

TECHNICAL EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
(FCC FILE NO. BLTTL-20030611AAH)
LPTV STATION KJOI-LP
FACILITY ID 61178
BAKERSFIELD, CALIFORNIA
CH 34 150 KW (MAX-DA)

Technical Narrative

The technical exhibit of which this narrative is part was prepared in support of an application for construction permit for LPTV station KJOI-LP at Bakersfield, California (Facility ID: 61178; File No. BLTTL-20030611AAH). Specifically, this application proposes a change in transmitter site, an increase in effective radiated power (ERP) from 40.4 kilowatts (kW) to 150 kW, an increase in radiation center above mean sea level (RCMSL) from 207 meters to 1062 meters, and a change from the current directional antenna system (Dielectric TLP16-F, Antenna ID 19132) to a Superior Broadcast Products (SBP) UP-6-NC (Antenna ID 38253) directional antenna system oriented at 270 degrees true. No other changes are proposed including channel (34), frequency offset (+), or community of license (Bakersfield). As detailed below, this application is considered a "minor change" in facilities pursuant to Section 73.3572.

Minor Change Application

Figure 1 depicts the authorized and herein proposed 74 dBu contours for KJOI-LP. As indicated, the proposed 74 dBu contour encompasses all 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 Analog Protection

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

operation of KMEX-TV on channel 34 at Los Angeles, California (BLCT-20030313AHD). Therefore, waiver of Section 74.705 is requested with respect to KMEX. Justification for the waiver request is provided below.

Station KMEX-TV operates co-channel to the proposed KJOI-LP operation. Based on the provisions of the OET-69 Bulletin as permitted by FCC rules [Section 74.705(e)], it is believed that KJOI-LP's proposed operation complies with the FCC's interference criteria towards KMEX-TV's licensed operation. Specifically, calculations have been made using the procedures outlined in the FCC's OET-69 Bulletin and a 2 square kilometer grid. The results of the OET Bulletin No. 69 are tabulated on Figure 2 and, as indicated, the proposal is not predicted to cause any prohibited interference to KMEX-TV's licensed facility.¹

Response to Paragraph 13(b) - DTV Station Protection

Calculations based on OET Bulletin No. 69 indicate that the proposed KJOI-LP operation on channel 34 complies with the FCC's 0.5% interference threshold criteria to all allotted, proposed or actual DTV operating facilities on channels 33, 34, and 35. The results are tabulated in Figure 2.

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

A study has been conducted which indicates that the KJOI-LP proposal will not create prohibited interference to other existing, authorized or proposed LPTV, TV Translator and Class A stations with the exception of the authorized facility of Class A station KAZB-CA on channel 19 at Bakersfield (BMPTTA-20020318AAE, -15 channel UHF picture image taboo). However, based on the provisions of the OET-69 Bulletin as permitted by FCC rules [Section 74.707(e)] it is believed that

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. An Alpha based processor computer system was employed. The results have been found to be in very close agreement with the results of the FCC implementation of OET Bulletin 69.

KJOI-LP's proposed operation complies with the FCC's interference criteria towards KAZB-CA. Specifically, calculations have been made using the procedures outlined in the FCC's OET-69 Bulletin and a 2 square kilometer grid. The results of the OET Bulletin No. 69 are tabulated on Figure 2 and, as indicated, the KJOI-LP proposal is not predicted to cause any interference to KAZB-CA's authorized facility.

Environmental Considerations

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

Public access to the transmitting site will be restricted; therefore, the area in the vicinity of the transmitter site is defined as a "controlled" environment. Using a greater than expected vertical relative field value of 0.5 towards the tower base, a maximum visual effective radiated power of 150 kilowatts and 10 percent aural power, the calculated power density at ground level at the base of the tower is 1.4205 milliwatts per square centimeter (mW/cm^2), or 72% percent of the Commission's recommended limit applicable to controlled exposure areas (1.98 mW/cm^2 for TV channel 34). Since this is not a multi-user site, it is believed that this proposal is in compliance with the FCC's RF emission rules.

Access to the transmitting site will be restricted and appropriately marked with warning signs. Furthermore, in the event that workers or other authorized personnel enter the restricted area 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 stations are at reduced power or shut down.

