

TECHNICAL EXHIBIT
APPLICATION FOR DTV CONSTRUCTION PERMIT
IN SUPPORT OF ITS POST-TRANSITION FACILITY
STATION KPIF-DT (FACILITY ID 86205)
POCATELLO, IDAHO

MARCH 3, 2008

CH 15 251 KW (MAX-DA) 327 M

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Technical Narrative

This Technical Exhibit supports an application to “flash-cut” to digital operation for television station KPIF at Pocatello, Idaho. This application requests a construction permit (CP) for a digital television operation on channel 15, using its existing analog directional antenna. Thus, KPIF-DT is requesting processing under the “5 mile waiver” procedure to allow recovery of its noise-limited service up to the Grade B contour.

Proposed Facilities

Station KPIF-DT proposes to operate DTV channel 15 from its analog transmitter site and antenna, with a maximum directional effective radiated power (ERP) of 251 kilowatts and antenna height above average terrain (HAAT) of 327 meters (same as analog HAAT). The transmitter site coordinates are:

42° 51' 50" North Latitude
112° 31' 10" West Longitude

A sketch of antenna and pertinent elevations are included as Figure 1. Figure 2 depicts the proposed antenna patterns.

Figure 3 is a map showing the DTV predicted coverage contour and the associated analog Grade B coverage contour. The extent of the contour has been calculated

using the normal FCC prediction method. The Pocatello city limits were derived from information contained in the 2000 U.S. Census of Population and Housing.

Population Served

The herein proposed KPIF-DT facility is predicted to serve 217,371 persons, post-transition, based upon the 2000 Census. KPIF-DT's associated Appendix B facility is predicted to serve 216,141 persons. Therefore, the herein proposed KPIF-DT facility would serve more than 100% of KPIF-DT's Appendix B population.

Allocation Considerations

Since the proposed KPIF-DT ERP exceeds the Commission's *Appendix B* allocated maximum effective radiated power in some azimuthal directions¹, an allocation study was completed to ensure no prohibited interference would occur. The proposed KPIF-DT operation meets the FCC's post-transition interference standards to pertinent Class A and DTV allotments using the procedures outlined in the FCC's OET-69 Bulletin and a 2 kilometer grid cell size. The results of the interference analyses are summarized in Figure 4.

Radiofrequency Electromagnetic Field Exposure

The proposed KPIF-DT facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna is located 80 meters above ground level with a maximum ERP of 251 kW. A conservative relative field value of 0.1 was assumed for the calculation (see Figure 2). The calculated power density at a point 2 meters above ground level will not exceed 0.014 mW/cm². This is less than 5% of the FCC's recommended limit of 0.32 mW/cm² for channel 15 for an "uncontrolled" environment.

¹ See Seventh Report And Order And Eighth Further Notice Of Proposed Rule Making in the Matter of Advanced Television Systems and their Impact Upon the Existing Television Broadcast Service, MB Docket 87-268, Released August 6, 2007; Adopted August 1, 2007.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, 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 scheduling work when the station is at reduced power or shut down. The proposed KPIF-DT operation appears to be otherwise categorically excluded from environmental processing.

It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner.



