

EXHIBIT 15, Groundwave Interference Considerations

PART B

Field Strength Measurements

Statement

Part B of Exhibit 15 contains field strength measurements of the daytime operation of KEPL, Estes Park, Colorado, that were employed for determining the values of effective ground conductivity along three radial paths from KEPL. Station KEPL operates on 1470 kHz with 1.0 kW power during daytime hours, employing a nondirectional antenna.

Field strength measurements of KEPL were made along radials bearing 15° True, 35° True and 55° True. Data for these measurements is contained in Tables A, B and C of Part B of this Exhibit. Graphs A, B and C show an analysis of the measurements. The data tabulations also identify significant terrain features along each radial path; the KEPL transmitter site is located just south of the town of Estes Park, and the radial paths fall entirely in Roosevelt National Forest, Estes Park and Rocky Mountain National Park.

The field strength measurements of KEPL contained in Part B of this Exhibit were made by this engineer with a Potomac Instruments Model FIM-41 Field Strength Meter, serial number 1858, which was last calibrated on June 4, 2001. The radial paths for the field strength measurements were plotted on USGS 7-1/2-minute topographic maps, and all of the points at which field strength measurements were made were plotted on these maps; the determination of the distance to the points of measurement is accurate to within approximately one percent, or 0.03 kilometer, whichever distance is greater. Aerial photographs were utilized as a supplement to the topographic maps in a number of instances, for the purpose of locating measurement points precisely. Maps showing the location of the points of measurement will be placed in the files of station KRAE.

These field strength measurements were made in accordance with the methods set forth by the Federal Communications Commission to the extent that this was possible. All of the measurements were made at points relatively free from local interfering obstructions, such as overhead wires. With certain exceptions, the field strength measurements were made during the period of the day beginning two hours after sunrise and ending two hours before sunset. Where measurements were made less than two hours before sunset, all of the values of field strength were sufficiently high to preclude any possibility of daytime skywave interference to the measurements. Although some areas along the radial paths were covered with snow, it is unlikely that this environmental condition had any significant effect on the validity of the field strength measurements.

EXHIBIT 15, PART B (continued)

Field Strength Measurements

The operation of the KEPL transmitting facilities was monitored during the period of the field strength measurements by a daily check of the field strength at a selected point near the station's transmitter site. Maximum deviation of the measured field strength at the check point was less than one percent of the average of all the measurements made at this point.

Mountainous terrain exists over extended portions of each of the KEPL measured radials, and the number of distant measurement points on these radials was limited by problems of access. It is believed that a sufficient number of field strength measurements for an accurate analysis have been obtained.

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