

TECHNICAL EXHIBIT
DISPLACEMENT RELIEF APPLICATION FOR CONSTRUCTION PERMIT
LOW POWER TV STATION K59GM
FACILITY ID 125591
STATELINE, NEVADA
CH 31 8 KW (MAX-DA)

Technical Narrative

The technical exhibit of which this narrative is part was prepared in support of a displacement relief application for construction permit for licensed (BLTTL-20030822ACF) Low Power TV station K59GM at Stateline, Nevada (Facility ID: 125591).

Displacement Relief Justification

Station K59GM operates on channel 59 (740-746 MHz) which is located within that portion of the TV band (channels 52-69) which has been reallocated for wireless services as a result of the DTV transition. Therefore, pursuant to Section 73.3572(a)(4)(ii), K59GM is considered to be displaced and permitted to file a displacement relief application. Thus, it is proposed to operate K59GM on analog channel 31 from its currently licensed transmitter site location. This application is considered a "minor change" in facilities pursuant to Section 73.3572, as it is a displacement relief application and the proposed 74 dBu contour will overlap a portion of the licensed 74 dBu contour (see Figure 1).

Proposed Facilities

It is proposed to operate on DTV channel 31 (572-578 MHz) using a Scala "off-the-shelf" model PR-450U directional antenna system (antenna ID 23501, orientation 120 degrees true). The maximum ERP towards the radio horizon will be 8 kW, and the maximum ERP at any horizontal or vertical angle will also be 8 kW. The antenna will be mounted at the 11 meter level on an existing 12 meter tower. Based on the FCC's TOWAIR program (see Figure 3), the existing tower does not require registration.

Response to Paragraph 13

The proposed K59GM LPTV facility complies with all the following applicable rule Sections: Sections 74.705, 74.706, 74.707, 74.708, 74.709 and 74.710.

Response to Paragraph 14 - Environmental Protection Act

The proposed K59GM LPTV facilities were evaluated in terms of potential radiofrequency radiation exposure at ground level in accordance with OST Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation."¹ The calculated power density at the base of the tower was calculated using the appropriate equation of the Bulletin. Using a greater than expected vertical relative field value of 0.1 towards the tower base (see vertical plane relative field pattern attached as Figure 2), a maximum total visual effective radiated power of 8 kilowatts (horizontal polarization) and 10 percent aural power, the calculated power density at 2 meters above ground level at the base of the tower is 0.0165 milliwatt per square centimeter (mW/cm²), or 3.3 percent of the Commission's recommended limit applicable to general population/uncontrolled exposure areas (0.2 mW/cm² for TV channel 31). Therefore, based on the responsibility threshold of 5%, the K59GM proposal will comply with the RF emission rules.

Access to the transmitting site will be restricted and appropriately marked with warning signs. Furthermore, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or

¹ See *Report and Order* in ET Docket 93-62, FCC 96-326, adopted August 1, 1996, 11 FCC Rcd 15123 (1997). See also *First Memorandum Opinion and Order*, ET Docket 93-62, FCC 96-487, adopted December 23, 1996, 11 FCC Rcd 17512 (1997), and *Second Memorandum Opinion and Order and Notice of Proposed Rulemaking*, ET Docket 93-62, FCC 97-303, adopted August 25, 1997.

scheduling work when the stations are at reduced power or shut down.

Finally, it is noted that this technical exhibit only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already has been provided to the FCC by the tower owner as part of the tower registration process.