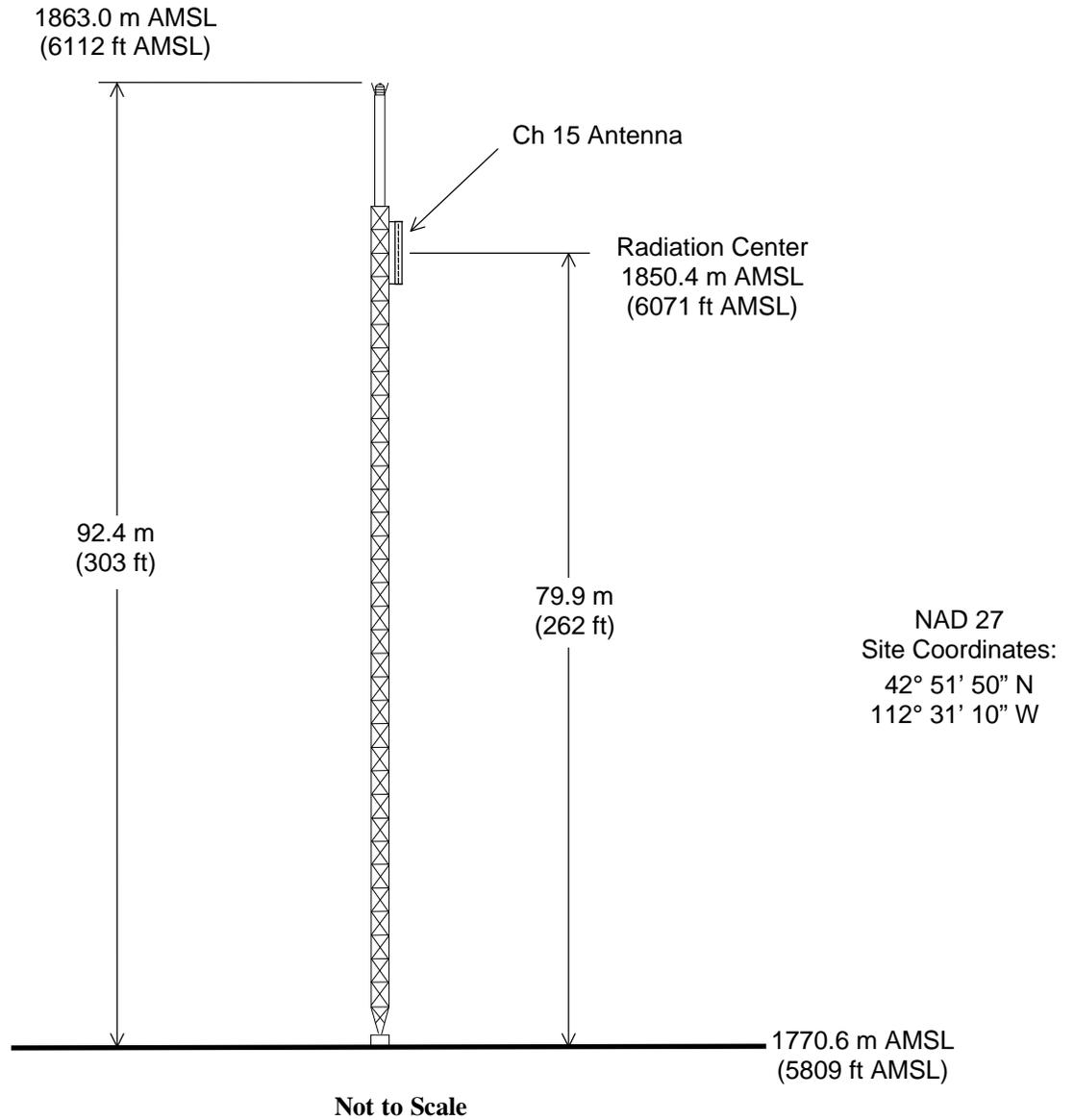
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March 3, 2008



