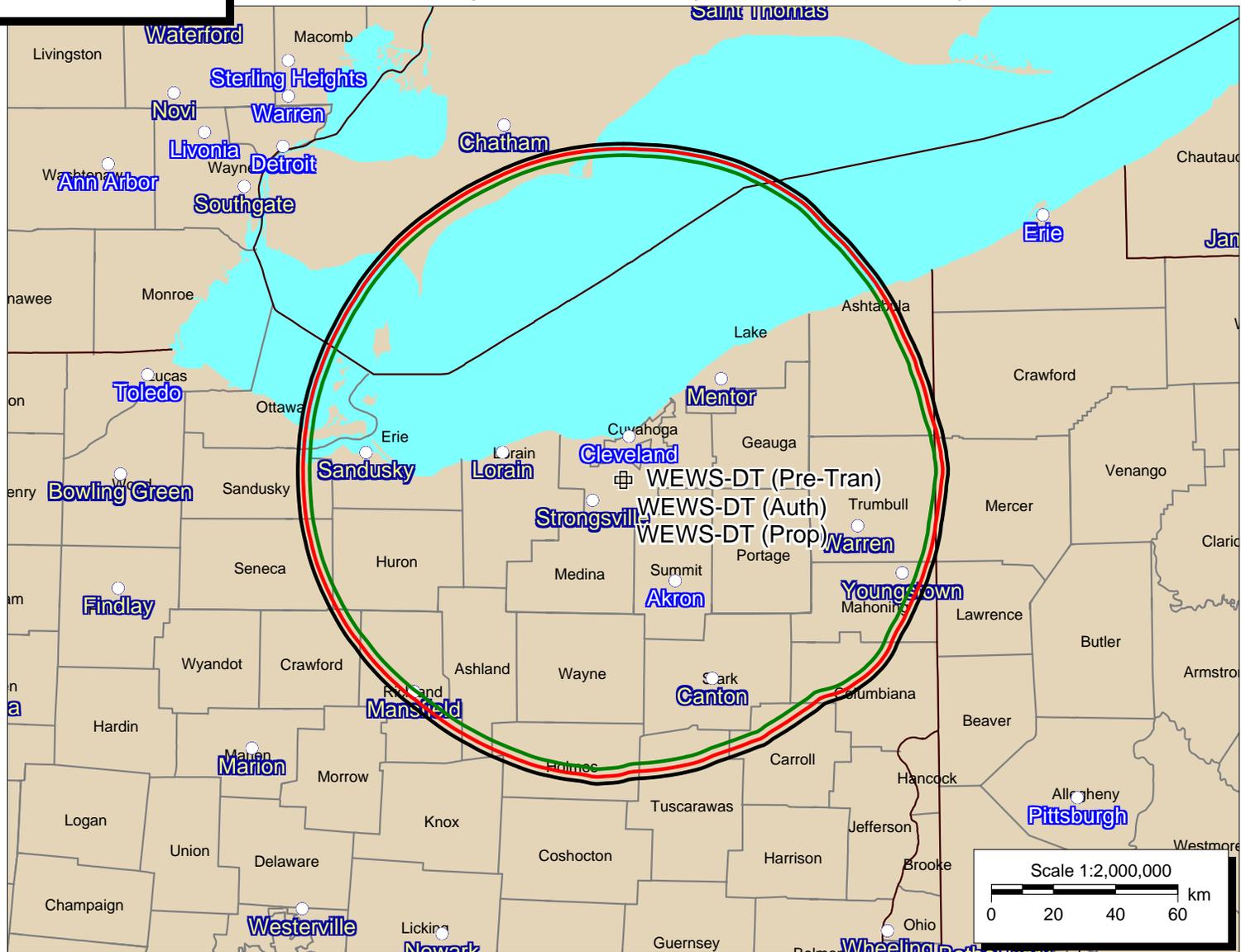
Certification

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.



