# NIER Report for KJLF, 90.5 MHz, Butte, Montana
# Permit File Number: BPED-20070907AFI
# FCC Facility ID: 93010
# February 10, 2008

The purpose of this report is to fulfill special operating condition number 4 of the above captioned construction permit requiring RF field strength measurements to determine compliance with FCC guidelines for human exposure to RF fields.

KJLF is located at the communications site locally known as XL Heights, approximately 5 air miles east of Butte, Montana. The site is home to Channel 4, 6, and 18 full power analog TV stations along with their respective DTV channels, six full power FM stations, two cellular telephone facilities, and various FM translators, LPTV, and two way communications facilities.

On February 8, 2008, KJLF was operated at 920 watts ERP under equipment test authority while the site was surveyed with a Narda Model 8718B Electromagnetic Radiation Survey Meter (SN 6053) and Narda Isotropic Electric Field Probe Model 8761D (SN 06010). The probe is a flat frequency response model for 300 kHz to 3 GHz. Readings were recorded as $mW/cm^2$.and converted to percentage of the FCC's Public/Uncontrolled Access Limit of 0.2$mW/ cm^2$.

Procedure: The site was traversed using the instantaneous readings of the Narda meter to determine areas of higher RF field. At locations of apparent RF field and also in areas commonly occupied by humans, spatially averaged measurements were taken over a two meter vertical range to simulate human exposure to the apparent RF field using the procedure described in Chapter 7 of the Narda User's Manual, using a 2 to 5 second time interval. Because the RF fields in the area are from FM broadcast, VHF television and UHF television sources, no correction factors were applied. The results of the spatially averaged measurements are tabulated in Table 1. A drawing of the approximate measurement locations is included as Figure 1.

In addition to the spatially averaged measurements, instantaneous measurements were taken to determine possible hazardous conditions near the towers and guy wires on the site.

The site was covered with one to three feet of snow, and the engineer performing the measurements was on snowshoes, so the actual measurements were 0.3 to 1 meter closer to the antenna center of radiation than actual ground level. Any error introduced by this factor should be to increase apparent field strength and thereby add an additional margin of safety for humans in the area.

Conclusions: This survey has determined human exposure to radio frequency radiation in the area is in most cases only marginally above the FCC's limit for public/uncontrolled access sites of 0.2 $mW/cm^2$.

The site has restricted access with a locked gate on the road to the site. Warning signs have been placed on the road to at the actual transmitter site warning of RF levels above the uncontrolled/public limit beyond that point. Warning signs have also been placed on all sides of the site to warn any passers by of the hazard in the area.

Because this site has access controlled by a locked gate on the road to the site, KJLFis in full compliance with the requirements of FCC adopted guidelines for Human exposure to NIER for a controlled access site.

Certification: This work and report was performed by me using industry accepted methodology and the results are true and correct to the best of my knowledge.

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Table 1-- NIER Measurement Data for South end of XL Heights Communications Site

| Location | Spatially Avg. | Calculated | Max Value | Remarks |
|---|---|---|---|---|
| | Value | Value | Instantaneous | |
| | $mW/cm^2$ | % Occ. Limit | %Occ. Limit | |
| 1 | 0.12 | 12% | 17% | 10' West of Door |
| 2 | 0.11 | 11% | 16% | 3' W of KJLF Twr. |
| 3 | 0.3 | 30% | 38% | 4' W of KOPR tw. |
| 4 | 0.28 | 28% | 31% | 4' S of Propane tnks. |
| 5 | 0.17 | 17% | 21% | 8' SW of TX bldg. |
| 6 | 0.19 | 19% | 24% | 15' W of TX bldg. |
| 7 | 0.05 | 5% | 6% | Access Road |
| 8 | 0.27 | 27% | 36% | 12' N of West. Wireless Building |
| 9 | 0.29 | 29% | 75% | 1' from NW KJLF guy anchor |
| 10 | 0.37 | 37% | 101% | 1' from NW KOPR guy anchor |
| 11 | 0.15 | 15% | 19% | 3' from NW KOPR guy anchor |
| 12 | 0.52 | 52% | 63% | 20' N of West. Wireless Building |
| 13 | 0.03 | 3% | 5% | Center of TX Room |
| 14 | 0.06 | 6% | 10% | Behind TX |
| 15 | 0.09 | 9% | 14% | Near KJLF Tower |
| 16 | 0.48 | 48% | 80% | Near KOPR Tower |
| 17 | 0.18 | 18% | 22% | North of Propane Tanks |
| 18 | 0.28 | 28% | 38% | Parking area W.W. Building |
| 19 | 0.3 | 30% | 35% | Between bldg. & KOPR Tower |
| 20 | 0.29 | 29% | 70% | 1' from KJLF S Guy Anchor |
| 21 | 0.15 | 15% | 26% | 1' from KOPR S. Guy Anchor |
| 22 | 0.09 | 9% | 10% | E of KOPR tower, 20' W of p.pole |
| 23 | 0.3 | 30% | 42% | 40’ NW of KJLF tower |

