

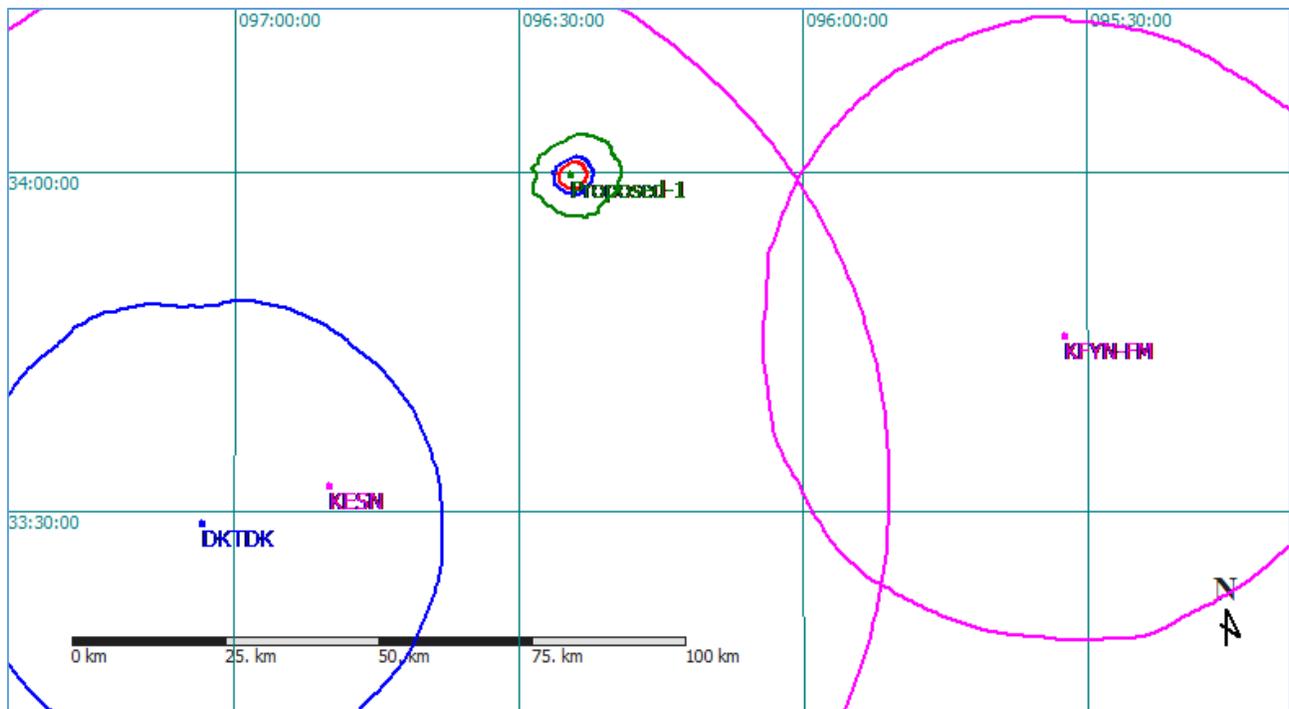
Exhibits  
in support of a  
Minor Modification  
to  
FM Translator Construction Permit  
K280GD

November 14, 2016

## INTERFERENCE AND OVERLAP REQUIREMENTS

The proposed facility will not create prohibited overlap to any other licensed facility or pending application other than to third-adjacent KESN. As more fully discussed below, processing pursuant to 47 C.F.R. § 74.1204(d) is appropriate here.

The study below illustrates that the proposed facility will not create prohibited overlap to any other licensed facility or pending application other than to the KESN.



The green contours represent co-channel interfering (40 dBu) to co-channel protected (60 dBu) contours. Blue contours represent first-adjacent channel interfering (54 dBu) to first-adjacent protected (60 dBu) contours. Magenta contours represent second and third-adjacent channel interfering (100 dBu) to second and third-adjacent protected (60 dBu) contours. Red contours represent co-channel protected (60 dBu) to co-channel interfering (40 dBu) contours.

KESN is authorized to broadcast with 98 kilowatts at 606 meters HAAT from a site that is 64.26 kilometers from the proposed translator site. The predicted strength of KESN at the proposed translator site is 71.4 dBu. Therefore, 111.4 dBu is the lowest value predicted to cause interference to KESN.

The facility proposed herein will operate with an effective radiated power of 1 watt. The antenna will be placed at 40 meters AGL on an existing roof-mounted tower. The top of the roof is 9 meters AGL. Therefore, the antenna will be 31 meters above the surface of the roof. The zone of predicted interference to KESN extends only 19 meters from the antenna. Consequentially, the area of predicted interference is 13 meters above the roof and does not penetrate the building.

The aerial image below demonstrates that no other inhabited structures are in the zone of predicted interference.



The Applicant respectfully submits that since a lack of population exists in the area of actual interference, the processing pursuant to 47 C.F.R § 74.1204(d) is appropriate for the instant application.