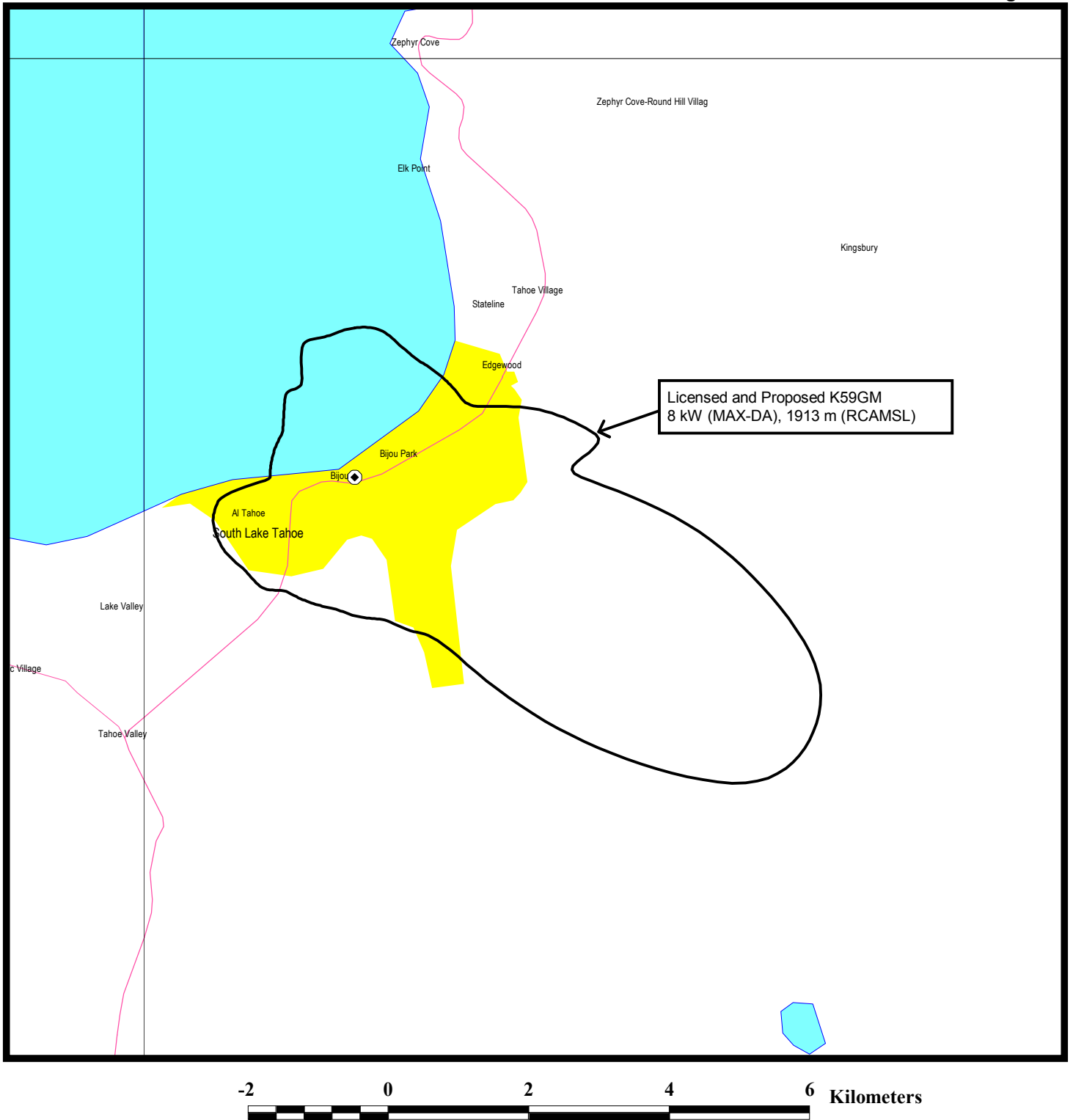


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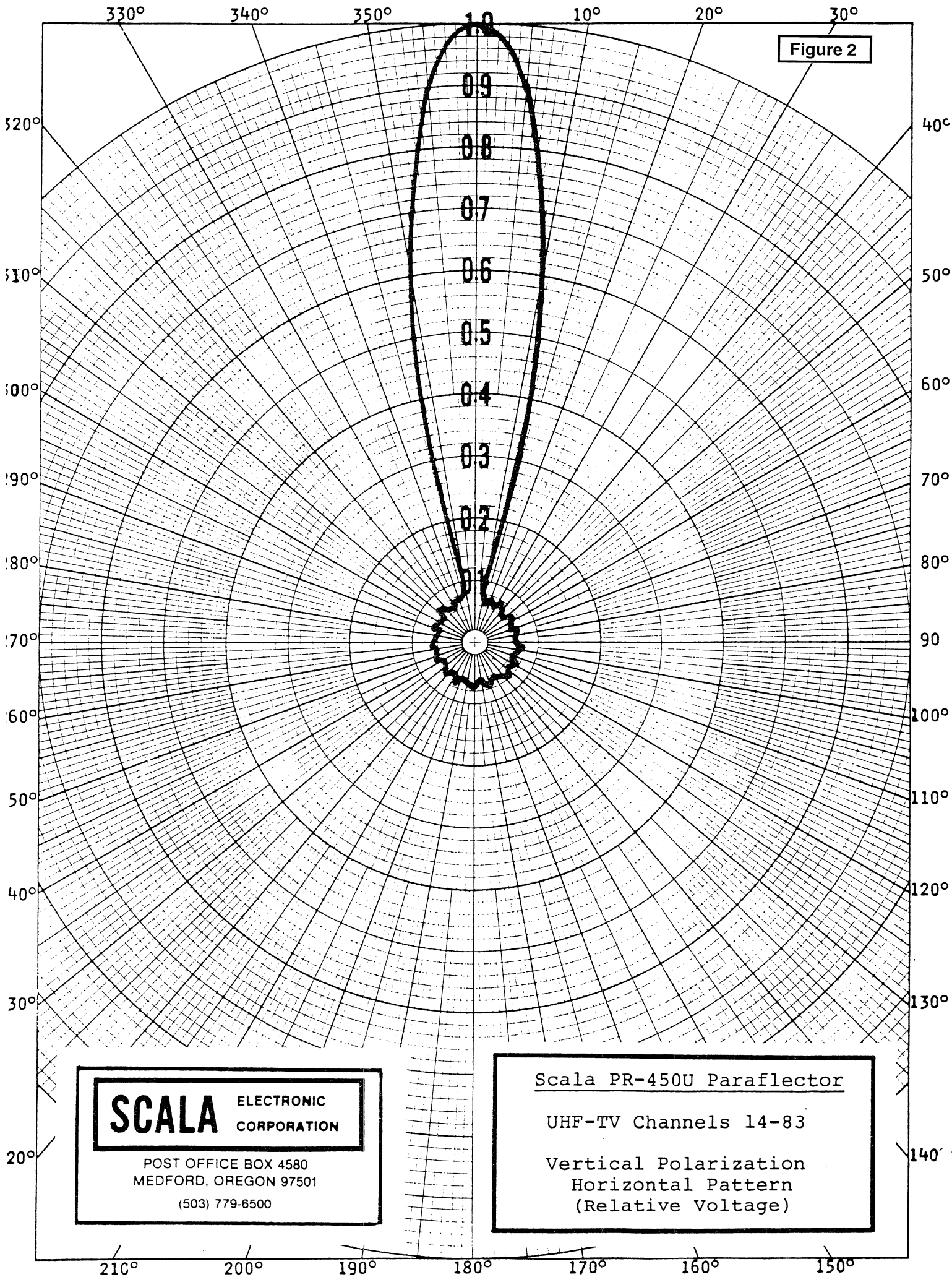
Figure 1



PREDICTED 74 dBu CONTOURS

LPTV STATION K59GM
STATELINE, NEVADA
CH 31 8 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



TOWAIR Determination Results

A routine check of the coordinates, heights, and structure type you provided indicates that this structure does not require registration.

*** NOTICE ***

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

DETERMINATION Results

PASS SLOPE(100:1)NO FAA REQ - 5068.0 Meters (16627.0 Feet)away & below slope by 41.0 Meters (134.509 Feet)

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	38-54-19.00N	119-59-31.00W	LAKE TAHOE	EL DORADO	1905.2	2604.1999999999998
					SOUTH LAKE TAHOE, CA		

Your Specifications

NAD83 Coordinates

Latitude	38-56-46.7 north
Longitude	119-57-58.7 west

Measurements (Meters)

Overall Structure Height (AGL)	12
Support Structure Height (AGL)	12
Site Elevation (AMSL)	1902

Structure Type

TOWER - Free standing or Guyed Structure used for Communications Purposes

[Tower Construction Notifications](#)

Notify Tribes and Historic Preservation Officers of your plans to build a tower.

CLOSE WINDOW