Registration No. 1239956



ANTENNA AND SUPPORTING STRUCTURE

STATION KPIF-DT

POCATELLO, IDAHO

CH 15 251 KW (MAX-DA) 327 M

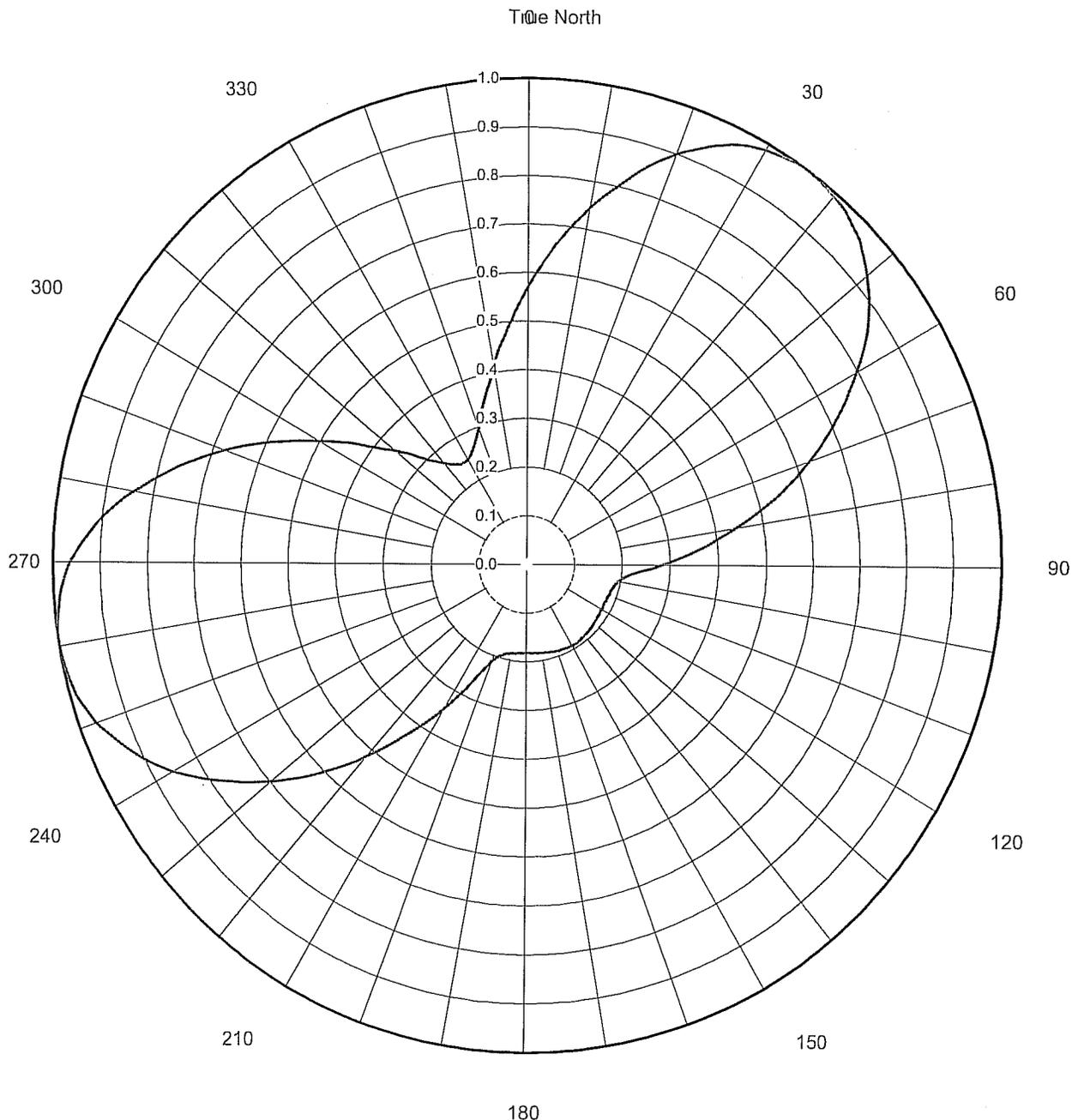
du Treil, Lundin & Rackley, Inc. Sarasota, Florida



Proposal Number 1158:6:204506 Revision: 3
Date 4-Sep-03
Call Letters Channel 15
Location Pocatello, ID
Customer
Antenna Type TFU-31JSC-R 3BP285

AZIMUTH PATTERN

Gain 2.85 (4.55 dB) Frequency 479.00 MHz
Calculated / Measured Calculated Drawing # TFU-3BP285-15

