

TECHNICAL SUMMARY
APPLICATION FOR MODIFICATION OF CONSTRUCTION PERMIT
TELEVISION STATION WDJT-TV
MILWAUKEE, WISCONSIN
CHANNEL 29 1000 KW (H), 200 KW (V) 351 M HAAT

1. The instant application for modification of construction permit is to increase the authorized antenna height for the repack facilities of WDJT-TV, Milwaukee, WI (Channel 29).^{*} A waiver of the FCC freeze on applications that would result in an extension of the noise-limited service is hereby requested to the extent necessary.

2. Tower structural loading studies have been conducted on the WDJT-TV tower in connection with the reconfiguration of the tower. It is noted that in addition to WDJT-TV, there are two other stations located on the tower that are being re-packed as a result of the Incentive Auction process: WYTU-LD (17 → 16) and WBME-CD (24 → 17). The existing tower structure supports the old WDJT-TV top-mounted pylon antenna, which was formerly used on Channel 58. Many scenarios were studied and due to tower loading issues, it is advantageous to replace the old top-mounted pylon with the new WDJT-TV Channel 29 antenna rather than install a new tower section with a side-mounted antenna. By changing to a top-mounted antenna for WDJT-TV, the old Channel 58 pylon antenna can be quickly replaced with the new Channel 29 top-mount pylon antenna with a single helicopter removal and replacement process. This will allow for a quicker installation and one that is less costly to the Incentive Auction process.

3. Changing from a side-mount to a top-mount arrangement results in an increase in antenna height of 15.8 meters. A waiver is requested to allow for the full 1000 kW ERP for WDJT-TV so as to avoid any signal losses in the market due to the change. There will be no change in the overall registered structure height. It has been determined that a reduction in maximum ERP to less than 850 kW would be necessary to avoid any noise-limited service contour extension. The level of reduction of ERP would thus exceed 0.5 dB and would negatively affect viewers in Milwaukee and the surrounding DMA market area.

^{*} See FCC File No. 0000034662.

4. The attached Predicted Coverage Contour map depicts the small nature of the requested contour increase. The increases in the distances to the predicted noise-limited service contour vary approximately from a minimum of 1.2 km to a maximum of 1.6 km along the eight cardinal radials, with an average increase in contour distance of less than 1.44 km along the eight cardinal radials.

5. The attached *TVStudy* analysis exhibit demonstrates that the proposal is fully compliant with the FCC's *de minimis* interference protection limits.

6. Based on the foregoing it is believed to be of overall public interest benefit to allow for the top-mount of the new WDJT-TV transmitting antenna while maintaining its authorized ERP level.