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Consultants in Electronic Media Technology / Management

STA Application for Interim Operation at Alternate Site During Spectrum Repack Transition Cox Media Group Northeast, LLC WFXT Television, Boston, MA File Number: BLCDT-20090422ABH

WFXT Antenna Installation Issues

WFXT Television, licensed to Cox Media Group Northeast, LLC, (hereinafter "WFXT") and serving the Boston, Massachusetts market, currently operates on Channel 31 at a site called Needham, owned by American Tower Corporation ("ATC") in the town of Needham, Norfolk County, MA. The WFXT antenna is mounted in the top position of a two-antenna stack on an arm of a candelabra tower (ASR No. 1004233) shared with several other television stations. The tower at Needham is planned by ATC to be reconfigured to incorporate a broadband panel array to be shared by all of the UHF stations operating at the site and to be surmounted by a Low-VHF antenna for one station that elected in the recent Spectrum Incentive Auction to move there from UHF. Reconfiguration of the antennas on the Needham tower, installation of new transmission line, installation of channel-combining equipment to enable WFXT and the other UHF stations to share the transmission line and antenna, and installation of new spectrum mask filters needed for WFXR operation on Channel 34 will require a substantial period for completion of the work. WFXT will not be able to operate from the Needham site during that time, which will be measured in months. Given loading on the tower and RF safety considerations for workers on the tower, there was no possibility of installing a temporary antenna on it, meaning that WFXT had only two choices: move to an alternate site or go off the air for a prolonged period.

Request for Operation from an Alternate Site Under STA

For an ongoing broadcast operation, going off the air for any period, let alone a prolonged one, is not an option. Consequently, ATC has located a site that can accommodate an Interim WFXT operation at an antenna height and an emitted power level that should permit WFXT to retain much of its service to the Boston region. The alternate site is Needham Heights, the normal transmitter location for several other television stations, which is situated about 1½ miles from the Needham site. Arrangements for installation of a WFXT transmitter and use of a broadband antenna have been made with ATC, and contracts have been signed. Costs for the WFXT Interim operation were included in the station's Form 2100 Schedule 399 filings and have been approved by the FCC Repack Reimbursement Administrator. Construction of the Interim facility is nearing completion, and it should be ready for use around the end of September 2018.

The currently-requested Engineering STA is to cover the period of WFXT operation at the Needham Heights site, during which the Needham facility will be reconstructed. That period potentially could

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extend from September 24, 2018, to permit testing of the Interim facility prior to its use for carrying programming, through the end of the Phase 4 transition on August 2, 2019, and possibly beyond. The WFXT transition from operation on Channel 31 at Needham Heights to operation on Channel 34 back at the Needham site is planned for no later than the period in late July 2019 and will be carried out in coordination with the other stations on which WFXT's transition is dependent and with the one station that is dependent on WFXT's transition. Consequently, the Engineering STA is requested for a period of 6 months, with one renewal for another 6 months expected. A renewal for 6 months would permit operation beyond the Phase 4 transition date. Since the antenna at Needham Heights is broadband in design, such an authorization would permit WFXT to move from Channel 31 to Channel 34 operation by the required date at Needham Heights in the unanticipated eventuality that the Needham site is not completed by the end of Phase 4.

Facilities Requested Under STA

Requested facilities at the Needham Heights site are detailed technically in the LMS form to which this description is attached. In summary, they include operation with a directional antenna having a radiation center height of 329.6 m (1081.4 ft) above ground level (RCAGL), corresponding to 376.2 m above mean sea level (RCAMSL), peak effective radiated power (ERP) of 280 kW, and an azimuth orientation of the axis of symmetry of the antenna toward 89.5 degrees True. As can be seen on the map on the next page, the pattern and power of the facility at the Needham Heights site are set to obtain a match, as closely as possible, between the contours of the Needham WFXT facility and the Interim facility at the Needham Heights site.

Environmental Impact and Radio Frequency Radiation

None of the conditions specified in Section 1.1307 of the FCC rules that would require the preparation of an Environmental Assessment pertain with respect to the proposed facility. In particular, because the proposed facility will be installed on a tower at an existing site, the proposed operation does not implicate many of the causes for further investigation and preparation of further reports.

With respect to Radio Frequency Radiation exposure, OET Bulletin No. 65 provides methods for evaluating the level of exposure for both employees (occupational/controlled situations) and non-employees (general population/uncontrolled situations). The combination of the antenna radiation pattern, as provided in the manufacturer's technical specifications, with the antenna height above ground level and the operating power level indicate that the potential exposure would be less than 5 percent of the Maximum Permissible Exposure (MPE) limit for general population/uncontrolled situations at the site.

To be precise, OET-65 methods produce an exposure estimate of approximately 0.143 percent of the limit for general population/uncontrolled situations. Since the facility has a calculated exposure value of less than 5 percent of the relevant exposure limit, it is categorically excluded from requirements for detailed RF exposure analyses of the site.

