

TECHNICAL EXHIBIT
APPLICATION FOR MODIFICATION OF
LICENSED FACILITY
(FCC FILE NO. BLTTL-20031202ACQ)
LPTV STATION KCBB-LP
FACILITY ID 31388
BOISE, IDAHO
CH 51 150 KW (MAX-DA)

Technical Narrative

The technical exhibit of which this narrative is part was prepared in support of an application to modify the Licensed facility of LPTV station KCBB-LP at Boise, Idaho (Facility ID: 31388; File No. BLTTL-20031202ACQ). Specifically, this application proposes to change transmitter site, increase the antenna radiation center height above mean sea level from 1800 meters to 1815 meters, and modify the antenna system. No other changes are proposed, including no change in channel (51), effective radiated power (150 kW), carrier frequency offset (-), or community of license (Boise). As detailed below, this application is considered a "minor change" in facilities pursuant to Section 73.3572.

It is proposed to side-mount the directional antenna on a new 60 meter supporting structure. The new tower does not require tower registration based on the FCC's TOWAIR program. It is believed that the instant application conforms with all other applicable rules and regulations of the Federal Communications Commission.

Minor Change Application

Figure 1 depicts the Licensed and herein proposed 74 dBu contours for KCBB-LP. As indicated, the proposed 74 dBu contour encompasses a majority of the licensed 74 dBu contour. Therefore, the proposed modification is considered a "minor" change in facilities pursuant to Section 73.3572.

Response to Paragraph 13(a) - TV Broadcast Station Protection

A study has been conducted using the provisions of Section 74.705 which indicates that the proposed KCBB-LP operation will not create prohibited interference to other existing, authorized or proposed NTSC full-power stations.

Response to Paragraph 13(b) - DTV Station Protection

Calculations based on OET Bulletin No. 69 indicate that the proposed KCBB-LP operation on channel 51 complies with the FCC's 0.5% interference threshold criteria to all allotted, proposed or actual DTV operating facilities on channels 50, 51 and 52.¹

Response to Paragraph 13(c) - LPTV/TV Translator and Class A Station Protection

A study has been conducted using the provisions of Section 74.707 which indicates that the KCBB-LP proposal will not create prohibited interference to other existing, authorized or proposed LPTV, TV Translator and Class A stations.

Environmental Considerations

The proposed KCBB-LP LPTV facilities were evaluated in terms of potential radiofrequency radiation exposure at 2 meters above ground level in accordance with OST Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation." This Bulletin provides assistance in determining whether FCC-regulated transmitting facilities, operations or devices comply with limits for human exposure to radiofrequency (RF) electromagnetic fields.

¹ The du Treil, Lundin & Rackley, Inc. DTV interference analysis program is based on the program and procedures outlined by the FCC in the Sixth Report and Order; subsequent Memorandum Opinion and Order; and FCC OET Bulletin No. 69. A nominal grid size resolution of 2 km was employed. A Unix based processor computer system was employed.

The transmitter site is a two tower site, with the towers located roughly 20 meters apart from each other, and is completely fenced in and gated. Therefore, this site is considered a "controlled" environment. The proposed KCBB-LP antenna will be side-mounted on the new tower. The antenna center of radiation is located 30 meters above ground level. The calculated power density at 2 meters above ground level (AGL) was calculated using the appropriate equation contained in the Bulletin. The maximum ERP is 150 (horizontal polarization) and 10% aural power (15). A "worst-case" vertical plane relative field value of 0.16 (for angles below 60 degrees downward) is assumed for the antenna's downward radiation (see Figure 2). The calculated power density at a point 2 meters above ground level is 0.0818 mW/cm^2 . This is 3.5% of FCC's recommended limit of 2.32 mW/cm^2 for channel 51 for a "controlled" environment. Therefore, based on the responsibility threshold of 5%, the proposal will comply with the new RF emission rules.

Access to the transmitting site will be restricted and appropriately marked with warning signs. Furthermore, as this is a multi-user site, an agreement will be in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that 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 stations are at reduced power or shut down.