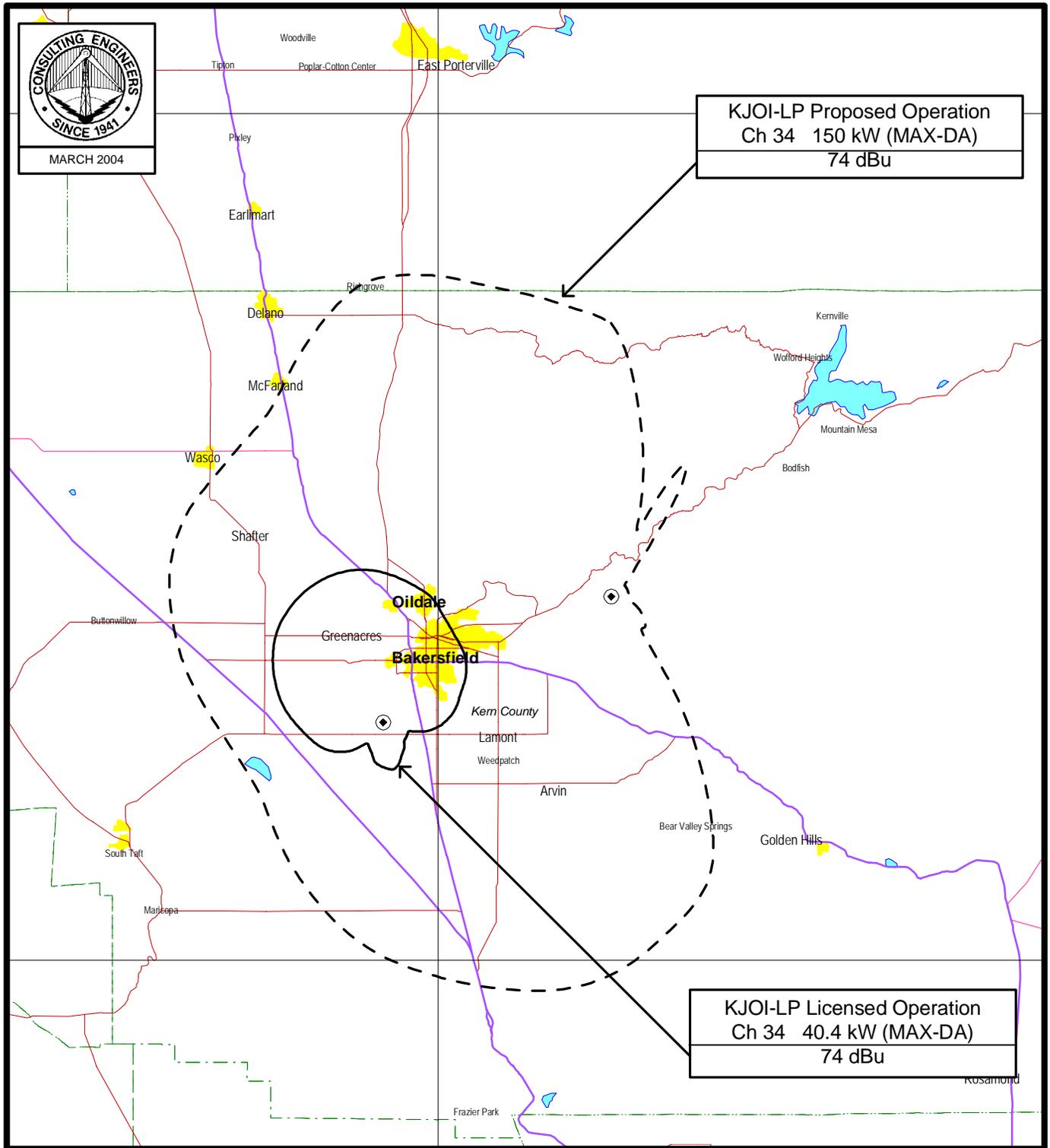
It is noted that this technical exhibit only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be provided to the FCC by the tower owner as part of the tower registration process.

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Figure 1



PREDICTED FCC COVERAGE CONTOURS

LPTV STATION KJOI-LP
BAKERSFIELD, CALIFORNIA
CH 34 150 KW (MAX-DA)

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

OET-69 FULL-SERVICE NTSC, DTV AND CLASS A INTERFERENCE CAUSED STUDY

CELL SIZE : 2.00
Using offset in determining thresholds

KAZB-C 35-27-11 118-35-25 19(-) 7.300 kw 2324 m DA 50.0 % 72.2 dBu
BAKERSFIELD CA
CP MOD BMAPTA20020318AAE
 1.00 0.99 0.95 0.89 0.83 0.77 0.70 0.63 0.56 0.49 0.43 0.36
 0.29 0.21 0.14 0.10 0.10 0.12 0.13 0.12 0.10 0.10 0.14 0.21
 0.29 0.36 0.43 0.49 0.56 0.63 0.70 0.77 0.83 0.89 0.95 0.99

Ref Az: 270.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	2455.183	142668
not affected by terrain losses	2277.505	140587

