

Engineering Statement in support of  
FCC FORM 349  
APPLICATION FOR AUTHORITY TO  
CONSTRUCT OR MAKE CHANGES  
IN AN FM TRANSLATOR  
(Modification of a Construction Permit)  
BNPFT-20130326BCI  
K235CA, Facility ID 153258

**Introduction:**

This is a CP Modification application by KSUX/KSCJ RADIO BROADCASTING COMPANY, INC. (the Applicant) for BNPFT-20130326BCI, Facility ID 153258.

The proposed modification is minor since there is no change in frequency and the proposed service contour overlaps the authorized service contour.

The proposal's 100dBu Interfering contour is contained within KGLI's 60dBu protected service contour. The 100dBu contour is also contained within KGLI's 99dBu protected contour. Therefore, 40dB of interference protection is achieved with a Proposed Interfering contour of 139dBu.

The distance to the 139dBu contour is 12 meters. Since the antenna is to be mounted 58 meters AGL the limit of interference will be 46 meters above ground. Therefore, no actual interference will occur.

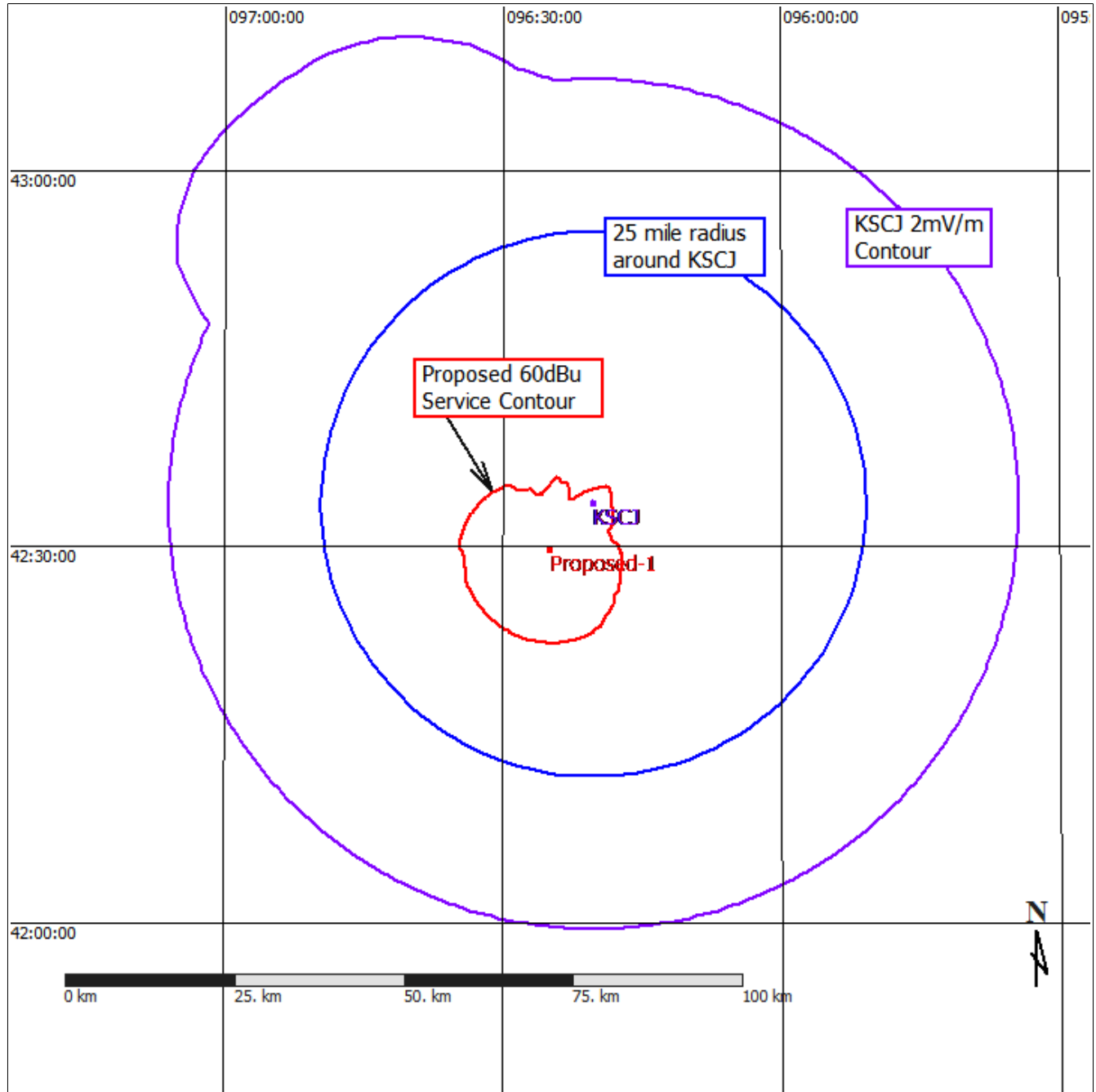
This application was prepared using FCC 30-arc-second terrain data.