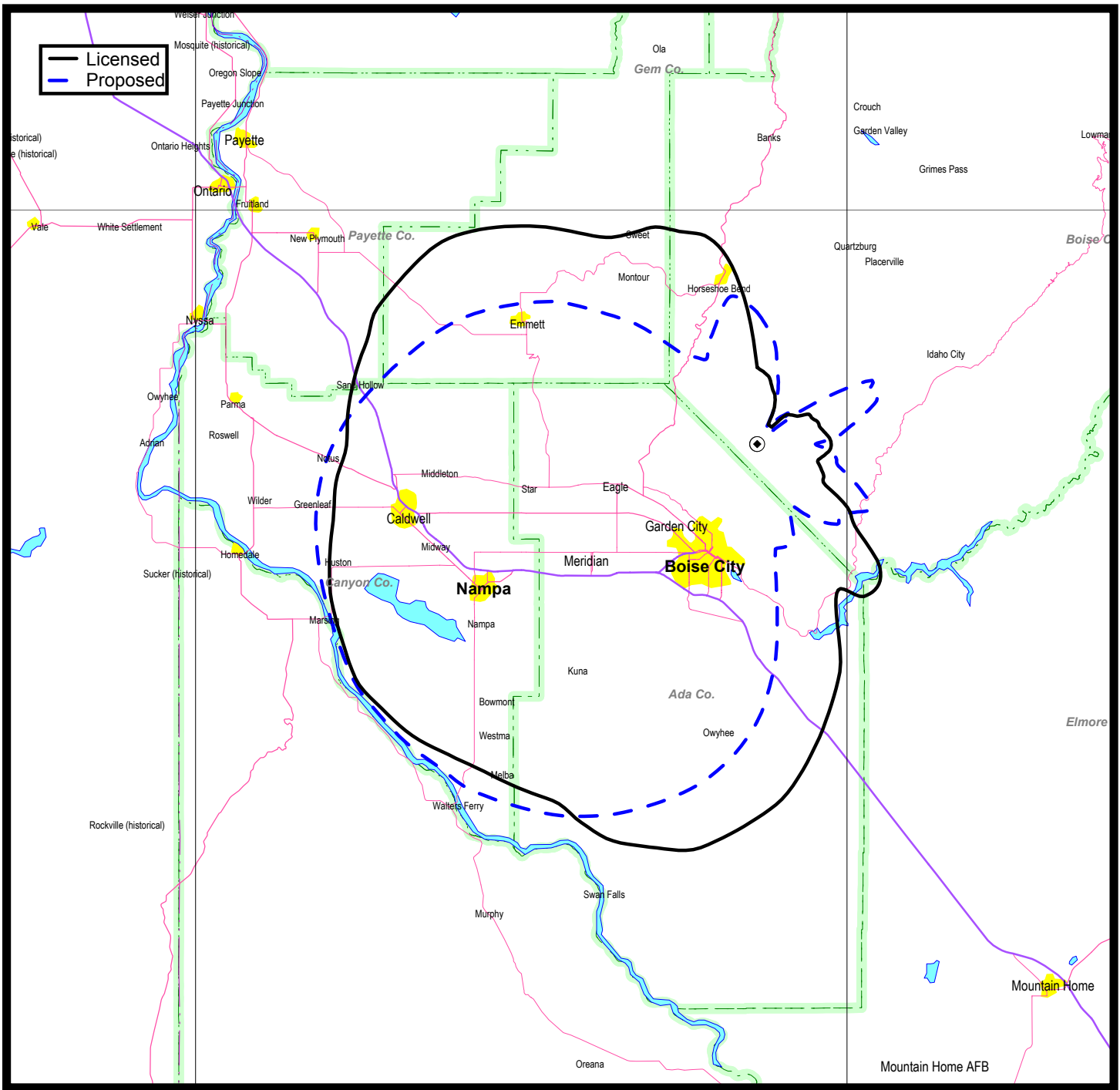
Finally, it is noted that this technical exhibit only addresses the potential for radiofrequency electromagnetic field exposure.

