



# Propagation Systems, Inc.

Quality Broadcast Antenna Systems

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June 8, 2016

Jim Turvaville  
Turbo Tech Services  
PO Box 144  
360 Patton Street  
Mobeetie, TX 79061

Ref: FM Translator W231DD for Grand Rapida, MI Co-locating with Existing FM Translator, W235BN

Dear Mr. Turvaville,

We anticipate no adverse effects to the directional pattern of the W235BN antenna as a result of mounting the W231DD antenna 43 meters higher on the tower.

The coaxial transmission line which will be used to feed the W231DD antenna passes through the aperture of the W235BN antenna but will be shielded by the reflector panels used in the design. Thus, this transmission line will not have any adverse effect on the pattern of the W235BN antenna.

If you have any additional questions please don't hesitate to call.

Sincerely,

Douglas A. Ross  
President