Notwithstanding the foregoing, Cox Media Group Northeast, LLC recognizes its responsibility for the safety and health of employees and contractors when exposed to RF radiation conditions. It will take the steps necessary to assure that personnel working in its facilities and on the tower and antennas are protected from exposure to RF radiation levels exceeding those specified in the Commission's rules. It will work cooperatively with other users of the site to assure a safe working environment for all. Added steps to be taken may include measurements and monitoring as well as power reduction or turning off the transmitter, if necessary to ensure a safe working environment.

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Contour Comparison of WFXT Needham and WFXT Proposed Interim Facilities

Figure 1 below shows the Channel 31 contours of the normal WFXT facility at the Needham site, in orange, and the proposed Interim WFXT facility at the Needham Heights site, in brown, overlaid upon one another. The map was produced using EDX Signal software, version 11.5.1.

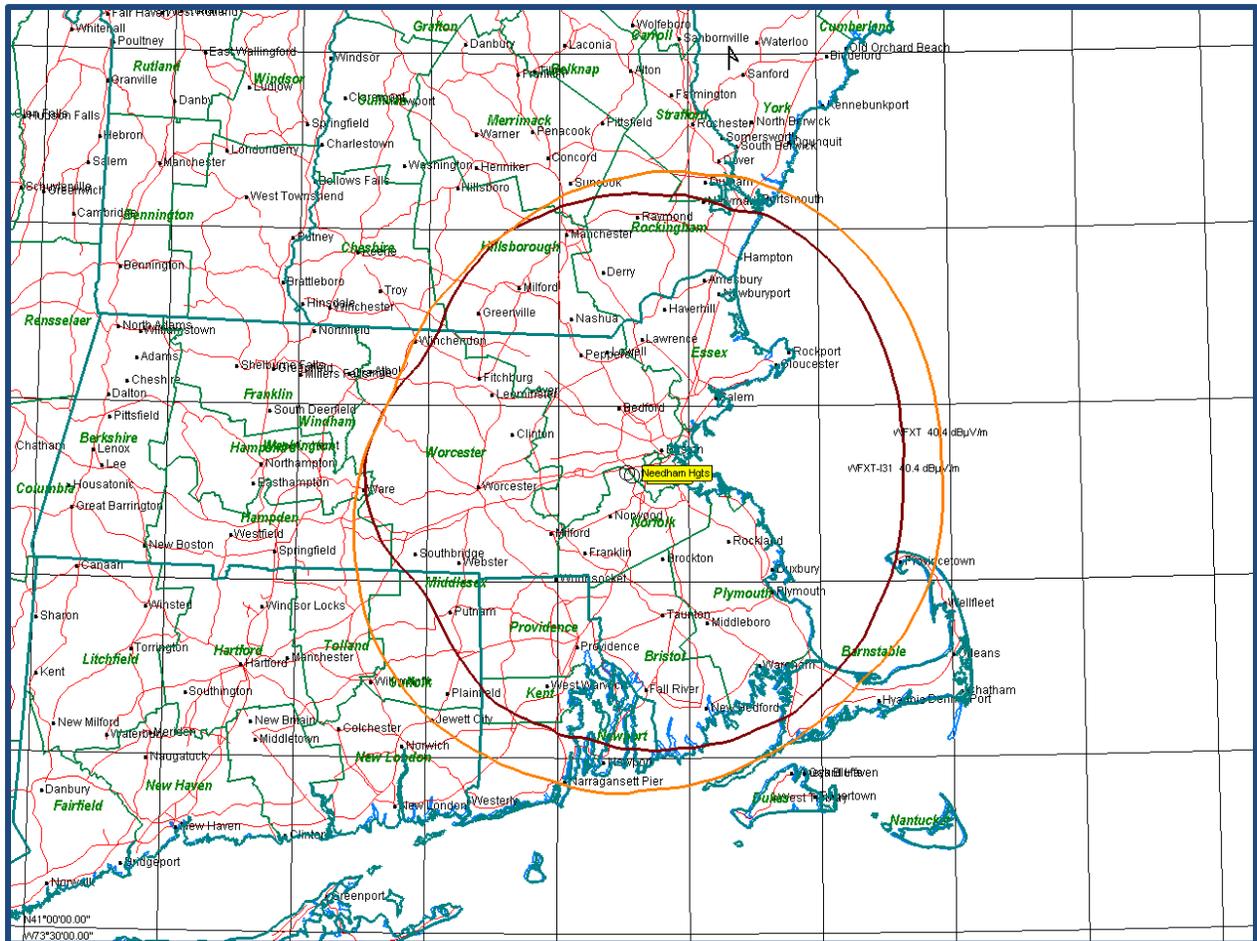


Figure 1 – Comparison of WFXT 40.4 dBu Contours – Needham site (Orange) vs. Needham Heights Interim site (Brown)