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ENGINEERING STA REQUEST
WJLP (DTV) CHANNEL 3
MIDDLETOWN TOWNSHIP, NJ
FCC FACILITY ID 86537

ENGINEERING STA STATEMENT - MARKET RESCAN PERIOD

NARRATIVE

PMCM TV, LLC., licensee of WJLP Middletown Township, New Jersey proposes a short term temporary operation at its licensed antenna site, using its licensed antenna system an effective radiated power (ERP) of 26.5 kilowatts.¹ No other changes are proposed.

Extraordinary Circumstances & Public Interest:

PMCM TV, LLC, holds a construction permit that authorizes modification of its current facility license to operate at WTC-Freedom Tower (LMS file number 0000035766).

That authorization is part of a mutual power increase agreement and the associated minor change applications of WJLP, Channel 3, Middletown Township, NJ, and the immediate adjacent channel facilities of WDPN-TV (formerly KJWP), Channel 2, Wilmington, DE, WACP Channel 4, Atlantic City, NJ.²

WJLP has however experienced delays in its construction that may last several more months as result of unforeseen construction modifications made by the building owners concerning the antenna mounting design at WTC-Freedom Tower, and more recently the availability of approved tower crews during the Television Channel repack period as discussed in its public interest showing elsewhere in this application.

¹ WJLP, currently has an existing STA to operate using its licensed antenna system at 15-kilowatts. The requested STA is a short term request to operate at 26.5 kilowatts using the same transmission system, during the Phase 4 television transition/repack period.

² A fourth station, WVIR-TV, Channel 2, Charlottesville, VA is also part of the mutual power increase agreement, but does not (due to its physical distance) affect the operation of WJLP.

As noted in its public interest showing, the New York City market is part of the Phase 4 Television channel repack transition which is scheduled to be completed by August 2, 2019.

The Phase 4 testing period is scheduled to start on June 22, 2019, 37-days before the end of the phase transition period.

During the phase 4 testing period and for sometime after, it can be expected that the viewing public will initiate the process of channel rescanning on their individual television receivers as stations move to their new channel assignments. Particularly just before the end of the transition period as the public become aware via the required over-the-air public service announcements of the pending channel change.

WJLP seeks to ensure that during this market wide channel rescanning period that its signal is at or near parity with that which it would have enjoyed from its Construction Permit site at World Trade Center (Freedom Tower) had completion of its build-out not been delayed by the availability of qualified tower crews. In particular, those viewers in the heavily populated areas to the south (New Jersey) of its transmission facility.

The ERP requested in this short duration STA matches to the extent possible the authorized service contour of the WTC/Freedom tower facilities as shown in the attached service map over the southern service area.³ No other facilities are impacted by this request that are not a part of the underlying mutual interference agreement.

While the ERP requested is slightly below that in which an ideal match of the southern contour would occur, it represents that maximum ERP that can be obtained from the antenna system (transmitters and antennas) at 4-Times Square.

The impacted area is that area in which the current STA at 15 kilowatts falls inside the southern contour from WTC (beginning on the east side and extending around to the northwest). This area depending on the contour discrepancy between the WTC construction permit contour and the 15-kilowatt currently authorized STA contour would be underserved by as much as 2.5 dB (a 33% reduction in available signal voltage at the receiver input). A

³ Minor deviation between the predicted service contours are a result of differences in the site locations and the resulting terrain path profiles.

discrepancy that could result in thousands of receivers failing to lock onto the WJLP signal. The market rescan period is as if all over-the-air viewers in the market bought a new television and are setting them up for the first time. Once the channel has been locked into the television sets channel memory it will remain until the viewer initiates another rescan.

Service beyond the WTC Construction permit contour will occur on the north side of the service area. This is a temporary short duration condition in which TVStudy reports no impact on other facilities.

Environmental Impact:

No new construction will occur at the 4-Times Square site that would trigger an environmental review. The increase in ERP will not result in an increase above the limits for controlled or uncontrolled areas. Power density contribution from the proposed operation was computed using the appropriate equations of the OET Bulletin 65. The maximum radiated power is 26.5-kilowatts (53-kilowatts H+V). Using a "worst-case" relative field pattern of 0.25 for all values 30 degrees and greater below the horizon, the power density was computed at a level of 2 meters above the building's rooftop to be 0.003 mW/cm² or 0.03% of the recommended limit of 1.0 mW/cm² for a controlled area, and 1% of the recommended limit of 0.2 mW/cm² for an uncontrolled area. No further study is required. The rooftop is fully secured, and a power density monitoring device is in service at the roof access point.

May 16, 2019

Respectfully Submitted,
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A handwritten signature in blue ink that reads "Timothy Z. Sawyer". The signature is written in a cursive style with a large initial "T" and "S".

Timothy Z. Sawyer

RECEIVERS WITHIN THE RESCAN AREA OF CONCERN COULD EXPERIENCE UP TO A 2.5 DB DIFFERENCE AT THE RECEIVER INPUT BETWEEN THE EXISTING STA POWER OF 15 KW AND A TEMPORARY RESCAN POWER OF 26.5 KW

AREA OF CONCERN - RESCAN UNDER VOLTAGE AT RECEIVER TERMINALS IN COMPARISON WITH AUTHORIZED SIGNAL FROM CP AT WTC 28 DBU FCC F50,90 CONTOUR

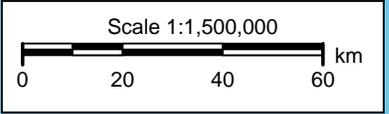
ORANGE AREA TEMPORARILY EXCEEDS CP AUTHORIZED CONTOUR DURING THE RESCAN PERIOD. NO OTHER FACILITIES ARE IMPACTED BY THIS SHORT DURATION TEMPORARY POWER INCREASE.

TEMPORARY RESCAN 26.5 KW 4TIME SQ

POPULATION WITHIN RESCAN AREA OF CONCERN
Population: 12,364,729 (2010 CENSUS)
Housing Units: 4,931,844

EXISTING STA 15 KW
BLACK CONTOUR

CP WTC SITE
9 KW RED CONTOUR



9KW CP WTC (RED CONTOUR)
26.5 KW TEMPORARY STA 4TIMES SQUARE

