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NORTHEASTERN PENNSYLVANIA TV ASSOCIATION

LICENSEE OF WVIA-TV CH 50

SCRANTON, PENNSYLVANIA

and

LICENSEE OF W47DH-D

CLARKS SUMMIT, etc, PA

FAC ID# 167207

FCC FILE # BLDTT-20090916AAI

**APPLICATION FOR A TRANSLATOR DISPLACEMENT CP AS A
RESULT 600 MHz Band NOTIFICATION OF OPERATION LETTER
RECEIVED DECEMBER 16, 2017**

EA AND RFR EXHIBIT

December 26, 2017

NORTHEASTERN PENNSYLVANIA TV ASSOCIATION
LICENSEE OF W47DH-D CLARKS SUMMIT, PA
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APPLICATION FOR A TRANSLATOR DISPLACEMENT CP
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ENVIRONMENTAL CONSIDERATIONS

FCC Rule, Section 1.1307

An environmental assessment (“EA”) is categorically excluded under Section 1.1306 of the FCC Rules and Regulations because the tower structure is existing and will not be modified so as to invoke the need for environmental analysis. The existing tower is only 23 meters tall and is not required to be registered with the FAA nor FCC. This application is for a simple existing antenna replacement and there is no change in height of the existing structure nor is there any ground disturbance required. It was not constructed during 2001-2005 and thus is not a “twilight tower.”

There will be no material change in visual appearance, since one antenna is being substituted for another with no increase in overall structure height.

RF SAFETY CONSIDERATIONS

With calculations performed utilizing OET Bulletin 65, Edition 97-01, Equation 10 and Tables 9 and 10 in Supplement A, I have evaluated the radiofrequency energy radiation from the antenna system of proposed WNEW29 modification follows:

The proposed W29NEW) is one of several low power TV broadcast antennas at the station location required to be considered by 47 CFR 1.1307(b).

MODIFICATION OF PROPOSED OF W47DH-D (W29NEW)

W29NEW, Channel 47, is proposing to change operations during the Repack to Channel 29 and utilize an average ERP of 0.703 kilowatts (DA) with horizontal polarization.

W29NEW PROPOSED OPERATION

The proposed W29NEW, CH 29 transmitting antenna is a high gain unit with an elevation power gain of 10X side mounted with a base approximately 15 meters above ground. Because of the high gain, the ERP at angles departing +/- 40 degrees from the horizon is attenuated by a minimum of 10 dB. For occupational/controlled environment (1.89 mW/cm^2 at 568 MHz) and utilizing Equation 10 of OET Bulletin 65 and allowing for 10 dB at steep angles, the required physical separation is 1.12 meters. For general population/uncontrolled environment (0.378 mW/cm^2), the required physical separation is 2.5 meters. Since the base of the antenna is 15 meters above ground, the height of the structure limits the possible excessive radiation values to at least 12.5 meters above the ground. Again using Equation 10 of OET Bulletin 65, and using the total RF power corrected for steep angles, the *actual predicted RF level at 2 meters about the ground from the proposed W29NEW) is 14 uW/cm^2 or 3.7 % of the total allowable at 568 MHz.*

The replacement of the CH 47 antenna with the new CH 29 antenna for W29NEW is calculated to contribute less than 3.7% of the allowable RFR energy at ground level in the vicinity of the existing tower for the general public/uncontrolled space.

CONCLUSIONS ON RFR ANALYSIS

Based on the on the calculations included herein, I believe that the W29NEW transmission system and tower is and will continue to be in compliance with 47 CFR 1.1307 and FCC OET Bulletin 65 with the addition of the proposed modified W47DH-D.

The antenna supporting structure is enclosed by a chain-link fence to prevent unauthorized access. As a precaution to employees, a suitable sign is posted at the base of the tower alerting maintenance personnel to the presence of RFR energy so that appropriate action can be taken when access on the tower above ground is required.

Also not all broadcast transmitters co-located on the site are owned by the applicant. The applicant further states that he is a party to electromagnetic radiation abatement plan to educate employees and workers as to the potential hazards when working on the tower. During periods of maintenance where workers on the tower could be exposed to excessive levels of RFR energy, any transmitting system that could pose a hazard will be either turned off or reduced in power to insure that workers are not subject to excessive values of radiofrequency energy radiation.

With these procedures in place, we believe the proposed W29NEW operation will be in compliance with the radiofrequency energy radiation exposure requirements of 47 CFR 1.1307(b).

FAA NOTIFICATION AND FORM 854-R

The FAA has not been notified as the existing structure is only 23 meters (75.44 ft) high and is not being increased in overall height.