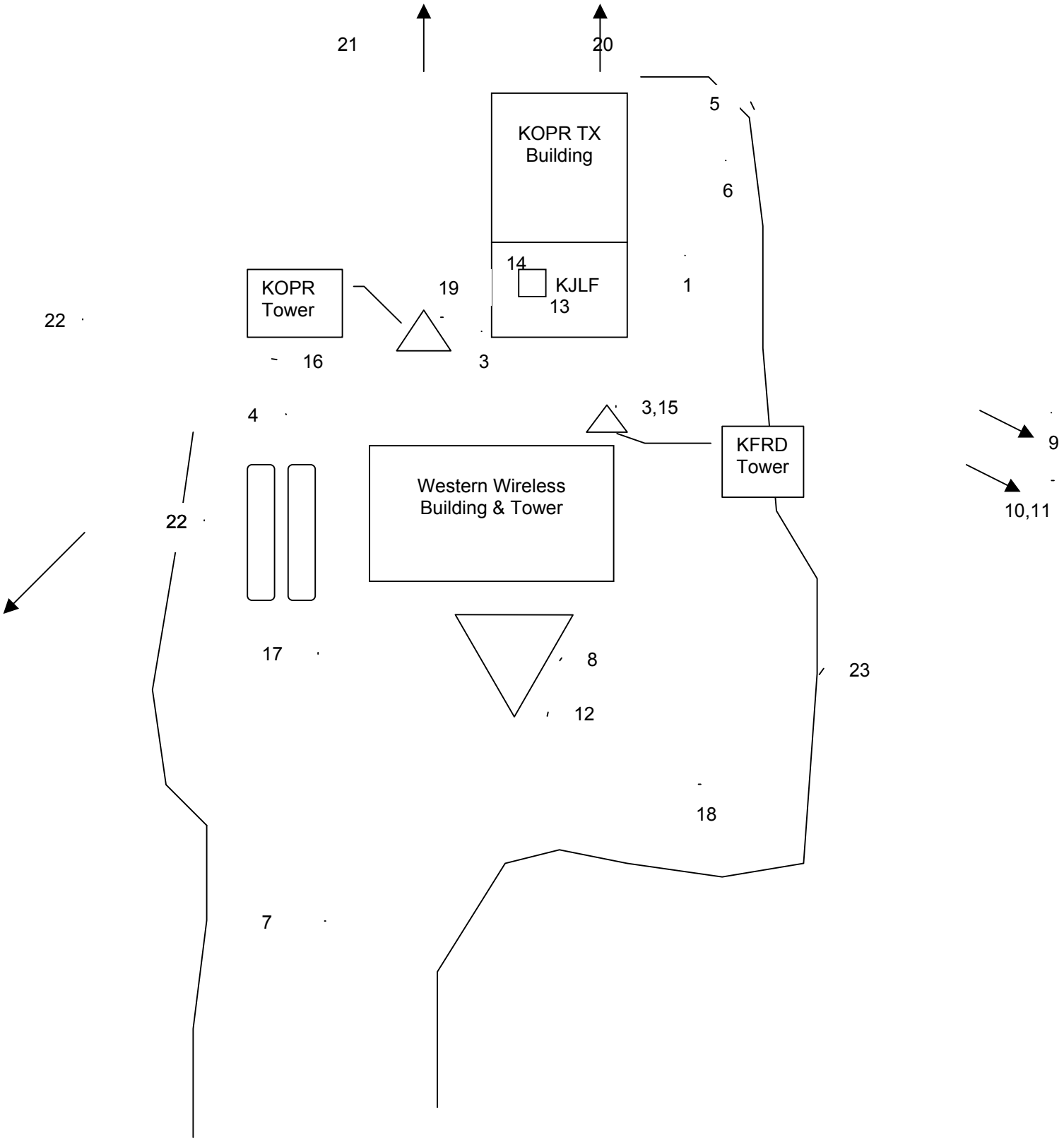


Figure 1-- Measurement locations for NIER survey of KFRD