KJOI-LP 35-25-47 118-44-56 34(+) 150.000 kw 1062 m DA 10.0 % 73.7
BAKERSFIELD CA
PROPOSED
 1.00 0.94 0.83 0.80 0.93 1.00 0.98 0.92 0.94 0.71 0.58 0.41
 0.14 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02
 0.13 0.40 0.56 0.71 0.82 0.92 0.98 0.98 0.89 0.78 0.83 0.95

Ref Az: 270.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -9.00

	Area	Pop
Interference	52.50	0

DKBAKT 35-27-11 118-35-25 33(0) 70.100 kw 2352 m DA 90.0 % 40.6 dBu
BAKERSFIELD CA 15846 538 DTVSERVICE: 538000 NTSCSERVICE: 472000
DTVALT DTV ALLOTMENT
 0.25 0.32 0.43 0.42 0.46 0.70 0.77 0.83 0.93 0.92 0.70 0.65
 0.87 0.87 0.70 0.56 0.25 0.06 0.10 0.17 0.18 0.13 0.03 0.04
 0.11 0.11 0.03 0.06 0.13 0.36 0.50 0.38 0.19 0.10 0.11 0.22

(86.0 1.00)

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	25829.54	639508
not affected by terrain losses	16249.44	555039

KJOI-LP 35-25-47 118-44-56 34(+) 150.000 kw 1062 m DA 10.0 % 73.7
BAKERSFIELD CA
PROPOSED
 1.00 0.94 0.83 0.80 0.93 1.00 0.98 0.92 0.94 0.71 0.58 0.41
 0.14 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02
 0.13 0.40 0.56 0.71 0.82 0.92 0.98 0.98 0.89 0.78 0.83 0.95

Ref Az: 270.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -49.00

	Area	Pop
Interference	16.15	0

KBAK-T 35-27-11 118-35-25 33(N) 110.000 kw 2343 m DA 90.0 % 40.6 dBu
BAKERSFIELD CA 15846 538 DTVSERVICE: 538000 NTSCSERVICE: 472000
CP BPCDT19990921AAS

0.94	0.86	0.78	0.69	0.58	0.44	0.30	0.28	0.35	0.39	0.34	0.26
0.28	0.38	0.49	0.56	0.60	0.63	0.66	0.67	0.65	0.61	0.56	0.51
0.48	0.47	0.47	0.50	0.54	0.59	0.67	0.76	0.86	0.95	1.00	1.00

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	36348.66	978682
not affected by terrain losses	24855.48	826348

KJOI-LP 35-25-47 118-44-56 34(+) 150.000 kw 1062 m DA 10.0 % 73.7
BAKERSFIELD CA
PROPOSED

1.00	0.94	0.83	0.80	0.93	1.00	0.98	0.92	0.94	0.71	0.58	0.41
0.14	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.13	0.40	0.56	0.71	0.82	0.92	0.98	0.98	0.89	0.78	0.83	0.95

Ref Az: 270.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -49.00

	Area	Pop
Interference	28.26	95

KGPE 37-04-14 119-25-31 34(N) 185.000 kw 1415 m DA 90.0 % 40.7 dBu
FRESNO CA
LIC BLCDT20030702ABJ

0.73	0.74	0.78	0.84	0.90	0.95	0.99	1.00	0.97	0.92	0.83	0.72
0.58	0.45	0.33	0.26	0.26	0.29	0.31	0.29	0.26	0.26	0.33	0.45
0.58	0.72	0.83	0.92	0.97	1.00	0.99	0.95	0.90	0.84	0.78	0.74

(67.0 1.00)(293.0 1.00)

Ref Az: 220.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	29071.70	1203823
not affected by terrain losses	25467.31	1192739

KJOI-LP 35-25-47 118-44-56 34(+) 150.000 kw 1062 m DA 10.0 % 73.7
BAKERSFIELD CA
PROPOSED

1.00	0.94	0.83	0.80	0.93	1.00	0.98	0.92	0.94	0.71	0.58	0.41
0.14	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.13	0.40	0.56	0.71	0.82	0.92	0.98	0.98	0.89	0.78	0.83	0.95

Ref Az: 270.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00

	Area	Pop
Interference	340.79	2896

KJEO-T 37-04-14 119-25-31 34(N) 330.000 kw 1435 m 90.0 % 40.7 dBu
 FRESNO CA
 GRANT BPRM20000803AAD

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	35212.42	1256785
not affected by terrain losses	30940.12	1240388

KJOI-LP 35-25-47 118-44-56 34(+) 150.000 kw 1062 m DA 10.0 % 73.7
 BAKERSFIELD CA

PROPOSED

1.00	0.94	0.83	0.80	0.93	1.00	0.98	0.92	0.94	0.71	0.58	0.41
0.14	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.13	0.40	0.56	0.71	0.82	0.92	0.98	0.98	0.89	0.78	0.83	0.95