John F. X. Browne, P.E.
November 30, 2009

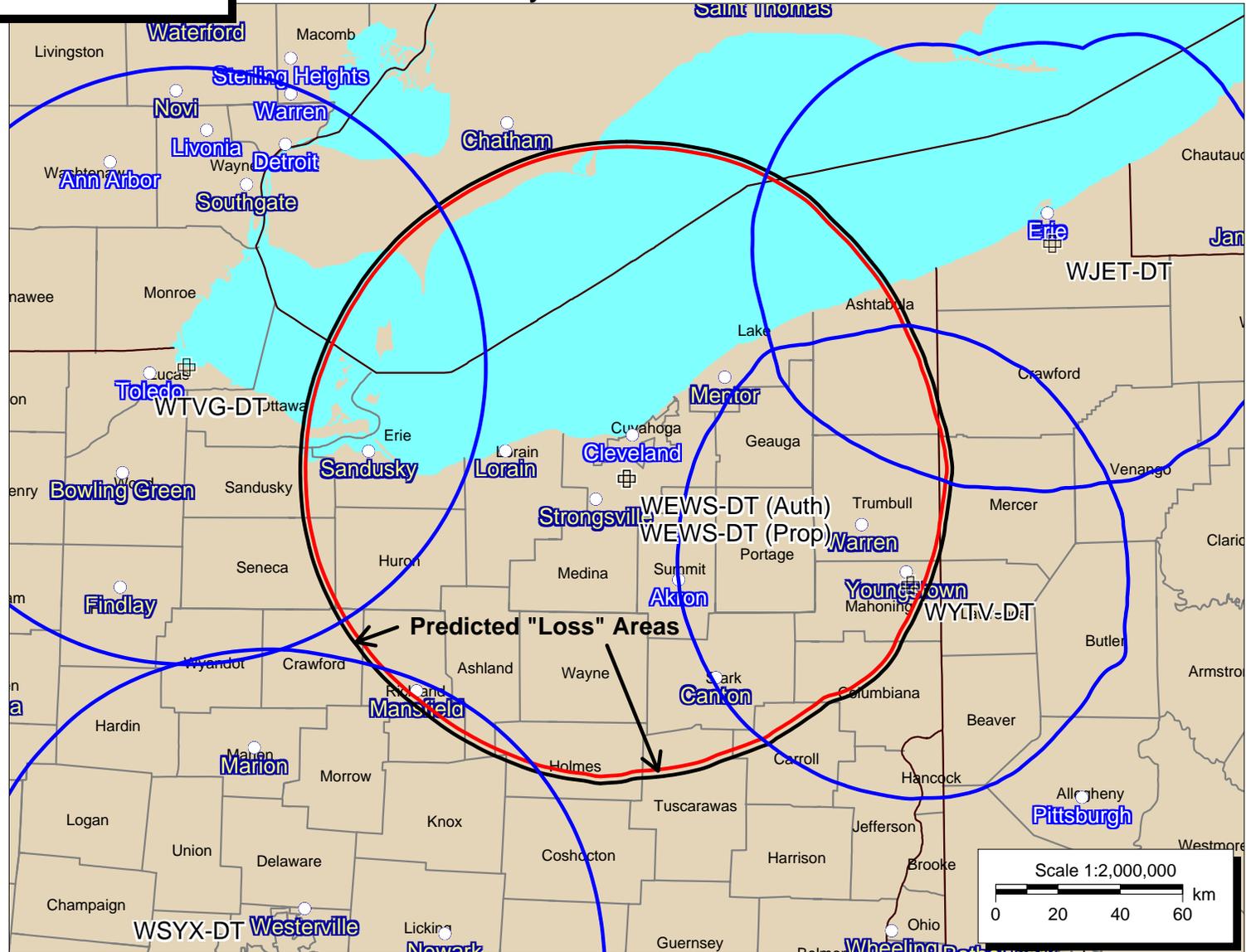
Noise Limited Contours of WEWS Pre-Transition Facility,
Presently Authorized Facility and Proposed Facility



Green - Noise Limited Contours of WEWS Pre-Transition Facility
Black - Noise Limited Contour of WEWS Authorized Facility (BMPCDT-20080620AGC)
Red - Noise Limited Contour of Proposed WEWS Facility

Figure 1
11-30-09

Noise Limited Contours of WEWS Authorized Facility, Proposed WEWS Facility and Other ABC Affiliate Stations



Black - Noise Limited Contour of WEWS Authorized Facility (BMPCDT-20080620AGC)

Red - Noise Limited Contour of Proposed WEWS Facility

Blue - Noise Limited Contours of Other ABC Affiliate Stations

Figure 2

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Note: see accompanying text for discussion on predicted "loss" areas