

WSCV Application for CP for New Digital Auxiliary Facility

June 1, 2022

Engineering Exhibit

The purpose of this application is to request a new digital auxiliary for WSCV, Fort Lauderdale, FL, Facility ID 64971, licensed to NBC Telemundo License LLC. This application does not replace or modify the existing digital auxiliary construction permit LMS File Number 0000118120.

This application proposes installing a new digital auxiliary facility at the American Tower site (ASR #1026553). The proposed antenna center of radiation will be 258.7 meters AMSL with a height above average terrain (HAAT) of 256.9 meters

A TVStudy 2.2.5 analysis of the proposed facility using the default 2 km cell size and 1 km terrain profile spacing showed no increase in interference created to any application or authorized facility in the LMS database dated June 1, 2022.

Antenna System

The proposed facility uses an RFS RD16C170500620HDS side mounted antenna with 0.6 degrees electrical beam tilt and no mechanical beam tilt. The main beam axis of symmetry is 286 degrees.

Tabular and plotted antenna data is attached. The antenna will be horizontally polarized. Main beam azimuth and azimuth plots and tabulations are included in the attached 73.625(c) data.

In the "Antenna Technical Data" section the question "Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?" is checked "Yes" solely to allow upload of elevation pattern data to provide more accurate coverage and interference analysis and not because of a variation in elevation pattern.

Environmental Statement

The requested facility will replace an existing antenna on an existing tower at a site shared by other broadcasters. No new tower construction or increase in height is required for this application.

RF power density from the facility using the maximum ERP of 380 kW was calculated using the procedures described in FCC Office of Engineering and Technology Bulletin 65. The maximum calculated RF power density on the ground from the proposed facility, in any location around the tower, after including an additional 2 meters for the height of a person and an additional 61 meters to allow for surrounding neighborhood building roof tops and other structures is 0.000779 mW/cm² or 0.21% of the public exposure limit for an uncontrolled environment as specified in FCC rule §1.1310 for WSCV's frequency of 569 Mhz. The tower itself is protected by a fence and gate and is not accessible to the general public.

RF exposure in the main beam of the antenna is calculated to drop below the maximum permissible occupational limit for a controlled environment at horizontal distances greater than 82 meters from the tower and below 5% Of the public exposure limit at distances greater than 819 meters from the tower. The tower is shared with other facilities and power will be reduced or shut off as required to protect workers on this tower from RF exposure above the limits specified in FCC rule §1.1310 There are no structures above 61 meters in height within 819 meters of the tower.

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Broadcast Facility

Compliance with 73.616:

A study using TVStudy 2.2.5 and the FCC LMS database dated 06/01/2022 showed the proposed facility complies with the interference requirements of Section 73.616 with regards to any applications or authorized facilities when studied with the default settings of 2 km cell size and 1 km terrain profile point spacing. As shown on the attached map, the proposed digital auxiliary contour does not exceed the WSCV licensed service area contour in any direction.

Compliance with 73.622(i):

The proposed facility will operate on the channel currently assigned to WSCV. The coverage area will not exceed that of the WSCV licensed service area contour.

Compliance with 73.623(e):

Not applicable. This application does not change the assigned channel or location of the authorized station.

Compliance with 73.625:

The proposed facility will place a 48 dB μ v/m principle community contour over Fort Lauderdale, FL, the community of license. See "WSCV Proposed Coverage" map, attached.

Compliance with 73.1030:

A TVStudy analysis did not show a requirement for notification or coordination with any facility listed in Section 73.1030.

Compliance with 73.1125:

The WSCV main telephone number, (954) 622-6000, is a toll free call from Fort Lauderdale, FL, the community of license.

