

Engineering Statement in support of  
FCC FORM 349  
APPLICATION FOR AUTHORITY TO  
CONSTRUCT OR MAKE CHANGES  
IN AN FM TRANSLATOR  
OR FM BOSTER STATION  
(For Minor Change in licensed facility)  
K240BD 240FX, Facility ID 33804

**Introduction:**

This is an application by 1TV.com, Inc. (the Applicant) for a minor change in K240BD 240FX, Facility ID 33804.

The applicant proposes the following changes:

- Increase ERP from 0.200 kW to 0.250 kW.
- Reorient the antenna to 242 degrees.

The facility is 206 km from the international border with Mexico. No part of the proposal's 60 dBu contour is within 116.3 km of the Mexican border.

The proposed changes are minor since there is no change in channel or location.

The proposal will continue to operate as fill-in translator for KHOT-FM. See Exhibit 10.

The proposed facility is within the protected contour of 2<sup>nd</sup> Adjacent authorization, KYOT-FM, 238C, and is collocated with 3<sup>rd</sup> adjacent application, BNPFD-20030317EIU. The area of interference is in the Usery Mountains. There are no occupied structures in the area of interference. The only road in the interference zone is the communications facility access road. See Exhibit 12a.

This application was prepared using FCC 30-arc-second terrain data.

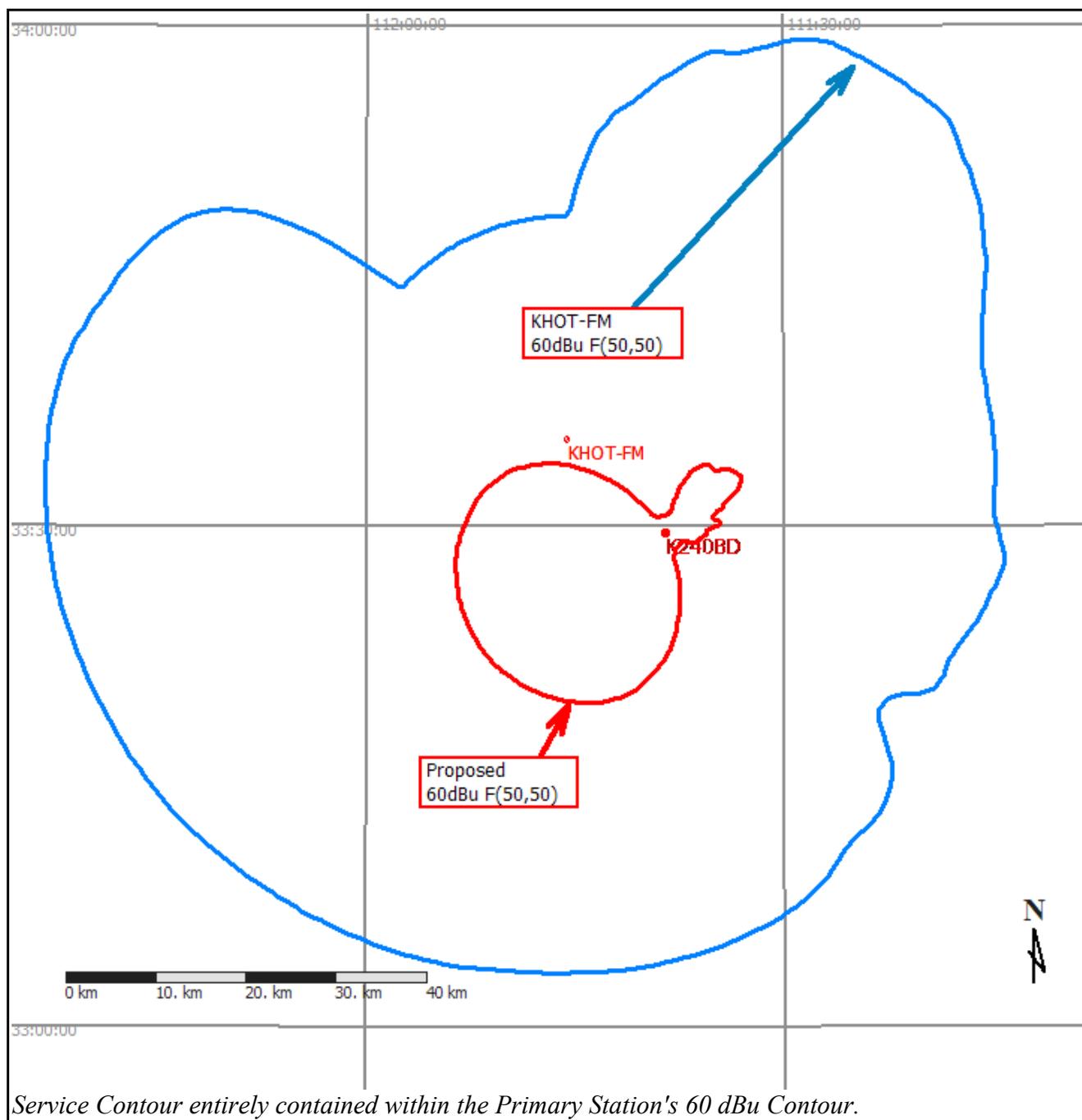
Joseph M. DiPietro, P.E.  
RFEngineers, Inc.  
October 12<sup>th</sup> 2009

