

SPECIAL OPERATING CONDITIONS
TECHNICAL STATEMENT
K233CH GREELEY, COLORADO
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This technical statement is made in support of an FCC Form 350 filed for K233CH Greeley, Colorado, facility ID 158501.

The construction permit, BNPFT-20130301AGP, has a special operating condition, number 3, that requires compliance with the spurious emission requirement under 47 C.F.R Sections 73.317(b) through 73.317(d).

Measurements were conducted at the new transmitter site using an HP model 8560A RF spectrum analyzer which was inserted into the output of the cavity diplexer using a Bird ThruLine wattmeter, model 43, with an RF sample output.

With modulation of both the K233CH and K271BN transmitters, all emissions were found to be in compliance.

Any emission appearing on a frequency removed from the carrier by between 120 kHz and 240 kHz inclusive was found to be attenuated by greater than 54 dB, more than the minimum of 25 dB, below the level of the unmodulated carrier.

Any emission appearing on a frequency removed from the carrier by more than 240 kHz and up to and including 600kHz was found to be attenuated by greater than 65 dB, more than the minimum of 35 dB, below the level of the unmodulated carrier.

Any emission appearing on a frequency removed from the carrier by more than 600kHz was found to be attenuated by greater than 80 dB, close to 95 dB, below the level of the unmodulated carrier. The minimum attenuation required is the lesser of 80 dB or

$43 + 10 \log_{10}(230)$ dB which is 63.6 dB, below the level of the unmodulated carrier.

Measurement shows compliance.

The construction permit, BNPFT-20130301AGP, has a special operating condition, number 4, concerning any changes to the AM tower for KGRE(AM). The operating characteristics of KGRE AM were carefully monitored before and after the installation of K233CH and no changes to KGRE(AM) were observed. This was as expected as there were no changes made to anything on or part of the AM tower, including no modifications to the transmitting antenna, the transmission lines, or the addition or removal of anything mounted on the tower. A diplexer was added with its diplexing cavities/filters inside of the transmitter building. Nothing was changed with the AM antenna system.

Respectfully submitted:

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