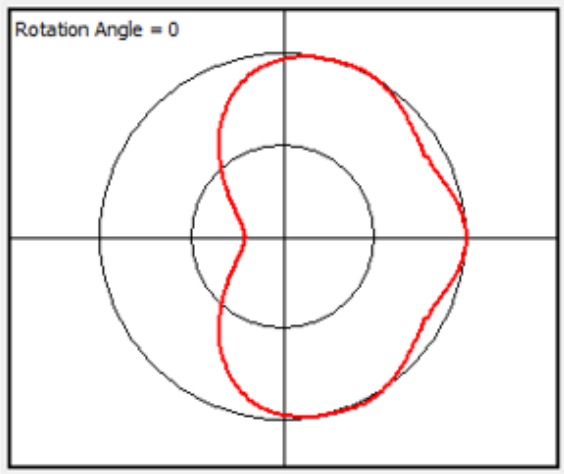
PURPOSE OF STA & REQUEST FOR WAIVER

The purpose of this STA amendment application is to **request a waiver of Section 73.622(e) of the FCC Rules** to allow the WEUX-DT Channel 21 post-auction interim facility to increase Effective Radiated Power (ERP) to 635 kW which would result in an F(50,90) 39.46 dBuV/m protected noise limited contour that would slightly exceed the authorized DTV service area pursuant to post-auction construction permit 0000053767 (see map below). The WEUX facility is currently operating under an STA to temporarily broadcast on its post-auction channel (21) using a side-mounted directional interim antenna (TFU-16WB C160) while the new post-transition main antenna is installed. However, due to the variance in the CP antenna pattern vs. the STA antenna pattern on the back side of the antenna, the STA facility is limited to an ERP of only 103 kW in order to comply with FCC rules such that the CP contour will completely encompass the STA contour in all azimuthal directions. The CP is authorized an ERP of 600 kW and a radiation center of 473 ft AGL using a top-mount antenna but the existing STA is authorized an ERP of only 103 kW and a radiation center of 347 ft AGL using a side-mount antenna. Accordingly, the combination of reduced parameters and tower distortion resulting from a side-mount antenna, the station is receiving a high volume of phone calls from viewers stating that they can no longer receive the off-air signal from the station. The station determined that it can increase the ERP of the interim facility to 635 kW without exceeding the rating of the transmission line which would significantly improve the “lost coverage” issue. The increased ERP would cause the F(50,90) 39.46 dBu contour of the STA facility to slightly exceed the F(50,90) 39.46 dBu contour of the post-auction CP facility as shown in the map below. **The attached TVStudy demonstrates that the proposed STA facility, with an ERP 635 kW and a center of radiation of 270 ft AGL, would not cause impermissible interference to any stations. TVStudy demonstrates that the proposed STA facility would receive interference and Nexstar hereby accepts the received interference.**

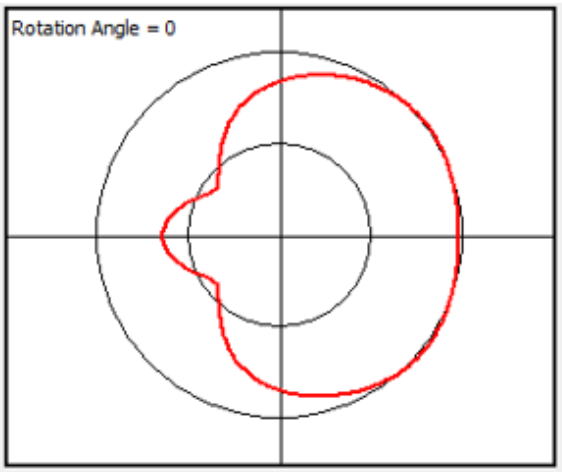
The contours of CP pattern and Interim facility pattern below pictorially demonstrate why the STA exceeds the CP protected noise limited contour at such a reduced power. The CP contour has a deep null on the backside of the antenna which the interim antenna does not.

