

TECHNICAL EXHIBIT  
APPLICATION FOR MODIFICATION OF  
LICENSED FACILITY  
(FCC FILE NO. BLTTL-20001129ABE)  
LPTV STATION K30GS  
FACILITY ID 74409  
BOISE, IDAHO  
CH 16 150 KW (MAX-DA)

Technical Narrative

The technical exhibit of which this narrative is part was prepared on behalf of Gary M. Cocola Family Trust, Gary M. Cocola, Trustee (herein "Gary Cocola") in support of an application for modification of the licensed facility for LPTV station K30GS at Boise, Idaho (Facility ID: 74409; File No. BLTTL-20001129ABE). Station K30GS is currently licensed to operate on channel 68, which is located in that portion of the TV band (channels 52-69) which has been reallocated for other services. Pursuant to Section 73.3572(a)(4)(ii), K30GS is considered to be displaced and permitted to file a displacement relief application at any time. Therefore, this application proposes operation on core-band channel 16 with a maximum effective radiated power (ERP) of 150 kW using a Kathrein model K723147 panel directional antenna system oriented at 235 degrees true. A slight change in transmitter site location of 3.59 kilometers is also proposed. As detailed below, this application is considered a "minor change" in facilities pursuant to Section 73.3572.

Response to Paragraph 6 - Antenna Structure Registration Number

Station K30GS proposes to utilize an existing Kathrein model K723147 panel directional antenna which is side-mounted at the 50-meter level on an existing 60-meter tower. This tower does not require tower registration based on the FCC's TOWAIR program.

Minor Change Application

Figure 1 depicts the licensed and herein proposed 74 dBu contours for K30GS. As indicated, the proposed 74 dBu contour completely encompasses the licensed 74 dBu contour. Furthermore, the proposal will involve a change in the K30GS

transmitter site of only 3.59 kilometers (2.2 miles), which will permit use of an existing antenna and will permit co-location with all the other LPTV/TV stations owned by Gary Cocola in the Boise market. Therefore, the proposed modification is considered a "minor change" in facilities pursuant to Section 73.3572.

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

A study has been conducted using the provisions of Section 74.705 which indicates that the proposed K30GS operation will not create prohibited interference to other existing, authorized or proposed TV broadcast analog (NTSC) full-power stations.

Response to Paragraph 13(b) - DTV Station Protection

Calculations based on OET Bulletin No. 69 indicate that the proposed K30GS operation on channel 16 complies with the FCC's 0.5% interference threshold criteria to all allotted, proposed or actual DTV operating facilities on channels 15, 16 & 17.<sup>1</sup> The results are tabulated in Figure 2.

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

A study has been conducted using the provisions of Sections 74.707 and 74.708 which indicates that the K30GS proposal will not create prohibited interference to other existing, authorized or proposed LPTV, TV Translator and Class A stations.

Environmental Considerations

The proposed K30GS television 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

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<sup>1</sup> 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. An Alpha based processor computer system was employed.

Human Exposure to Radiofrequency Radiation". The calculated power density at the base of the tower was calculated using the appropriate equation of the Bulletin.

Figure 3 depicts the vertical pattern data for the proposed directional antenna. Using a worst-case vertical relative field value of 0.11 at depression angles towards the tower base ( $-60^{\circ}$  to  $-90^{\circ}$  elevation), a maximum visual ERP of 150 kilowatts and 10 percent aural power, the calculated power density at 2 meters above ground level at the base of the tower is 0.0132 milliwatts per square centimeter ( $\text{mW}/\text{cm}^2$ ), or 4.1% percent of the Commission's recommended limit of  $0.32 \text{ mW}/\text{cm}^2$  for TV channel 16 applicable to general population/uncontrolled exposure areas. 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.

