

FEDERAL COMMUNICATIONS COMMISSION
445 TWELFTH STREET SW
WASHINGTON DC 20554

MEDIA BUREAU
AUDIO DIVISION
APPLICATION STATUS: (202) 418-2730
HOME PAGE: www.fcc.gov/mb/audio/

ENGINEER: CHARLES N. (NORM) MILLER
TELEPHONE: (202) 418-2767
FACSIMILE: (202) 418-1410
E-MAIL: charles.miller@fcc.gov

August 27, 2012

David Oxenford, Esq.
Wilkinson Barker Knauer LLP
2300 N Street NW, Suite 700
Washington DC 20037

In re: Point Four LLC
KCAQ (FM), Oxnard, California
Facility Identification Number: 25092
Application for Experimental Authorization

Dear Counsel:

The staff has before it a request for an Experimental Authorization, filed August 23, 2012, on behalf of Point Four LLC ("PFL"), licensee of Station KCAQ(FM), Oxnard, California. PFL proposes to conduct experimental operations at the site of Station KCAQ, to determine the benefits of operation with a vertically polarized signal.¹

PFL proposes to install a vertically polarized antenna at the site specified in Construction Permit BPH-20110415ABA, and to operate the station with the authorized vertically polarized effective radiated power, but with no horizontally polarized component. PFL proposes to test the effectiveness of the vertically polarized signal in the "extremely rugged and unusual terrain of KCAQ's service area." PFL states that it believes the problem of "picket fencing" in vehicular receivers can be eliminated through the use of a vertically polarized signal. PFL further states that the FM reception environment has changed. When the rules for FM broadcast stations were originally enacted, horizontally polarized outdoor antennas predominated; however, now there are very few outdoor FM antennas in use, and the vast majority of FM receive antennas are vertically polarized in design, such as vertical masts in vehicles and vertical wires in portable or desktop receivers. PFL further notes that the use of vertical-only polarization could cut energy requirements for the station nearly in half. Finally, PFL states that a similar experimental authority was previously granted to Station KCAQ; however, it was not implemented due to the planned change in transmitter location.

Our review indicates that the proposed experimental operation meets the requirements of Section 73.1510 of the Commission's rules and that the proposed experimental operation is not likely to result in interference to any other station. We agree with PFL's assessment that the FM reception

¹ KCAQ is licensed for operation on Channel 284B (104.7 MHz), with effective radiated power ("ERP") of 4.5 kW (H&V) and antenna height above average terrain ("HAAT") of 464 meters. Construction Permit BPH-20110415ABA authorizes relocation of the transmitter, an increase in ERP to 18 kW (H&V) and a decrease in HAAT to 252 meters.

environment has evolved over the past 50 years from horizontally polarized to predominately vertical, and that substantial energy saving would result from elimination of the horizontal component of the FM Broadcast signal. Thus, the Public Interest would be served through the collection of data on vertically polarized FM Broadcast signals which could be used in support of a Petition for Rule Making to modify Section 73.316 of the Commission's Rules to permit the use of vertical-only or predominately vertical polarization by FM stations.

Accordingly, the request for Experimental Authorization IS HEREBY GRANTED. Station KCAQ may operate from the site specified in Construction Permit BPH-20110415ABA with a vertically polarized antenna as described above. Effective radiated power shall not exceed 18 kilowatts. PFL shall employ whatever means are necessary to prevent excessive exposure of workers or the public to radio frequency radiation, pursuant to Section 1.1310. Within 60 days following completion of the experimental operation authorized herein, PFL shall file a full report of the research, experimentation and results with the Commission, pursuant to Section 73.1510(d). The authority granted herein does not convey or imply any authority for continued operation beyond the expiration date below. Any construction undertaken pursuant to this authority is entirely at PFL's own risk. This authority may be modified or cancelled by the FCC at any time without prior notice or right to hearing.

This authorization expires on **August 27, 2013**.

Sincerely,

A handwritten signature in blue ink, appearing to read "Charles N. Miller".

Charles N. Miller, Engineer
Audio Division
Media Bureau

cc: Point Four LLC