

## Compliance with 47 C.F.R. 73.525

There are several considerations outlined in 47 C.F.R. 73.525 for TV channel 6 protection. Outlined below are the various factors as they apply to the proposed operation and KSBY-TV.

**1. Distance between proposed operation and KSBY-TV**

47 C.F.R. 73.525(a)(1) requires a minimum separation of 196 kilometers for a channel 208 operation. The distance between the proposed station and KSBY-TV is 111.1 kilometers.

**2. Population Limitation**

When a proposed non-commercial station is not co-located with the channel 6 station in question, the applicant is required to show that the interference area (as predicted by the procedures outlined in 47 C.F.R. 73.525(e)(1)) contains no more than 3,000 persons. The actual population figures are contained in Exhibit 18 A, and a map of the interference area is shown in Exhibit 18 B.

**3. Vertically Polarized Transmissions**

When an applicant wishes to use vertically polarized transmissions only, C.F.R. 74.525(e)(4) limits the vertical ERP to the maximum permissible horizontally polarized ERP multiplied by 40 (if the predicted interference area lies entirely outside the limits of a city of 50,000 persons) or 10 (if not). The maximum permissible horizontally polarized ERP for the proposed facility is 1.25 kilowatts. Since the predicted interference area lies entirely outside the limits of a city of 50,000 persons, that is multiplied by 40 to obtain the vertical-only ERP of 50.0 kilowatts specified in this application.

For the reasons outlined above, the proposed operation fully complies with the provisions of 47 C.F.R. 73.525.

**73.525 Compliance**

Population in the predicted interference area was determined using the centroid method and the 2000 census. The predicted interference contour (of the theoretical horizontal component of 1.25 kilowatts) crosses the KSBY channel 6 grade B (47 dBu F(50,50)) contour (see Exhibit 18 B).

The predicted interference contour is determined from 47 C.F.R. 73.599 for channel 208 to range from 67.3 dBu to 65.9 dBu. (See Exhibit 18 C for a tabulation of the KSBY protected contour values and the corresponding channel 208 interfering contours)

Also, since the only network affiliation for KSBY is NBC, then per 47 C.F.R. §73.525(e)(3)(iii), the population centroids that are in the interference area that is located outside KSBY's Area of Dominant Influence (ADI)<sup>1</sup>, outside KSBY's Grade A (68 dBu F(50,50)) field strength contour, and within the predicted city grade (80 dBu F(50,50)) field strength contour for KGET (whose only network affiliation also NBC), have been excluded.

Exhibit 18 B shows the 47 through the 52 dBu F(50,50) contours for KSBY, the corresponding F(50,10) interfering contours for the proposed channel 208 facility, and the KGET 80 dBu F(50,50) contour. This map also shows the interpolated interfering contour determined by connecting the intersections of the KSBY protected contours and the corresponding interfering contours of the proposed facility (see 47 C.F.R. 73.525(e)(1)(ii)). (Note that the interpolated interfering contour excludes the centroids within KGET's 80 dBu contour.)

Exhibit 18 D shows only the KSBY Grade B contour and the proposed operation's interpolated interfering contour. Additionally shown is a population scattergraph of the area of proposed operation. Please see exhibit 18 A for a population report of the area contained within the interpolated interfering contour which totals 441 people.

Therefore, the proposed operation is within the limitations of 47 CFR 73.525(c).

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<sup>1</sup> Nielsen's current Designated Market Area (DMA) was used in place of the outdated ADI information.

**Population Report**

Polygon Population Report

Population Database: 2000 US Census (SF1)

Total Population: 441

Polygon Area: 217.4 sq. km



**Exhibit 18 B**

**KGLV**

Latitude: 35-36-52 N  
Longitude: 119-28-15 W  
ERP: 1.25 kW  
Channel: 208  
Frequency: 89.5 MHz  
AMSL Height: 188.0 m  
Elevation: 77.0 m  
Horiz. Pattern: Directional  
Prop Model: None