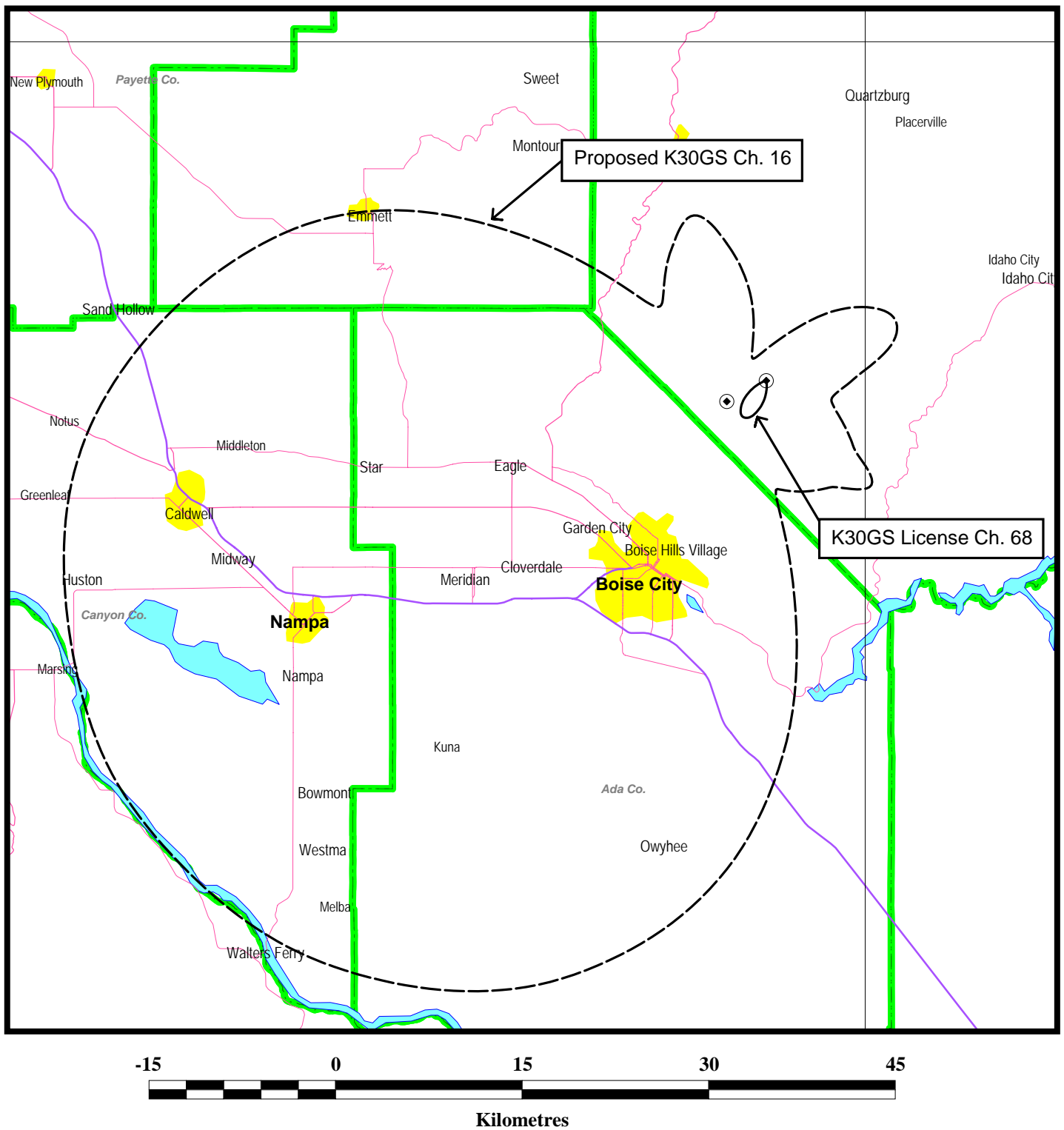


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May 2, 2005

### Figure 1



## PREDICTED 74 DBU CONTOURS

LPTV STATION K30GS  
BOISE, IDAHO  
CH 16 150 KW (MAX-DA)

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

OET-69 DTV INTERFERENCE CAUSED STUDY

CELL SIZE : 2.00  
TERRAIN INC : 1.00  
Using offset in determining thresholds

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DKMVT 42-43-48 114-24-52 16(0) 578.800 kw 1503 m DA 90.0 % 38.9 dBu  
TWIN FALLS ID 27977 131 DTVSERVICE: 131000 NTSCSERVICE: 129000  
DTVALT DTV ALLOTMENT

|      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|
| 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.97 | 0.98 | 0.98 | 0.99 | 1.00 | 0.97 | 0.95 |
| 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.91 | 0.92 | 0.93 | 0.94 |

