

EXHIBIT – SPECIAL TEMPORARY AUTHORITY JUSTIFICATION
AND TECHNICAL DETAILS
KRMA-TV
DENVER, COLORADO
FCC FACILITY ID 14040

April 8, 2019

Background and STA Justification

On March 20, 2019 KRMA transitioned to its post-auction assigned channel (CH 33) under STA approved by the commission on March 6. The STA authorizes an interim repack facility with operation at 250 kW ERP using a Micronetixx SFN-2030-5645-16 CH 33 antenna. This ERP is one-fourth of the post-auction authorized ERP of 1,000 kW.

After transitioning to the post-auction channel using this interim facility, KRMA began the replacement of its main transmit antenna with a new Channel 33 antenna and the replacement of 290 feet of rigid copper transmission line, both located on a guyed tower on Mt. Morrison near Idledale, Colorado with FCC registration number 1023484. The replacement tower work began on March 29, 2019 and is expected to require until sometime in May 2019 to complete.

Immediately after the transition the station began receiving a significant number of calls from viewers who could not receive the station's signal on the new channel at the reduced power level. Many of these calls were centered on Longmont, CO (population 94,000). These calls continued to be received in the week(s) after the transition.

The interim antenna is capable of an ERP of 500 kW; however, the ERP was limited to 250 kW because the power rating of connectors on an existing transmission line used to feed the antenna limited the input power to no more than 6 kW. This line was used in an economy measure to conserve repack funds. However, with the encouragement of the FCC repack administrator, KRMA has since been able to acquire new transmission line with higher rated connectors.

Accordingly KRMA hereby requests a new STA to authorize an ERP of 500 kW with all other transmission parameters remaining the same. This higher ERP is expected to restore service to many of the viewers who lost service as a result of the transition.

Technical Details

The transmitting antenna is a Micronetixx Model SFN-2030-5645-16 that is mounted on the ice bridge of the existing FCC registered tower. The transmitter site elevation is 2,343 m AMSL. The antenna center of radiation is located at 12 meters above ground level and 2,255 meters AMSL. The facility will operate on Channel 33 with a maximum directional average ERP of 26.99 dBk (500 kW).

The proposed facility provides minimum 48 dBu coverage of Denver, Colorado in compliance with Section 73.625(a)(1) of the FCC rules. Figure 2 in this exhibit is a map depicting the predicted coverage contours of the proposed facility.

The existing structure is registered with the FCC with antenna structure registration number 1023484. There will be no change in the overall height of the antenna structure as a result of this proposal.

The proposed KRMA-DT Channel 33 facility will meet the FCC's requirements for predicted interference to other existing facilities.

Environmental Considerations

The applicant will conduct power density measurements throughout the transmitter site area to confirm compliance with the FCC specified guidelines for human exposure to RF energy. The applicant has made arrangements for site measurements to be made by Pericle Communications, the company that has previously measured and reported on this site.

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Figure 1: Technical Specifications

Channel/Frequency	33/584-590 MHz
Site Coordinates (NAD 27)	39°40'17.4" North Latitude 105°13'8.0" West Longitude
Site Elevation	2,343 m AMSL
Overall Height of Existing Structure	84 m AGL
Overall Height of Support Structure	83 m AGL
Height of Antenna Radiation Center	12 m AGL / 2,355 m AMSL
Antenna Radiation Center HAAT	331 m
Proposed Operation	
Transmitter Power Output	10.79 dBk (12.0 kW)
Transmission Line Loss	.5 dB
Antenna Input Power	10.29 dBk (10.69 kW)
Antenna Maximum Gain (Micronetixx SFN-3020-5456-16)	16.70 dB
Maximum Directional ERP	26.99 dBk (500 kW)

FIGURE 2: PREDICTED COVERAGE CONTOURS