### Section III-A Engineering Data:

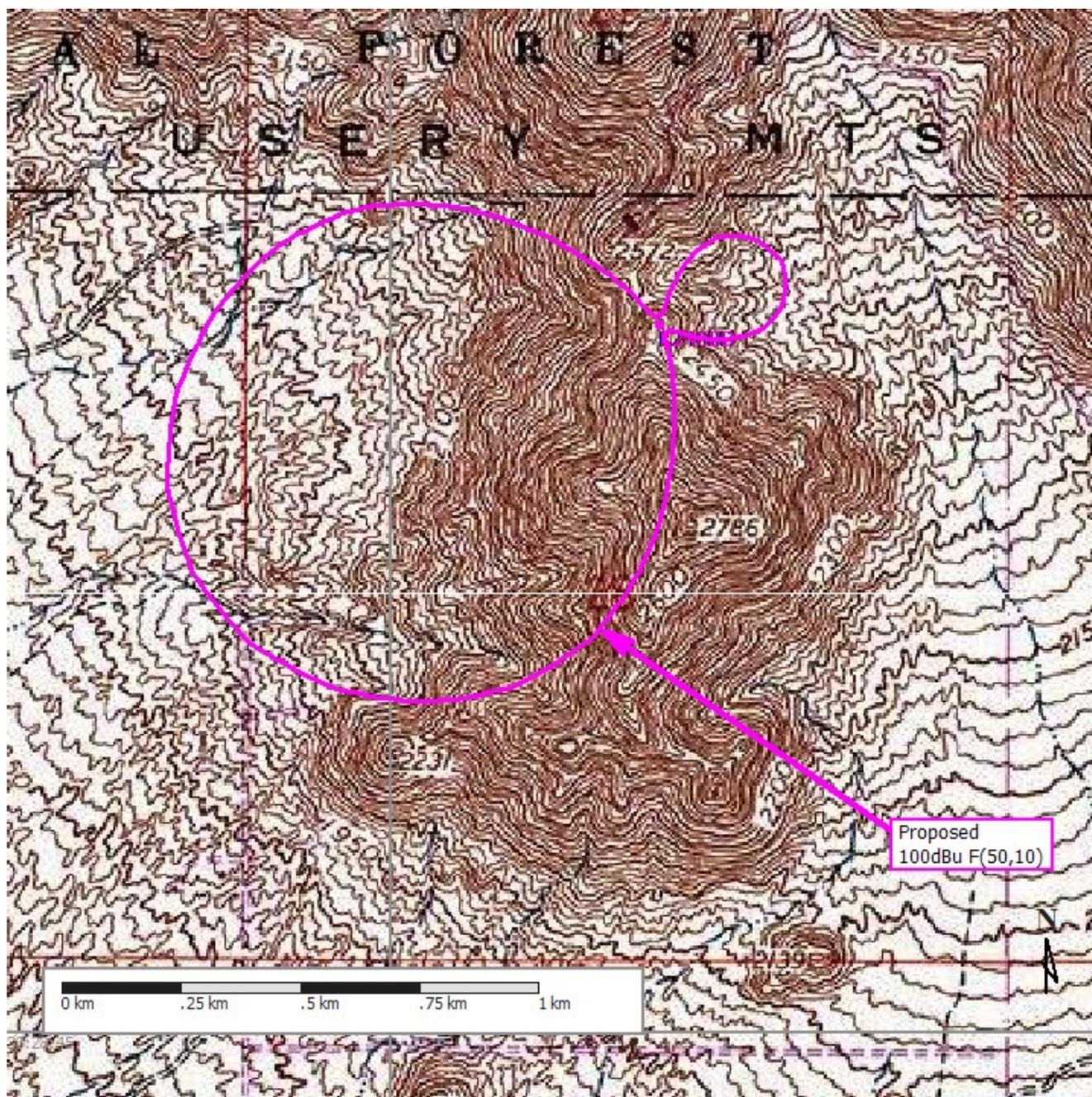
#### Tech Box Data:

