**WBTS-LD Application for Construction Permit for Displacement Facility**

**May 9, 2018**

Summary

The purpose of this Special Displacement Window (DA 18-124) application is to request authority to modify the existing license (FCC LMS file number 0000014006) of WBTS-LD, Channel 46, Boston, MA, Facility ID 64996, licensed to Station Venture Operations, LP. WBTS-LD is being displaced because its current channel 46 is not in the post-repack TV band.

This application specifies a new antenna site in Norton, MA; a change in the community of license from Boston, MA to Providence, RI; a decrease in antenna height above mean sea level; an increase in effective radiated power; and a change in antenna make, model, polarization and radiation pattern.

A TVStudy 2.2.4 analysis based on the May 8, 2018 LMS database using the default 1 km cell size and 1 km terrain profile point spacing for LPTV interference evaluation with the proposed facility at 15 kW effective radiated power (ERP) and stringent emission mask showed the maximum amount of new interference to any existing full power or Class A facility with the exception of WRIW-CD, any authorized post-auction full power or Class A facility, and any pending full power of Class A application was under 0.5%. The analysis also showed the maximum amount of new interference to any existing low power or TV translator facility, any authorized low power or TV translator facility, and any pending low power or TV translator application (as of 4/30/2018) was under 2.0%. This analysis also showed the proposed facility was not mutually exclusive with any displacement window application in the LMS May 8, 2018 database.

Request for waiver of contingent application rule Section 73.3517

Pursuant to paragraph 7 of the February 9, 2018 Special Displacement Window Public Notice, a waiver of the contingent applications rule set forth in Section 73.3517 of the FCC's rules is hereby requested as this displacement application proposes operation on the pre-auction channel for commonly owned WRIW-CD, Providence, Rhode Island (Facility ID 70184), channel 36.

WRIW-CD will terminate operations on its pre-auction channel and commence channel sharing with WPXQ-TV, Block Island, Rhode Island (Facility ID 50063) and its channel sharing partner WLWC, New Bedford, Massachusetts (Facility ID 3978). The target date to commence channel sharing is July 20, 2018 (see File No. 0000053634, granted May 7, 2018).

In order to comply with Section 73.3700(g)(2) of the FCC's rules, WBTS-LD hereby agrees that it will not begin transmitting on channel 36 prior to discontinuation of operation by WRIW-CD on channel 36. In cases where an operating LPTV station that is displaced requests waiver of the contingent application rule to permit the LPTV station to continue serving its current viewers, as is the case here, the FCC expects to look favorably on such waiver requests. Accordingly, WBTS-LD hereby requests that the FCC waive the contingent applications rule set forth in Section 73.3517 of the FCC's rules.

Proposed Site (40.75 km from current community of license reference coordinates)

This application proposes moving the WBTS-LD transmitter from its location in Needham, MA at 42º 18' 37.0" N, 71 14' 12.0" W to a tower in Norton, MA at 41º 59' 49.0" N, 71 09' 14.0" W. This location is 40.75 km (25.32 miles) from the current community of license (Boston) FCC Rules Section 76.53 reference coordinates of 42° 21′ 24″ N, 71°03′ 25″ W and

thus complies with the displacement rules outlined in the Special Displacement Window Public Notice paragraph 6.

Antenna System

The proposed facility will use a Dielectric TLP-4F/VP-R directional antenna with elliptical polarization, 1.45 degrees of electrical beam tilt, and no mechanical beam tilt. The main beam azimuth pattern is entered in the Directional Antenna Relative Field Values section of "Antenna Technical Data" in Schedule A. The "Elevation Radiation Pattern" question "Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?" was answered "Yes" solely for the purpose of uploading the elevation pattern data to allow a more accurate representation of the proposed facility's coverage and interference. The elliptical polarization proposed has a maximum ERP of 15 kW horizontally polarized and a maximum ERP of 7.5 kW vertically polarized.

Environmental Statement

The requested facility will use an existing FCC registered tower (ASR # 1049262) and will not increase the height of the tower with appurtenances above the height with appurtenances specified in the ASR. During preparation of this application some minor differences were discovered between the current ASR and existing tower. The tower owner, CCATT LLC, will be modifying the ASR to reflect those changes. These modifications will not change the height of the antenna AMSL nor change the location by more than one half second of latitude and longitude.

RF power density from the facility was calculated using the procedures in FCC Office of Engineering and Technology Bulletin 65. The maximum power density on the ground, power poles and buildings around the site, allowing for 2 meter person height plus an additional 14 meters for exposure on building rooftops and power poles, is calculated to be 0.01301 $mW/cm^2$ or 3.23% of the FCC maximum permissible exposure level of 0.403 $mW/cm^2$ at 605 MHz for an uncontrolled environment.

At full power, RF power density from the proposed facility is calculated to be below occupational exposure levels in the main beam of the antenna at distances greater than 20 meters from the antenna and below the public exposure level for an uncontrolled environment at distances greater than 44 meters from the antenna. There are no towers or surrounding structures in the main beam of the antenna less than 44 meters from the WBTS-LD tower. WBTS-LD will coordinate with other users at its tower site and reduce power or shut off as required to protect workers on the tower from RF exposure above the limits specified in FCC rule §1.1310. Access to the tower is restricted by locked fence and gate.

Broadcast Facility

*Compliance with Section 74.709*

The channel 36 proposed for WBTS-LD is not allocated for land-mobile operation in any market.

*Compliance with Section 74.793(e) and Section 74.793(f)*

A TVStudy 2.2.4 analysis using the default 1 km cell size and 1 km terrain profile point spacing for LPTV interference evaluation and the facility proposed in this application showed the maximum amount of new interference created to any existing full power facility, any

authorized post-auction full power facility, and any pending full power applications in the LMS database dated May 8, 2018 was under 0.5%.

*Compliance with Section 74.793(g)*
A TVStudy 2.2.4 analysis using the default 1 km cell size and 1 km terrain profile point spacing for LPTV interference evaluation and the facility proposed in this application showed no new interference above 0.5% to any currently authorized Class A TV facility or to any pending Class A TV station application in the LMS database dated May 8, 2018 with the exception of WRIW-CD (Facility ID 70184).

See “Request for waiver of contingent application rule Section 73.3517” on the previous page. WBTS-LD agrees not to begin operation on channel 36 until WRIW-CD has vacated the channel, in compliance with Section 73.3700(g)(2).*Compliance with Section 74.793(h)*

A TVStudy 2.2.4 analysis using the default 1 km cell size and 1 km terrain profile point spacing for LPTV interference evaluation and the facility proposed in this application showed no new interference above 2.0% to any authorized low power TV, TV translator, digital low power TV, or digital TV translator facility in the LMS database dated May 8, 2018. The proposed facility was not mutually exclusive with any low power TV, TV translator, digital low power TV, or digital TV translator application in the LMS database dated May 8, 2018.

Exhibit prepared by:
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