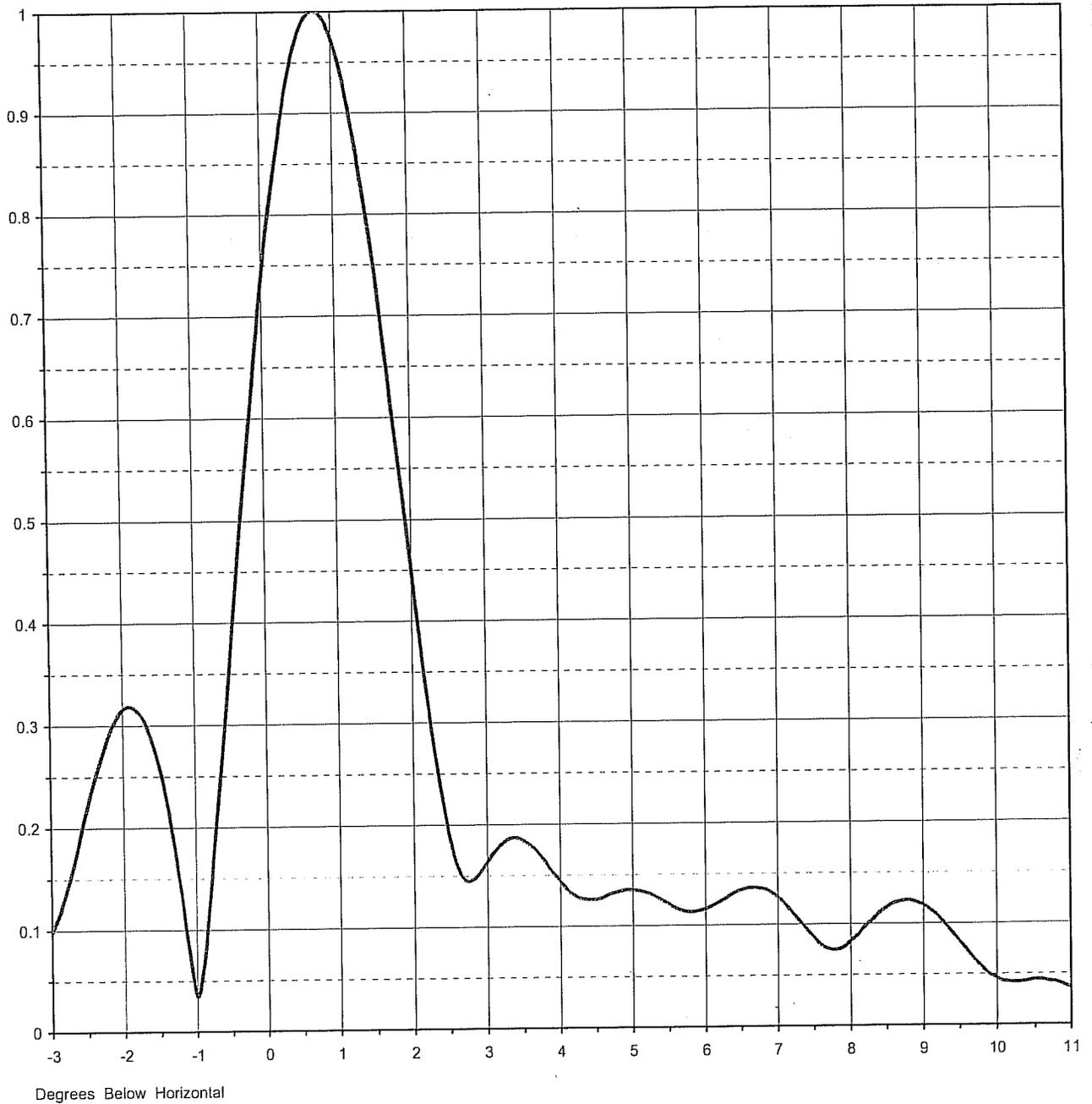




Proposal Number 1158:6:204506 Revision: 3
Date 4-Sep-03
Call Letters Channel 15
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Customer
Antenna Type TFU-31JSC-R 3BP285

ELEVATION PATTERN

RMS Gain at Main Lobe	27.90 (14.46 dB)	Beam Tilt	0.75 deg
RMS Gain at Horizontal	15.10 (11.79 dB)	Frequency	479.00 MHz
Calculated / Measured	Calculated	Drawing #	31Y279075