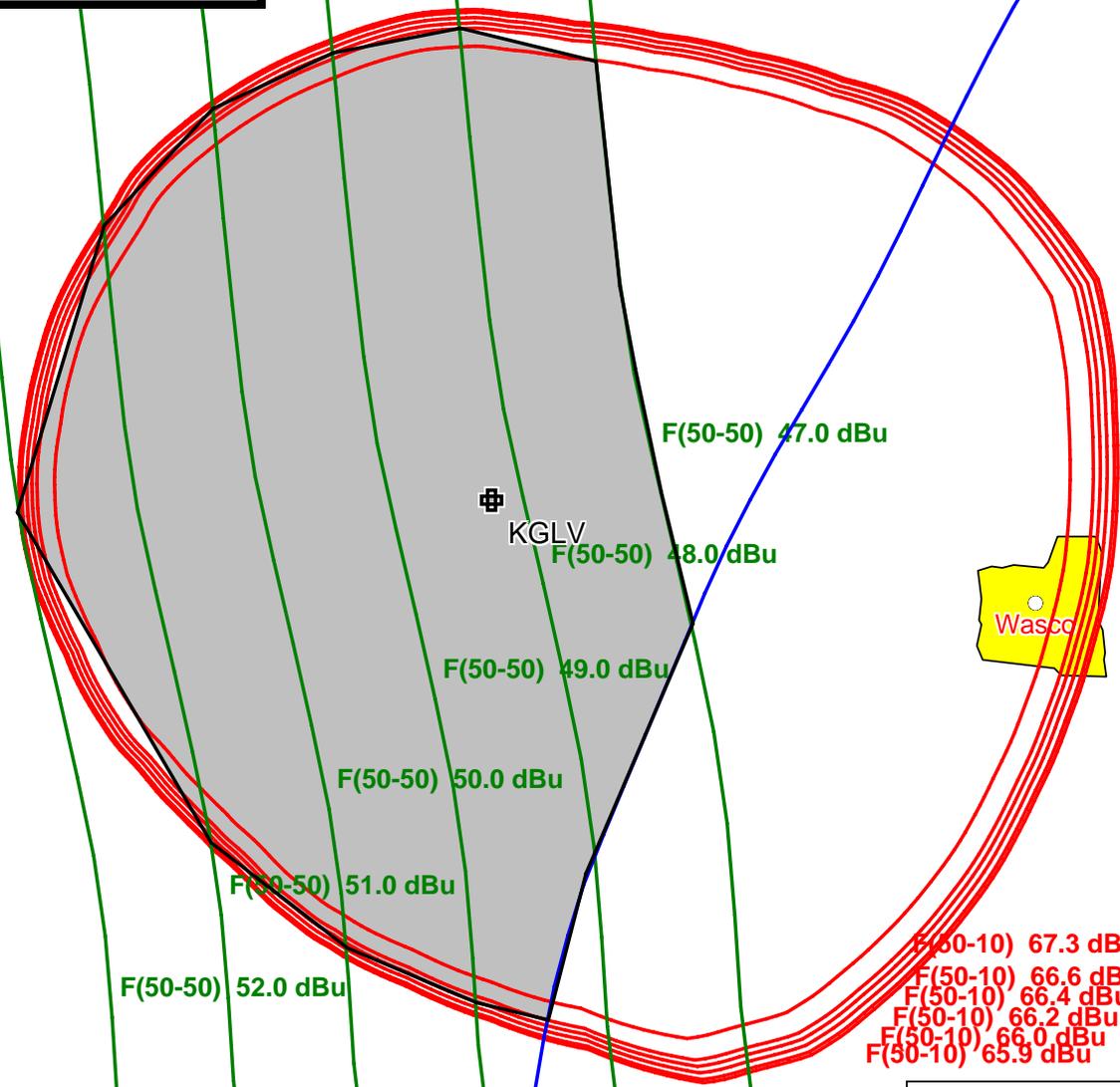
**KSBY**

BMLCT19860228KG  
Latitude: 35-21-37 N  
Longitude: 120-39-18 W  
ERP: 100.00 kW  
Channel: 06+  
Frequency: 85.5 MHz  
AMSL Height: 885.0 m  
Elevation: 626.69 m  
Horiz. Pattern: Omni

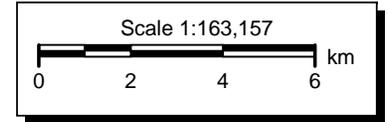
**KGETTV**

BLCT19790529KF  
Latitude: 35-26-20 N  
Longitude: 118-44-23 W  
ERP: 5000.00 kW  
Channel: 17Z  
Frequency: 491.0 MHz  
AMSL Height: 1148.0 m  
Elevation: 986.39 m  
Horiz. Pattern: Directional

Shaded polygon area contains  
441 people in 217.4 sq. km



- KGLV Interfering Contour
- KSBY Protected Contour
- KGETTV 80 dBu Contour



**Channel 6 vs Channel 208**

Channel 6 Contour	Value from 73.599	Channel 209 Contour
<b>47 (grade B)</b>	<b>20.3</b>	<b>67.3</b>
<b>48</b>	<b>18.6</b>	<b>66.6</b>
<b>49</b>	<b>17.4</b>	<b>66.4</b>
<b>50</b>	<b>16.2</b>	<b>66.2</b>
<b>51</b>	<b>15.0</b>	<b>66.0</b>
<b>52</b>	<b>13.9</b>	<b>65.9</b>
53	13.0	66.0
54	12.0	66.0
55	11.2	66.2
56	10.3	66.3
57	9.4	66.4
58	8.5	66.5
59	7.7	66.7
60	6.9	66.9
61	6.3	67.3
62	5.5	67.5
63	5.0	68.0
64	4.4	68.4
65	3.8	68.8
66	3.4	69.4
67	3.0	70.0

Channel 6 Contour	Value from 73.599	Channel 209 Contour
68 (grade A)	2.5	70.5
69	2.3	71.3
70	2.0	72.0
71	1.7	72.7
72	1.4	73.4
73	1.3	74.3
74	0.9	74.9
75	0.7	75.7
76	0.5	76.5
77	0.4	77.4
78	0.1	78.1
79	-0.1	78.9
80	-0.2	79.8
81	-0.4	80.6
82	-0.6	81.4
83	-0.7	82.3
84	-0.9	83.1
85	-1.1	83.9
86	-1.2	84.8
87	-1.4	85.6
88	-1.6	86.4
89	-1.7	87.3
90	-1.8	88.2



**Exhibit 18 D**

**KGLV**  
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Channel: 208  
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AMSL Height: 188.0 m  
Elevation: 77.0 m  
Horiz. Pattern: Directional  
Prop Model: None

**KSBY**  
BMLCT19860228KG  
Latitude: 35-21-37 N  
Longitude: 120-39-18 W  
ERP: 100.00 kW  
Channel: 06+  
Frequency: 85.5 MHz  
AMSL Height: 885.0 m  
Elevation: 626.69 m  
Horiz. Pattern: Omni

 **KSBY Protected Contour**

Interpolated Interfering contour  
contains 441 people in 217.4 sq. km