### Section III-A Engineering Data:

#### Tech Box Data:

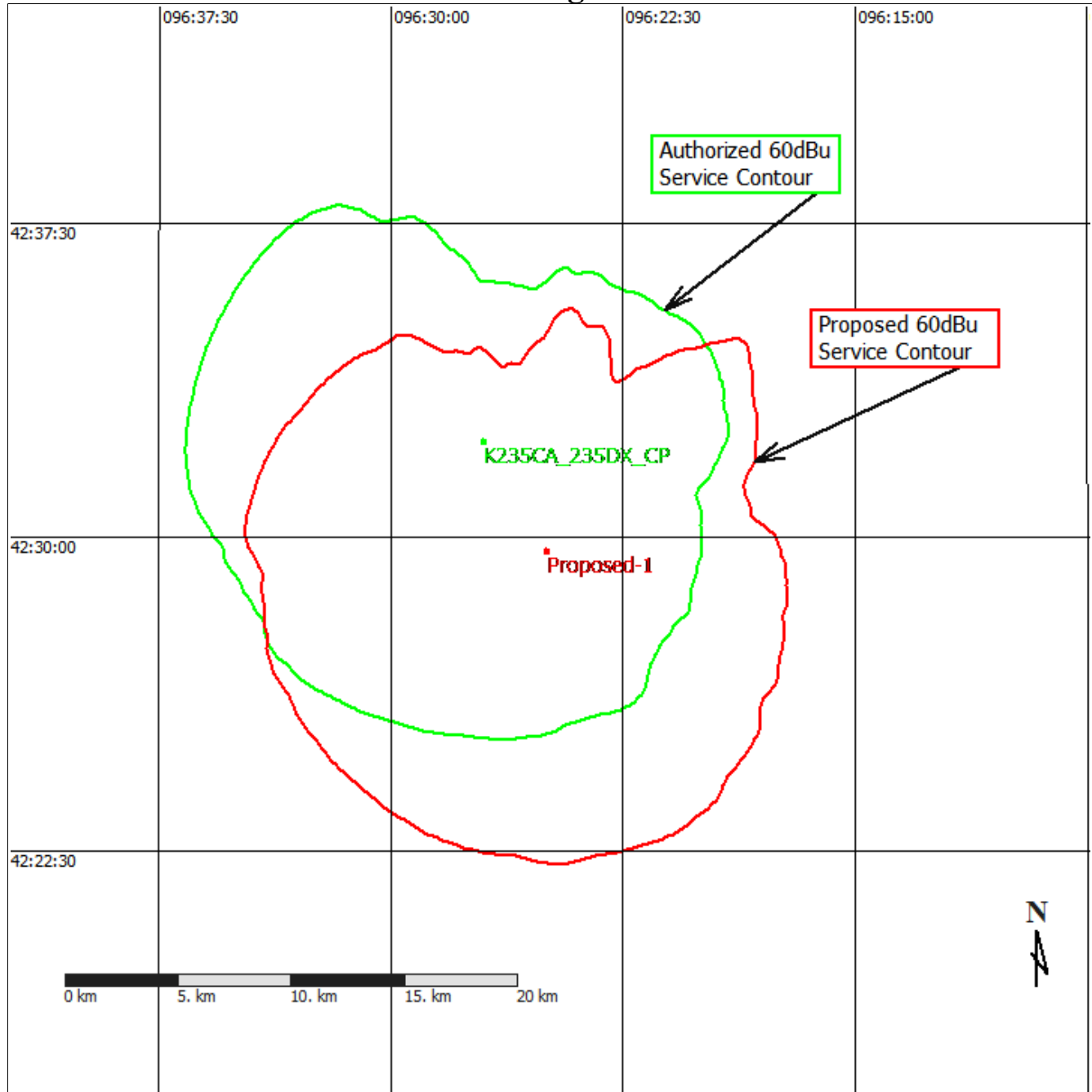
1. Channel: 235
2. Primary Station: Facility ID 21691, Callsign KSCJ, Sioux City IA 1360 kHz
3. Delivery Method: Other
4. Antenna Location Coordinates: 42° 29' 39" N (NAD-27)  
96° 24' 54" W
5. Antenna Structure Registration Number: 1027853
6. Antenna Location Site Elevation: 384 meters AMSL
7. Overall Tower Height: 76 meters AGL
8. Height of Radiation Center: 58 meters (H) - 58 meters (V) AGL
9. Effective Radiated Power: 0.250 kW (H) - 0.250 kW (V)
10. Transmitting Antenna: BEX TFC2K
11. Booster or Fill-in within protected contour: Yes.
12. Interference: No, the proposal's 100dBu Interfering contour is contained within KGLI's 60dBu Protected Contour.
  - a) Contour Overlap Requirements: Checked.
  - 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. This proposal is a collocation on an existing tower. The height of the tower is unchanged by this proposal.
  - 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 proposed site is in compliance with permissible exposure requirements based on calculations using RF Worksheet #1. 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.

