

ENGINEERING EXHIBIT

Request for Special Temporary Authorization

prepared for

Gray Television Licensee, LLC

K49CK-D Stead, NV

Facility ID 17504

Ch. 49 (digital) 0.417 kW

Gray Television Licensee, LLC (“Gray”) is the licensee of digital television translator station K49CK-D, Facility ID 17504, Stead/Lawton, NV (BLDTT-20100324ABT). The primary station associated with K49CK-D is KOLO-TV, Facility ID 63331, Reno NV. This statement supports *Gray*’s request for Special Temporary Authority (“STA”) to operate K49CK-D at an alternate site.

The tower structure supporting the K49CK-D antenna collapsed on November 18, 2011 during high winds. K49CK-D has been silent since that time as described in BLSTA-20111213AAY. *Gray* is contemporaneously filing an application for Construction Permit on FCC Form 346 to rebuild the K49CK-D facility at an alternate site located 0.44 km from the licensed site. This STA request is made to allow operation at the proposed site during processing of the Form 346 application, having identical technical parameters to the STA request. *Gray* desires to resume operations as soon as possible.

The accompanying CDBS electronic filing STA “Tech Box” provides pertinent technical data. Figure 1 depicts the 51 dB μ coverage contour of the proposed facility with that of the licensed K49CK-D. The service area overlap shown demonstrates compliance with §73.3572 for a minor change.

The proposed antenna system will be side-mounted on an existing tower structure with no change to the overall structure height. The tower structure is not presently registered with the FCC,

as it is less than 61 meters overall height above ground and there are no landing areas within 8 km according to the FCC's "TOWAIR" slope test program.

Interference study per OET Bulletin 69¹ shows that the proposal complies with the Commission's interference protection requirements toward all digital television, television translator, LPTV, and Class A stations. The results, summarized in Table 1, show no interference is predicted to be caused to any facility and therefore the proposal complies with §74.793.

The nearest FCC monitoring station is 261 km distant at Livermore, CA. This exceeds the threshold minimum distance specified in §73.1030(c)(3) that would suggest consideration of the monitoring station. The site is not located within the areas requiring coordination with quiet zones specified in §73.1030(a) and (b). There are no authorized AM stations within 3.2 kilometers of the site. The site is not within a border area requiring international coordination.

Human Exposure to Radiofrequency Electromagnetic Field

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number 65. Based on OET-65 equation (10) and considering 30 percent antenna relative field in downward elevations, the calculated signal density near the tower at two meters above ground level attributable to the proposed facility is $10.4 \mu\text{W}/\text{cm}^2$ which is 2.3 percent of the general population/uncontrolled maximum permitted exposure limit. This is below the five percent threshold limit described in §1.1307(b) regarding sites with multiple emitters, categorically excluding the applicant from responsibility for taking any corrective action in the areas where the proposal's contribution is less than five percent.

The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will

¹FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 ("OET-69"). The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. A cell size of 1 km was employed. Comparisons of various results of this computer program (run on a Sun Sparc processor) to the Commission's implementation of OET-69 show excellent correlation.

reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from RF electromagnetic field exposure in excess of FCC guidelines.

This exhibit is limited to the evaluation of exposure to RF electromagnetic field. The proposal involves installation of a side-mounted transmitting antenna on an existing antenna support structure which was constructed prior to March 16, 2001. No change in structure height is proposed.

Certification

The undersigned hereby certifies that the foregoing statement and associated attachments were prepared by him or under his direction, and that they are true and correct to the best of his knowledge and belief.



Joseph M. Davis, P.E.
January 25, 2012

Chesapeake RF Consultants, LLC
207 Old Dominion Road
Yorktown, VA 23692
703-650-9600

List of Attachments

Figure 1	Coverage Contour Comparison
Table 1	Interference Analysis Results Summary