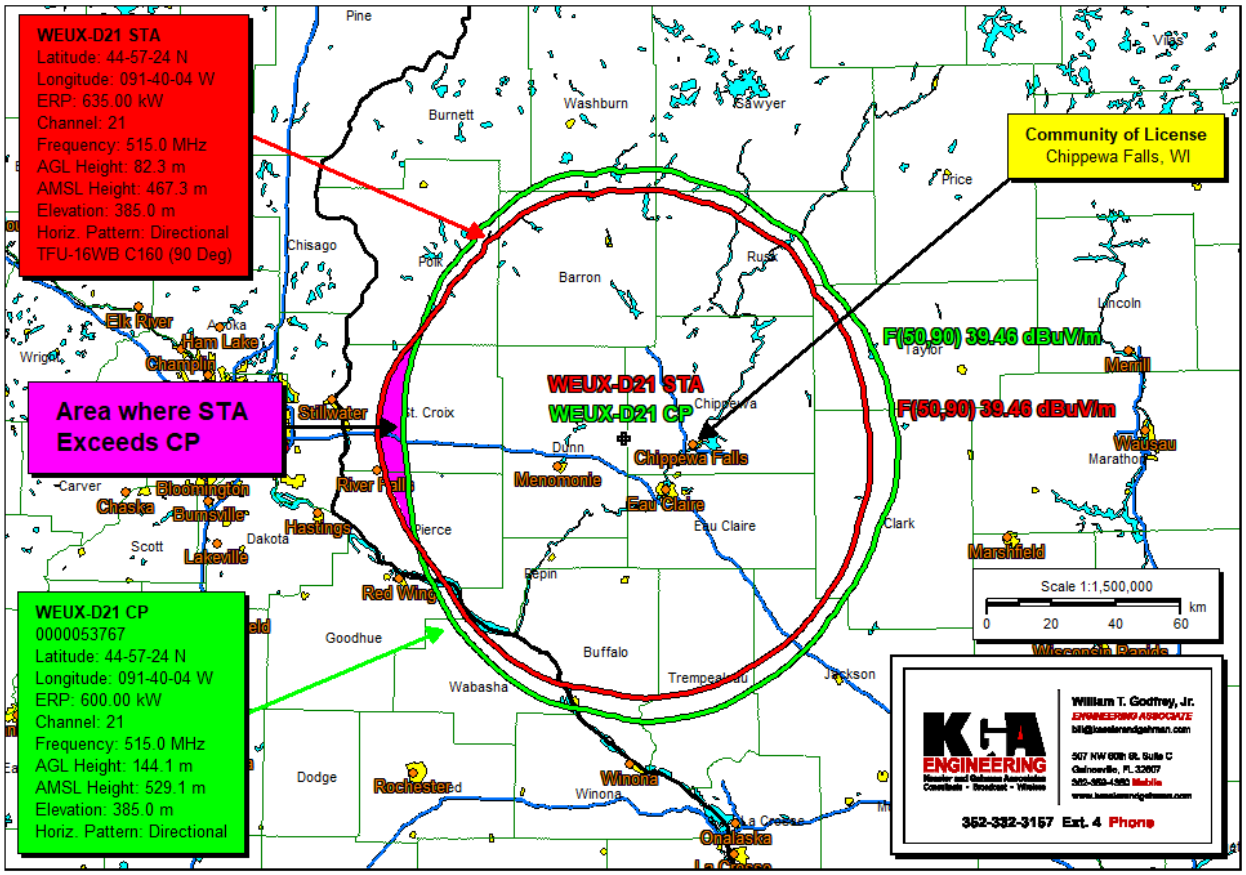
Accordingly, **Nexstar hereby respectfully requests a waiver** to operate slightly beyond its authorized post-auction F(50,90) 39.46 dBu protected noise limited contour at the proposed parameters **in order to better serve the public (Public Interest)**.

CP Pattern



Interim Pattern





WEUX-D21 CP vs. WEUX-D21 STA

CERTIFICATION

This technical statement was prepared by William T. Godfrey, Jr., Engineering Associate with the firm Kessler and Gehman Associates, Inc. having offices in Gainesville, Florida, and has been working with the firm in the field of radio and television broadcast consulting since 1998. Mr. Godfrey was a graduate from the University of North Florida and a Distinguished Military Graduate from the University of Florida. As a Professional in the field of Telecommunications he states under penalty of perjury that the information contained in this report is true and correct to the best of his knowledge and belief.

WILLIAM T. GODFREY, JR., CBT — 24 May, 2019
Engineering Associate