## AM Fill-In Exhibit



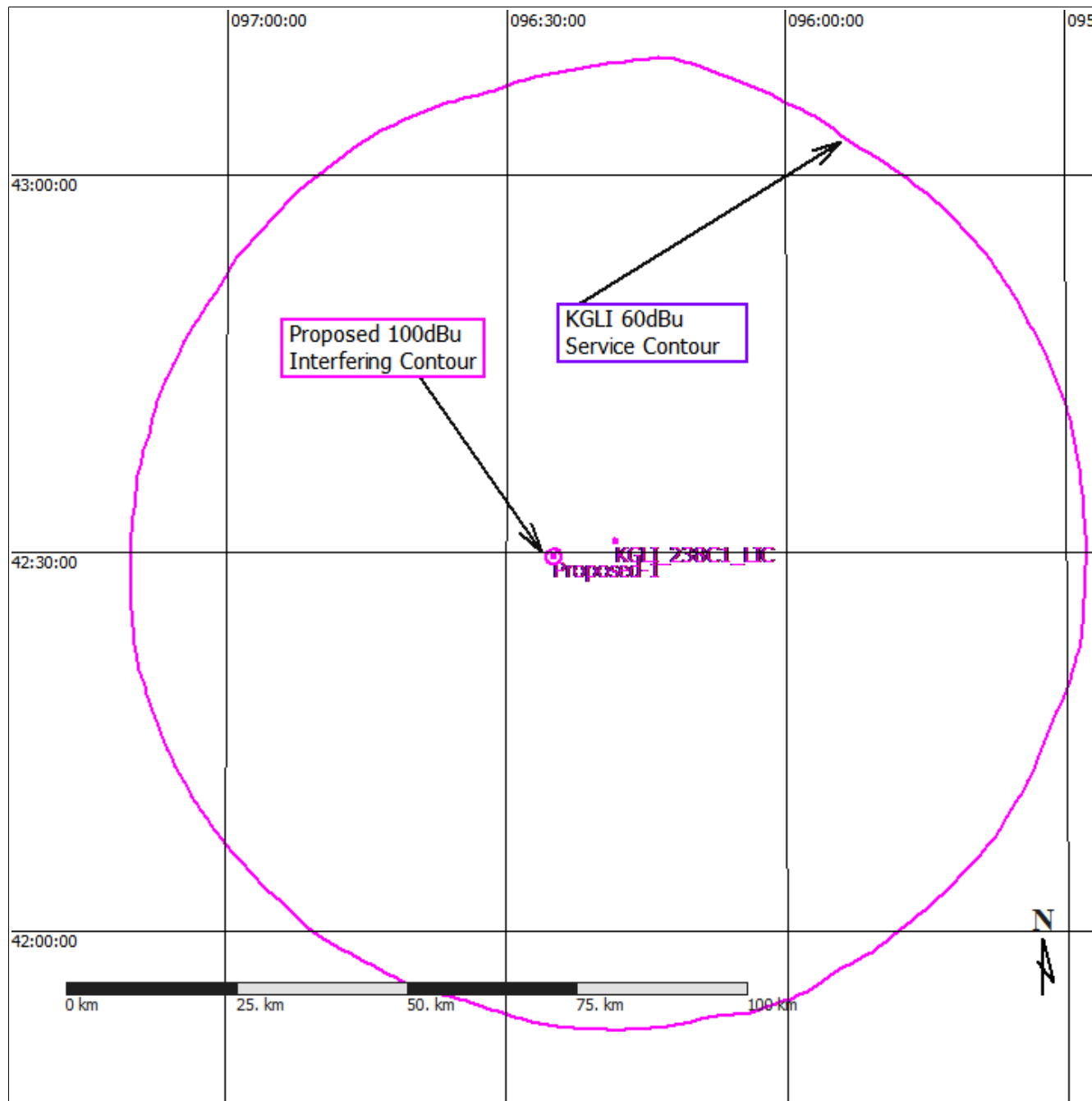
***Translator contour is within the Primary station's 2mV/m contour and does not extend more than 25 miles from the AM transmitter site.***