1. Channel: 240
2. Primary Station: Facility ID 59422, Callsign KHOT-FM, Paradise Valley, Arizona Channel 290C2
3. Delivery Method: Off Air
4. Antenna Location Coordinates: 33° 29' 33" N (NAD-27)  
111° 38' 23" W
5. Antenna Structure Registration Number: N/A
6. Antenna Location Site Elevation: 762 meters AMSL
7. Overall Tower Height: 46 meters AGL
8. Height of Radiation Center: - meters (H) 15 meters (V) AGL
9. Effective Radiated Power: - kW (H) 0.250 kW (V)
10. Transmitting Antenna: Directional "Off-The-Shelf" SCA CA-2V, #16130 @242°
11. Booster or Fill-in within protected contour: Yes. See Exhibit 10.
12. Interference: No. Overlap with KYOT-FM and BNPFD-20030317EIU. See Exhibit 12a.
  - a) Contour Overlap Requirements: Checked. See Exhibit 12b.
  - b) TV Channel 6 Protection: Not Checked.
13. Unattended Operation: Yes
14. Multiple Translators: Yes
15. NEPA, Yes.
  - a) Operation of this facility will not have a significant environmental impact. The existing site is located within a remote, mountain-top communications facility. To the best knowledge of the Applicant:
    1. The existing structure is not located in an officially designated wilderness area or wildlife preserve, nor does it threaten the existence or habitat of endangered species.
    2. The proposed changes will not affect districts, sites, buildings, structures or objects significant in American history, architecture, engineering or culture that are listed in the National Register of Historic Places, or eligible for listing.
    3. The site is not located in a flood plain. Nothing is proposed that would require significant changes in surface features such as wetland fill, deforestation or water diversion.
    4. The existing structure does not require markings or lights in accordance with FAA requirements.
  - b) The Applicant will cooperate with all site users, managers and owners with regard to the cessation of operation or the reduction of operating power, whenever it is necessary to comply with the FCC Regulations and Guidelines on Human Exposure to Non-Ionizing RF Radiation.
  - c) The modeled contribution to the RF environment, 2-meters above the ground, by the proposed facility is less than  $9.31 \mu\text{W}/\text{cm}^2$ , or 4.6%, of the maximum permitted value for general public exposure. This result was obtained using the FCC's FM Model program. The antenna was set to a Scala CA-2V. Based on this information the proposed facility is in compliance with 47 C.R.R. Section 1.1306 with regards to radio-frequency electromagnetic exposure.

