

TECHNICAL SUMMARY
APPLICATION FOR MODIFICATION OF CONSTRUCTION PERMIT
LMS FILE NO. 0000034619
TV STATION WYCI
SARANAC LAKE, NEW YORK
CHANNEL 34 11.4 KW (DA) 97 m

1. This instant application proposes to modify the WYCI construction permit (CP, LMS File No. 0000034619, Facility ID 77515) on channel 34 at Saranac Lake, New York. Specifically, it is proposed to operate on channel 34 from WYCI's licensed channel 40 transmitter site (FCC File No. BLCDDT-20100301ADR) using the currently licensed MCI model 955000-LP 1x2 Array directional antenna (DA) with an RCAMSL of 647.8 meters (same as current license), a DA maximum ERP of 11.4 kW and an HAAT of 97 meters. There will be no change in the overall structure height of the existing tower that will be utilized for the proposed operation (no ASRN).

2. Freeze Compliance: Figure 1 shows the predicted NLSC contours for the CP and proposed WYCI operations. As indicated, the proposed NLSC contour is entirely within the licensed NLSC contour. Therefore, the proposal complies with the FCC's 4/05/2013 Freeze Order Public Notice (DA 13-618).

3. As demonstrated in the *TVStudy* analysis exhibit, the proposal complies with the FCC's interference protection requirements based on a cell size of 2 km and profile resolution of 1 point/km.

4. RFR Compliance: The proposed facilities were evaluated in terms of potential radiofrequency radiation (RFR) exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna will be located 26.8 meters above ground level. The total DTV ERP is 11.4 kW (horizontal polarization only). A conservative vertical plane relative field value of 0.15 is presumed for the antenna's downward radiation in both the horizontal and vertical planes of polarization (for angles below 60 degrees downward). The calculated power density at a point 2 meters above ground level is 13.9 $\mu\text{W}/\text{cm}^2$ which is 3.5% of the FCC's recommended limit of 395.3 $\mu\text{W}/\text{cm}^2$ for channel 34 for an uncontrolled environment.

Access to the transmitting site is restricted and appropriately marked with RFR warning signs. Furthermore, as this is a multi-user site, a formal RFR protection protocol is in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measure will be taken to assure worker safety with respect to RFR exposure. Such measures include limiting the exposure time, wearing protective clothing, reducing power to an acceptable level or termination of transmitter output power all together until workers leave the restricted area.