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

|                                | Area         | Pop    |
|--------------------------------|--------------|--------|
| within Noise Limited Contour   | 30245.185547 | 133459 |
| not affected by terrain losses | 27921.097656 | 129243 |

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K30GSP 43-44-23 116-08-15 16(-) 150.000 kw 1835 m DA 10.0 % 71.9  
BOISE ID

Proposed

|      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|
| 1.00 | 0.96 | 0.86 | 0.70 | 0.54 | 0.40 | 0.27 | 0.13 | 0.05 | 0.03 | 0.04 | 0.05 |
| 0.05 | 0.04 | 0.03 | 0.02 | 0.06 | 0.10 | 0.10 | 0.10 | 0.06 | 0.02 | 0.03 | 0.04 |
| 0.05 | 0.05 | 0.04 | 0.03 | 0.05 | 0.13 | 0.27 | 0.40 | 0.54 | 0.70 | 0.86 | 0.96 |

Ref Az: 235.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00

|              | Area   | Pop               |
|--------------|--------|-------------------|
| Interference | 128.23 | 0( 0.0 FCC - 0.0) |

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KMVT 42-43-47 114-24-52 16(N) 50.000 kw 1456.3 m DA 90.0 % 38.9 dBu  
TWIN FALLS ID 27977 131 DTVSERVICE: 131000 NTSCSERVICE: 129000  
CP BPCDT19991012ABD

|      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|
| 0.21 | 0.22 | 0.21 | 0.19 | 0.23 | 0.30 | 0.40 | 0.60 | 0.81 | 0.96 | 1.00 | 0.96 |
| 0.83 | 0.62 | 0.43 | 0.36 | 0.38 | 0.40 | 0.39 | 0.35 | 0.39 | 0.40 | 0.38 | 0.36 |
| 0.43 | 0.62 | 0.83 | 0.96 | 1.00 | 0.96 | 0.81 | 0.60 | 0.40 | 0.30 | 0.23 | 0.19 |

Ref Az: 5.0

Using DEFAULT vertical antenna pattern

|                                | Area         | Pop    |
|--------------------------------|--------------|--------|
| within Noise Limited Contour   | 14410.700195 | 120814 |
| not affected by terrain losses | 14110.059570 | 119445 |

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K30GSP 43-44-23 116-08-15 16(-) 150.000 kw 1835 m DA 10.0 % 71.9  
BOISE ID

Proposed

|      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|
| 1.00 | 0.96 | 0.86 | 0.70 | 0.54 | 0.40 | 0.27 | 0.13 | 0.05 | 0.03 | 0.04 | 0.05 |
| 0.05 | 0.04 | 0.03 | 0.02 | 0.06 | 0.10 | 0.10 | 0.10 | 0.06 | 0.02 | 0.03 | 0.04 |
| 0.05 | 0.05 | 0.04 | 0.03 | 0.05 | 0.13 | 0.27 | 0.40 | 0.54 | 0.70 | 0.86 | 0.96 |