Ref Az: 270.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00

	Area	Pop
Interference	344.67	3030

KMEX-T 34-13-36 118-03-59 34(Z) 2291.000 kw 1839 m DA 50.0 % 63.7 dBu
 LOS ANGELES CA 21279 12427 FCC NTSC BL:13747950 FCC IX POP%: 1.0
 LIC BLCT20030313AHD

1.00	0.43	0.52	0.48	0.34	0.33	0.51	0.71	0.84	0.91	0.94	0.97
1.00	0.98	0.87	0.73	0.60	0.51	0.47	0.46	0.46	0.46	0.47	0.50
0.56	0.66	0.77	0.86	0.87	0.88	0.88	0.87	0.85	0.76	0.58	0.36

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	31158.38	14045872
not affected by terrain losses	21740.82	12640254

KJOI-LP 35-25-47 118-44-56 34(+) 150.000 kw 1062 m DA 10.0 % 73.7
 BAKERSFIELD CA

PROPOSED

1.00	0.94	0.83	0.80	0.93	1.00	0.98	0.92	0.94	0.71	0.58	0.41
0.14	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.13	0.40	0.56	0.71	0.82	0.92	0.98	0.98	0.89	0.78	0.83	0.95

Ref Az: 270.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 28.00

	Area	Pop
Interference	0	19

DKADE 35-21-38 120-39-21 34(0) 50.000 kw 778 m DA 90.0 % 40.7 dBu
 SAN LUIS OBISPO CA 6564 272 DTVSERVICE: 272000 NTSCSERVICE: 245000
 DTVALT DTV ALLOTMENT

0.50	0.35	0.27	0.19	0.14	0.14	0.15	0.16	0.16	0.15	0.14	0.14
0.17	0.21	0.32	0.48	0.69	0.91	1.00	0.95	0.82	0.59	0.34	0.33
0.33	0.30	0.31	0.33	0.32	0.35	0.55	0.76	0.87	0.89	0.86	0.70

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

USING NTSC GRADE B FOR SERVICE AREA

	Area	Pop
within Noise Limited Contour	7075.210	275028
not affected by terrain losses	6699.677	273866

KJOI-LP 35-25-47 118-44-56 34(+) 150.000 kw 1062 m DA 10.0 % 73.7
 BAKERSFIELD CA
 PROPOSED

1.00	0.94	0.83	0.80	0.93	1.00	0.98	0.92	0.94	0.71	0.58	0.41
0.14	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.13	0.40	0.56	0.71	0.82	0.92	0.98	0.98	0.89	0.78	0.83	0.95

Ref Az: 270.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00

	Area	Pop
Interference	39.95	12

KTAS 35-21-38 120-39-21 34(N) 82.000 kw 779 m DA 90.0 % 40.7 dBu
 SAN LUIS OBISPO CA 6564 272 DTVSERVICE: 272000 NTSCSERVICE: 245000
 CP MOD BMPCDT20020904AAP

0.58	0.56	0.60	0.66	0.76	0.87	0.95	1.00	0.98	0.92	0.84	0.72
0.59	0.44	0.30	0.25	0.28	0.36	0.40	0.38	0.30	0.25	0.29	0.42
0.57	0.72	0.84	0.92	0.98	1.00	0.97	0.88	0.77	0.66	0.60	0.56

Ref Az: 250.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	21060.21	377607
not affected by terrain losses	18858.28	366675

KJOI-LP 35-25-47 118-44-56 34(+) 150.000 kw 1062 m DA 10.0 % 73.7
 BAKERSFIELD CA
 PROPOSED

1.00	0.94	0.83	0.80	0.93	1.00	0.98	0.92	0.94	0.71	0.58	0.41
0.14	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.13	0.40	0.56	0.71	0.82	0.92	0.98	0.98	0.89	0.78	0.83	0.95

Ref Az: 270.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00

	Area	Pop
Interference	203.81	27

SUMMARY OF CALCULATIONS

Facility	Channel	Type	Baseline	Permissible	IX	%Base
KAZB-C, BAKERSFIELD, CA	19	TV	142668	0.5	0	0.00
DKBAKT, BAKERSFIELD, CA	33	DTV	538000	0.5	0	0.00
KBAK-T, BAKERSFIELD, CA	33	DTV	538000	0.5	95	0.02
KGPE, FRESNO, CA	34	DTV	1203823	0.5	2896	0.24
KJEO-T, FRESNO, CA	34	DTV	1262517	0.5	3030	0.24
KMEX-T, LOS ANGELES, CA	34	TV	13747950	0.5	19	0.00
DKADE, SAN LUIS OBISPO, CA	34	DTV	272000	0.5	12	0.00
KTAS, SAN LUIS OBISPO, CA	34	DTV	272000	0.5	27	0.01