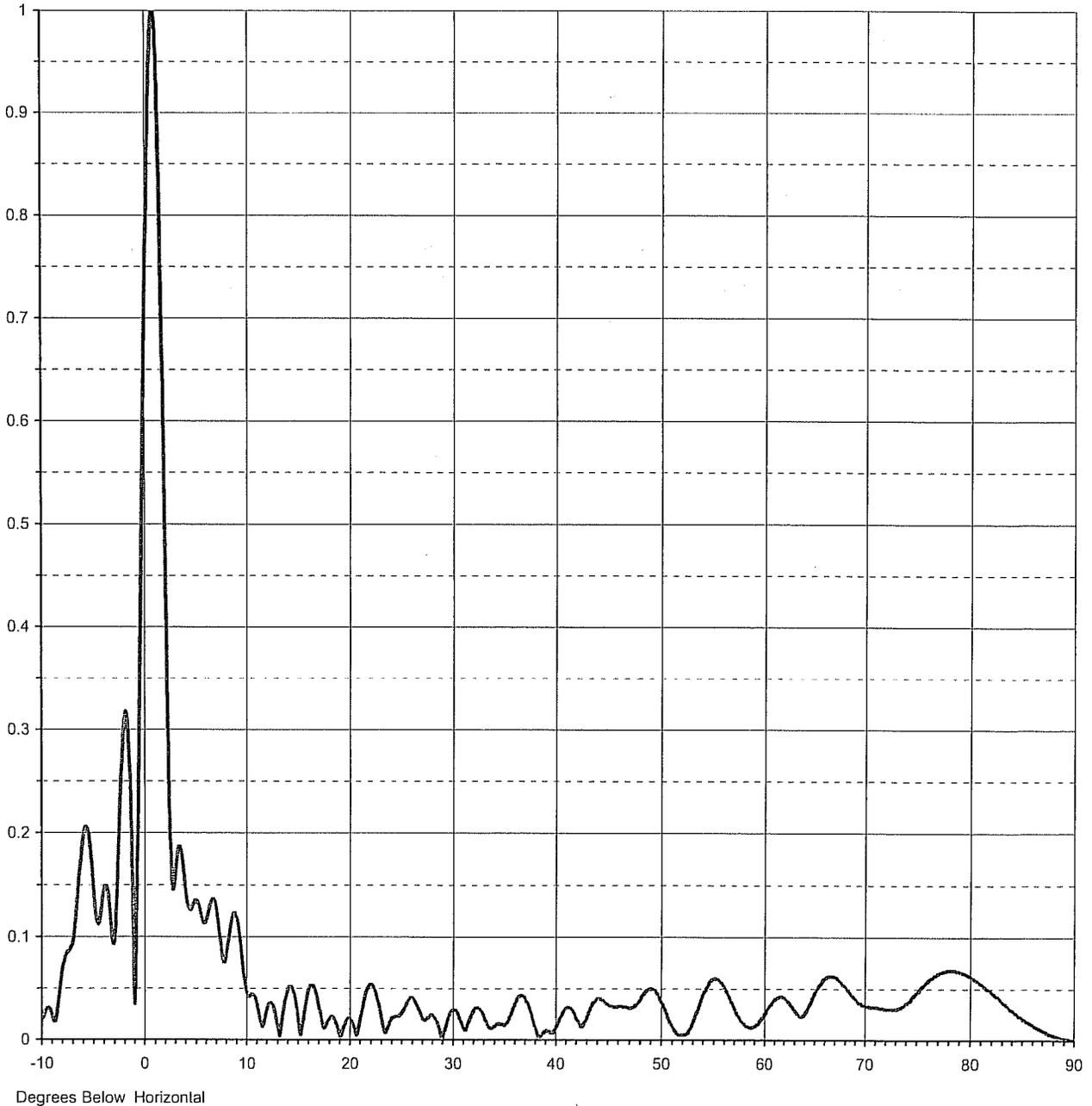




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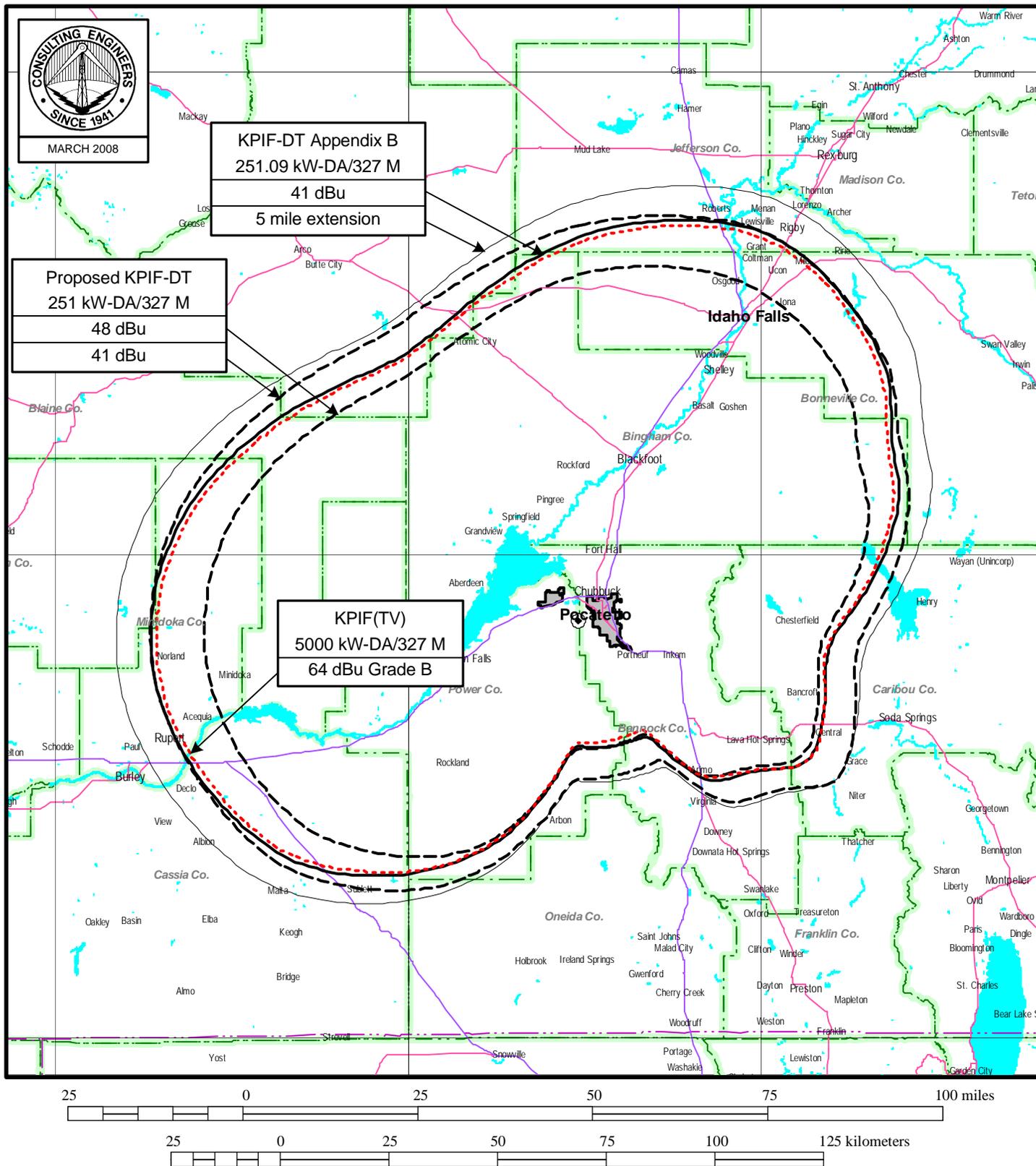
ELEVATION PATTERN

RMS Gain at Main Lobe	27.90 (14.46 dB)	Beam Tilt	0.75 deg
RMS Gain at Horizontal	15.10 (11.79 dB)	Frequency	479.00 MHz
Calculated / Measured	Calculated	Drawing #	31Y279075-90



Degrees Below Horizontal

Figure 3



PREDICTED COVERAGE CONTOURS

STATION KPIF-DT

POCATELLO, IDAHO

CH 15 251 kW (MAX-DA) 327

du Treil, Lundin & Rackley, Inc Sarasota, Florida

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application Ref. No.
15	KPIF	POCATELLO ID	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
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Total scenarios = 1

Result key: 1
Scenario 1 Affected station 1
Before Analysis

Results for: 15A ID POCATELLO USERRECORD01 APP
HAAT 340.0 m, ATV ERP 251.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	222667	21434.4
not affected by terrain losses	217371	17313.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	0.0

Potential Interfering Stations Included in above Scenario 1

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