

Lakeside  
**Smith and Fisher**

**AUTHORIZED 74 DBU**

**PROPOSED 74 DBU**

El Cajon

La Mesa

Spring Valley

San Diego

Coronado

National City

Proposed Site

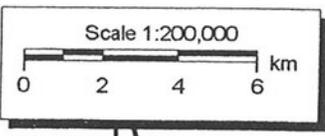
Bonita

Chula Vista

Imperial Beach

**PROPOSED 74 DBU**

**AUTHORIZED 74 DBU**



PROPOSED OPERATING PARAMETERS

PROPOSED KBOP-CA  
CHANNEL 43 – SAN DIEGO, CALIFORNIA

Transmitter Power Output:	1.0 kw
Transmission Line Efficiency:	88.1%
Antenna Power Gain – Toward Horizon:	4.65
Antenna Power Gain – Main Lobe:	66.0
Effective Radiated Power – Toward Horizon:	4.1 kw
Effective Radiated Power – Main Lobe:	58.1 kw
Transmitter Make and Model:	Type-accepted
Rated Output	1.0 kw
Transmission Line Make and Model:	Andrew HJ7-50A
Size and Type:	1-5/8" air heliax
Length:	100 feet
Antenna Make and Model:	PSI PSILP16CRAC-43
Orientation	245 degrees true
Beam Tilt	2.9 degrees
Effective Height Above Ground:	24.4 meters
Effective Height Above Mean Sea Level:	800 meters

POWER DENSITY CALCULATION  
PROPOSED KBOP-CA  
CHANNEL 43 – SAN DIEGO, CALIFORNIA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this San Diego facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 58.1 kw, an effective antenna height of 24.4 meters above ground, and the vertical pattern of the PSI antenna, maximum power density two meters above ground of  $0.0053 \text{ mw/cm}^2$  is calculated to occur 427 meters west-southwest of the base of the tower. Since this is only 1.2 percent of the  $0.43 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 43 (644-650 MHz), this proposal may be excluded from consideration with respect to public exposure to nonionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive nonionizing radiation.