Ref Az: 235.0

Using DEFAULT vertical antenna pattern

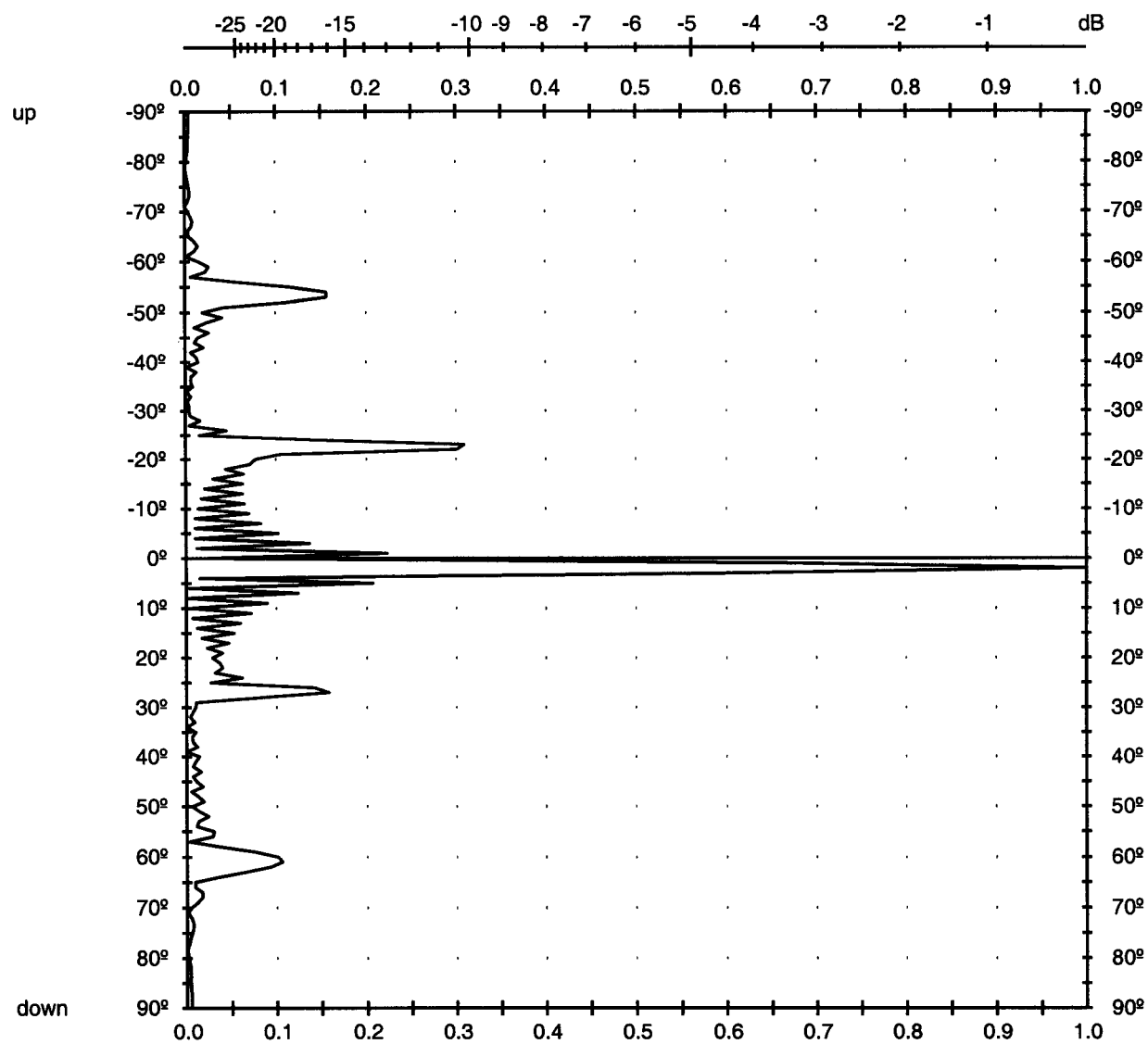
D/U Baseline: 2.00

|                     |             |            |
|---------------------|-------------|------------|
| <b>Interference</b> | <b>Area</b> | <b>Pop</b> |
|                     | 0           | 0          |

Summary of Calculations

| Facility              | Channel | Type | Baseline | Permissible | IX | %Base |
|-----------------------|---------|------|----------|-------------|----|-------|
| DKMVT, TWIN FALLS, ID | 16      | DTV  | 131000   | 0.5         | 0  | 0.00  |
| KMVT, TWIN FALLS, ID  | 16      | DTV  | 131000   | 0.5         | 0  | 0.00  |

Figure 3



frequency in MHz 621.25  
 azimuth in ° 0.0  
 omni-dir in dBd 14.56

|                                |  |         |
|--------------------------------|--|---------|
| <b>SCALA</b><br>Medford Oregon | 12x1 K723147 UHF-TV Panel Array<br>ch 39, 2' EDT | Typ Nr. |
| MJ 6/16/04                     |  | Bl.:    |