

KHRR Request for Special Temporary Authority For Interim Antenna January 15, 2018

The purpose of this application is to request authority to use an interim antenna at reduced power for operation on the pre-repack channel 40 for KHRR, Tucson, AZ, Facility ID 30601, licensed to NBC Telemundo License LLC. KHRR must remove its current channel 40 main antenna and replace it with a new antenna for operation on its post repack channel 16. A grant of this application is in the public interest as it will allow KHRR to complete installation of its channel 16 antenna by the phase 1 deadline without requiring the station to cease operation during the period between removal of the channel 40 main antenna and the beginning of KHRR's operation on channel 16 which will be on or before the phase completion deadline of 11/30/2018.

Interim Facility

The requested interim facility will use a Dielectric TUA-C2-5/10H-1-S broad-band panel array with a cardioid pattern with a radiation center 40.4 meters above ground and 1366.9 meters above sea level for a height above average terrain of 601 meters as calculated by TVStudy 2.2.4. The effective radiated power will be 273.7 kW, horizontally polarized.

The contour of the interim facility does not exceed that of the licensed KHRR main facility in any direction. As shown on the attached map, the community grade contour of the interim facility will completely enclose KHRR's community of license as well as the KHRR main studio.

Environmental

The proposed interim antenna will be mounted on an existing registered tower (ASR # 1218276) in an antenna farm that is not accessible to the general public and protected by fencing and locked gates.

The maximum RF power density from the proposed facility on the ground surrounding the tower as calculated using the procedures in FCC Office of Engineering and Technology Bulletin 65 and allowing for a person 2 meters tall and terrain variation of 4 meters is 0.426 mW/cm^2 , which is 20.34% of the limit of 2.097 mW/cm^2 for occupational exposure in a controlled environment and 101.7% of the limit of 0.419 mW/cm^2 for public exposure in an uncontrolled environment as defined in Section 1.1310 of the FCC Rules for maximum permissible exposure at 629 MHz. RF power density on the ground from this facility is calculated to be less than 5% of the public exposure limit except for areas between azimuths 330 degrees and 179 degrees at distances less than 67.5 meters from the tower. These areas are not accessible to the general public and the area is protected with a fence and appropriate warning signs.

RF power density from the proposed interim facility in the main beam of the antenna is calculated to exceed occupational exposure levels at distances 66.1 meters (217 feet) or less from the antenna. KHRR will cooperate with other broadcasters to protect workers on this and surrounding towers from excessive RF exposure and reduce power or shut down as necessary.

Prepared by Doug Lung
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