# Exhibit 10

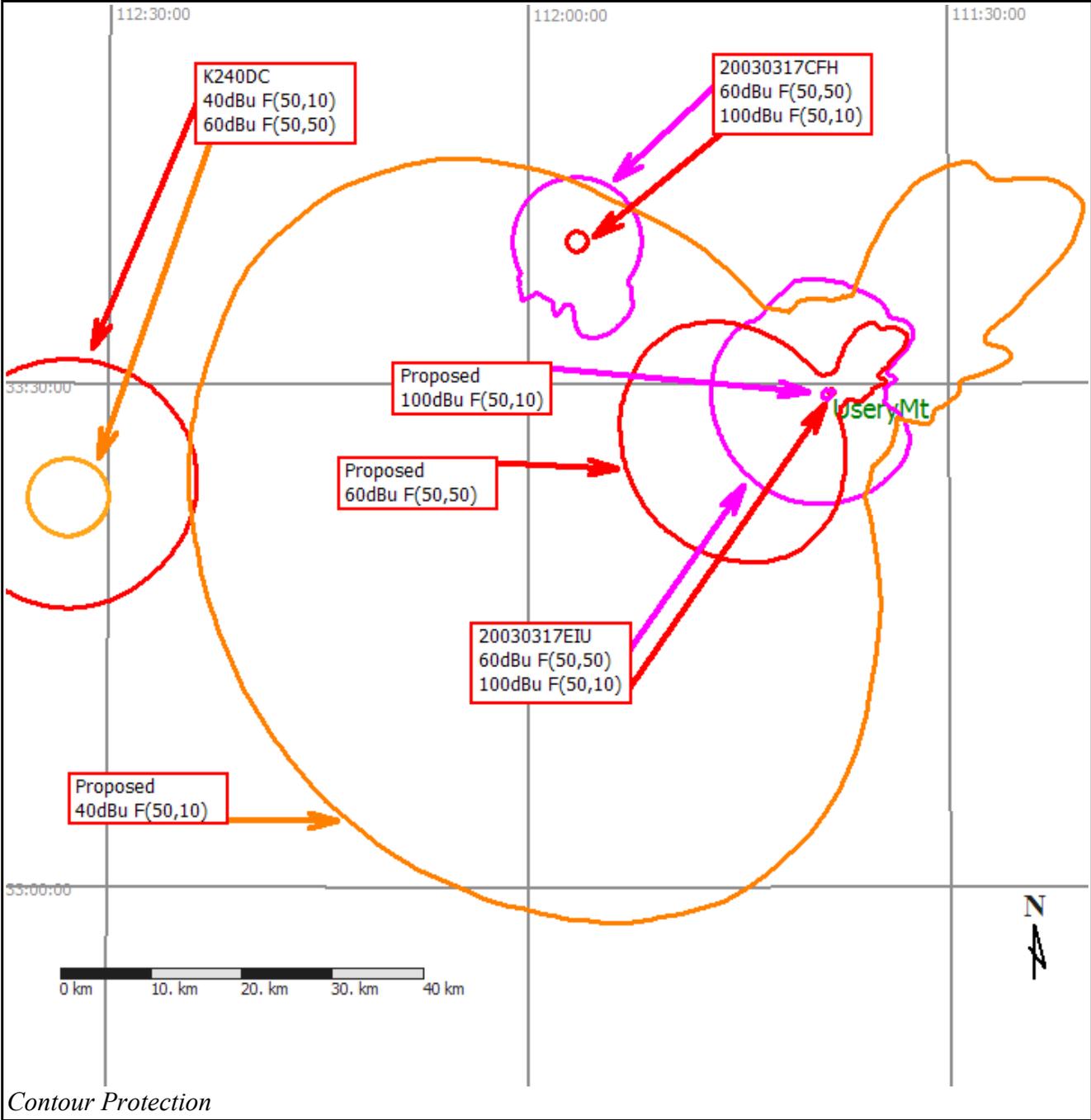


# Exhibit 12a



*No Occupied Structures or Roads within the 100 dBu Interfering Contour.*

# Exhibit 12b



Contours are color coded so that the overlap of LIKE COLORED lines indicates prohibited overlap.