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B. W. St. Clair, Inc.

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**Engineering Statement**  
in support of a  
**Displacement Application for BLDDT20110301ABU**  
**Channel 27, Tendoy/Leadore, ID**  
**Salmon TV Translator District**

**BACKGROUND**

Applicant is licensed as a digital TV translator on channel 51, K51LR-D. Applicant has been notified by a telephone company, CusterTel, that K51LR should be moved to another channel as they are getting ready to use channel 52. Therefore the applicant is requesting a displacement to channel 27 for its digital operations to continue.

**CUSTOM ANTENNA ARRAY**

The custom antenna array consists of one PR-TV Paraflector and a pair of Kathrein broadband panel antennas skewed 99.4°.

**CANADIAN INTERFERENCE ANALYSIS**

Probe4 was used to map the 19.5 dBu interference contour to see if the contour crossed the Canadian border. The 19.5 dBu (F50-10) contour did not cross the Canadian border at any point.

**INTERFERENCE CONSIDERATIONS**

Interference to the various TV stations was studied using "Population Loss Studies" based on the "Longley-Rice Terrain Dependent Algorithm" in accordance with OET Bulletin 69.<sup>1</sup> Population loss for each station is less than 0.5% for full-service and Class A TV stations and less than 2% for LPTV and translator stations. Cell size for service analysis is 1.0 km/side. The distance increments for Longley-Rice Analysis is 1.0 km. Any discrepancies are noted below.

NONE

Prepared By:  
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<sup>1</sup> The analysis was performed on a Sun "Blade" Computer using the exact replica of the FCC program. Population losses of less than 0.5% are not reported in detail. Only an indication of no interference is shown.