## Minor Change Exhibit



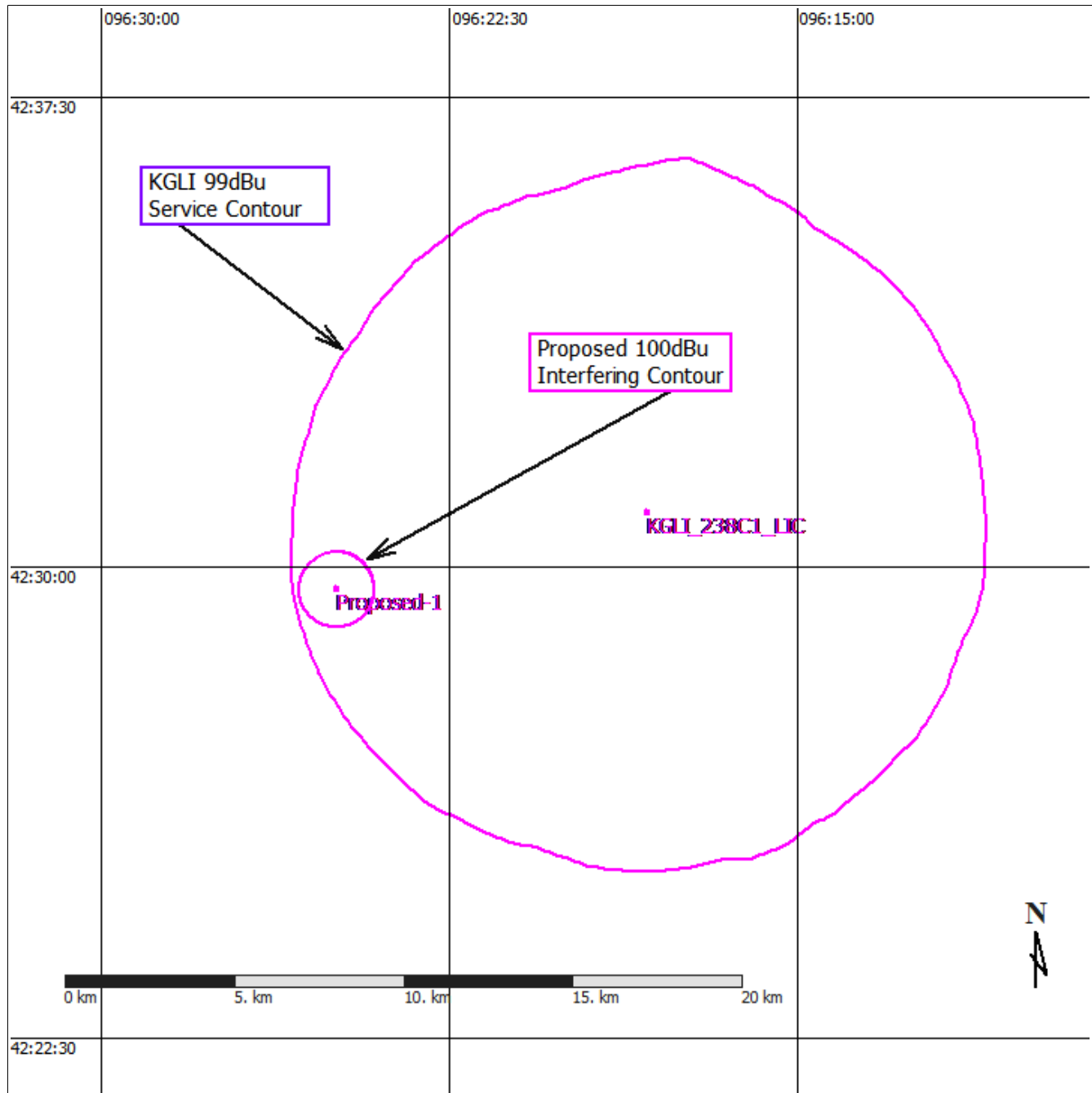
*Proposed Service Contour overlaps Authorized Service Contour.*

## Interference Exhibit



***Proposed 100dBu interfering contour is contained within the 60dBu contour of KGLI.***

## Interference Exhibit



***Proposed 100dBu interfering contour is contained within the 99dBu contour of KGLI.***

## RFR Exhibit

Rad Center Height	58.000	Meters AGL
Building Height	0.000	Meters AGL
Clearance Height	58.000	Meters AGL
Head Height	56.000	Meters AGL
Horizontal ERP	0.250	kW
Vertical ERP	0.250	kW
Total Power	0.500	kW
Power x 33.41	16.705	
line 5 squared	3136.000	
Line-9 / Line-10	0.005	
Percent Exposure	0.533	%