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Figure 1

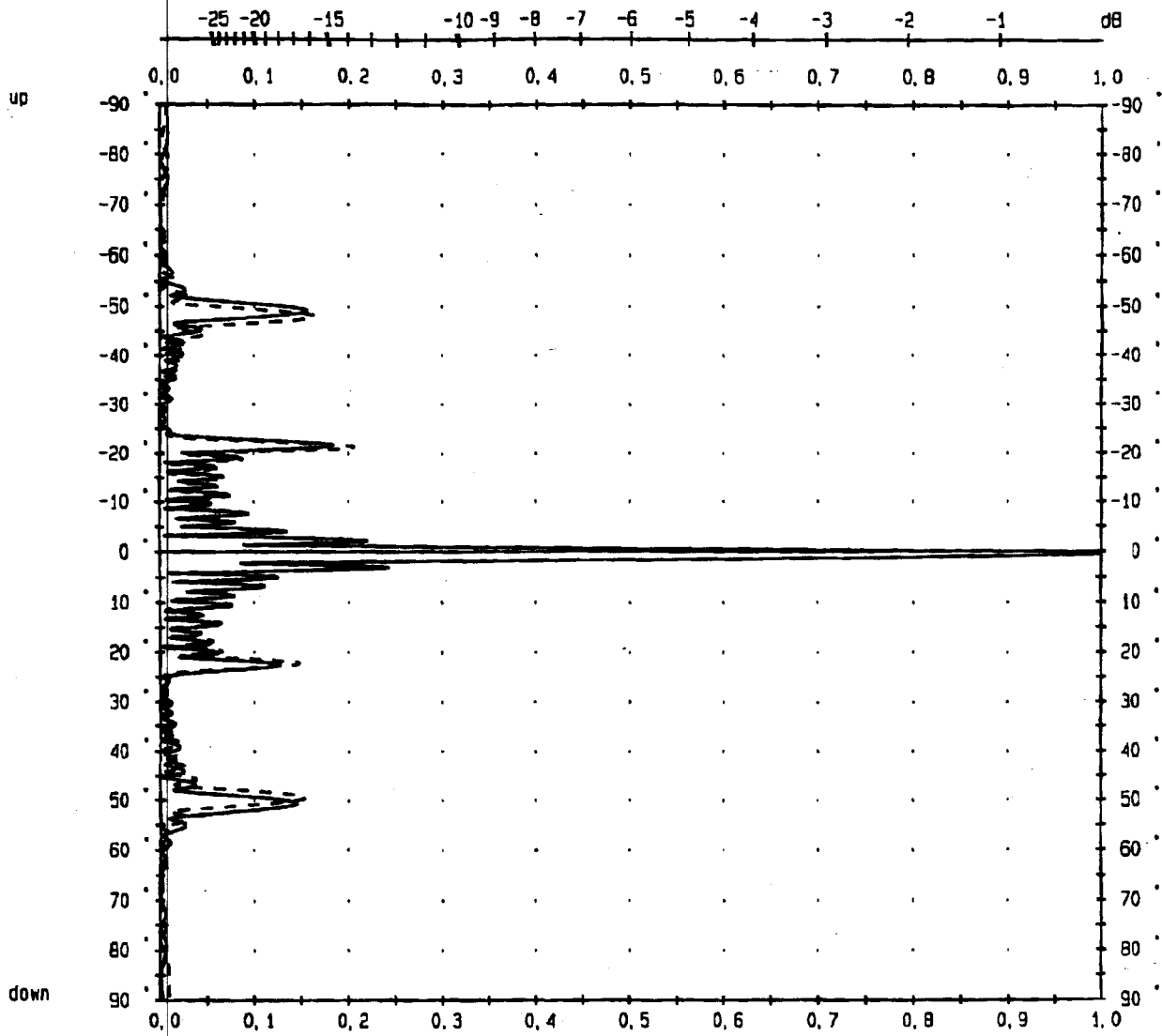


PREDICTED 74 DBU CONTOURS

LPTV STATION KCBB-LP
BOISE, IDAHO
CH 51 150 KW (MAX-DA)

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

Figure 2



frequency in MHz 681.250 693.250
 azimuth in 240.0
 omni-dir in dBd 15.35 15.35

S C A L A Medford Oregon	12x1 K723147 UHF-TV Panel Array	Typ Nr.
mj 14.5.xx 15:34	Channel 49 and 51 w/ .5' EDT and 10% NF	81.1

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 06-10-2004 Time: 11:00:29

Record Selected for Analysis

KCBB-LP USERRECORD-01 BOISE ☐ ID US
Channel 51 ERP 150. kW HAAT 820. m RCAMSL 01815 m
Latitude 043-44-23 Longitude 0116-08-15
Status APP Zone 2 Border Offset -
Dir Antenna Make CDB Model 00000000019753 Beam tilt N Ref Azimuth 240.
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Not full service station

Facility meets maximum power limit

Azimuth (Deg)	ERP (kW)	HAAT (m)	74.0 dBu F(50,50) (km)
0.0	0.009	470.1	3.6
45.0	0.086	120.8	4.8
90.0	0.000	427.6	1.5
135.0	0.008	392.7	3.3
180.0	7.971	606.9	32.2
225.0	101.873	820.4	54.4
270.0	63.046	805.7	50.5
315.0	0.041	470.4	6.6

Contour Overlap Evaluation from LPTV Station to Full Service TV & DTV

No Spacing violations or contour overlap from LPTV station

Contour Overlap Evaluation from LPTV to Full Service TV & DTV Complete

Contour Overlap Evaluation from LPTV Station to LPTV Stations

Station inside contour of station

KCBB-LP 51 BOISE ID BLTTL 20031202ACQ

Contour Overlap Evaluation from LPTV to LPTV Stations Complete

Contour Overlap to Proposed Station

Station
KCBB-LP 51 BOISE ID BLTTL20031202ACQ

Is inside contour of station
KCBB-LP 51 BOISE ☐ ID USERRECORD01

Station
KUNS-LP 66 BOISE ID BLTTL19990510JB

Is inside contour of station
KCBB-LP 51 BOISE ☐ ID USERRECORD01

Contour Overlap Evaluation to Proposed Station Complete

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Proposed Station			
Channel	Call	City/State	ARN
51	KCBB-LP	BOISE <input type="checkbox"/> ID	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
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Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State		Application Ref. No.
51	KCBB-LP	BOISE <input type="checkbox"/> ID		USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
44	KTRV-DT	NAMPA ID	3.6	PLN	DTVPLN	-DTVP1260
51	K51FL	GARDEN VALLEY ID	40.8	LIC	BLTT	-19990712JH
66	KUNS-LP	BOISE ID	3.5	LIC	BLTTTL	-19990510JB

Total scenarios = 1

Result key: 1
Scenario 1 Affected station 1
Before Analysis

Results for: 51N ID BOISE	<input type="checkbox"/>	USERRECORD01	APP
	POPULATION	AREA (sq km)	
within Noise Limited Contour	286015	2411.3	
not affected by terrain losses	281306	2347.4	
lost to NTSC IX	407	20.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	407	20.0	

Potential Interfering Stations Included in above Scenario 1

66N ID BOISE BLTTTL 19990510JB LIC

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