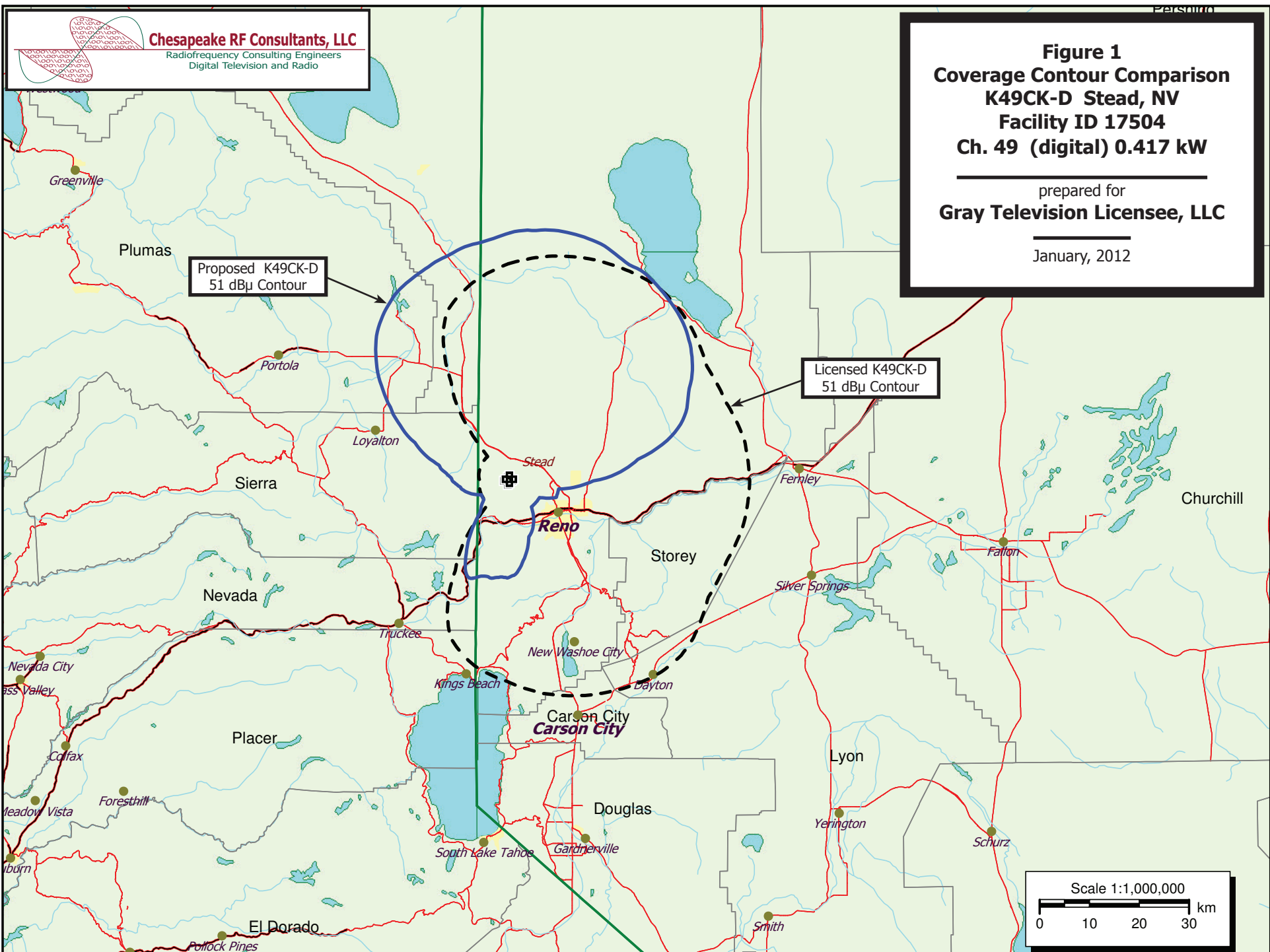
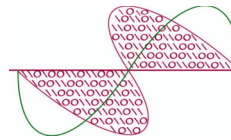


Table 1

Interference Analysis Results Summary

prepared for

Gray Television Licensee, LLC**K49CK-D Stead, NV****Chesapeake RF Consultants, LLC**Radiofrequency Consulting Engineers
Digital Television and Radio

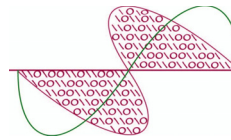
K49CK-D	USERRECORD-01	STEAD	NV US
Channel 49	ERP 0.417 kW	HAAT 817. m	RCAMSL 02528 m
SIMPLE MASK			
Latitude 039-35-22 Longitude 0119-55-39			
Dir Antenna Make CDB Model 00000000020748 Beam tilt N Ref Azimuth 10.			

Ch.	Call	City/State	Dist	Status	Application Ref. No.	---Population (2000 Census)---	
			(km)			Baseline	New Interference
41	KNVV-LP	RENO NV	31.2	LIC	BLTTL-20010829ABA	---	none
42	K42GV	SUSANVILLE, ETC. CA	102.1	LIC	BLTTL-20070620AEA	---	none
42	K42IL	VERDI NV	1.7	LIC	BLTT-20071211ABP	---	none
45	K45GZ	DAYTON NV	58.0	LIC	BLTT-20020715AAH	---	none
45	K45GZ	DAYTON NV	58.0	APP	BPTT-20000824AAR	---	none
46	K46HL-D	SUSANVILLE CA	102.1	CP	BPTT-20080611ACD	---	none
46	KRNS-CA	RENO, ETC NV	31.0	LIC	BLTTA-20051114AFU	---	none
46	KRNS-CA	RENO, ETC. NV	31.0	APP	BSTA-20110218AAD	---	none
48	K48KB	CHICO CA	182.9	LIC	BLTTL-20090406AJP	---	none
48	K48DI-D	LITCHFIELD CA	67.4	LIC	BLDTL-20111205AAU	---	none
48	KSPX-TV	SACRAMENTO CA	199.8	LIC	BLCDT-20050110ABB	---	none
48	K48LA-D	SOUTH LAKE TAHOE CA	60.2	LIC	BLDTT-20081010BFY	---	none
48	K48GG-D	HAWTHORNE NV	160.9	CP MOD	BMPDTT-20090521ADM	---	none
48	K48GG-D	HAWTHORNE NV	160.9	LIC	BLDTT-20100723AMY	---	none
48	NEW	LOVELOCK NV	118.1	APP	BNPDTL-20100512AHD	---	none
48	NEW	SCHURZ NV	113.0	APP	BNPDTL-20100430ADM	---	none
49	K49EA-D	CROWLEY LAKE CA	241.8	LIC	BLDTT-20111108AGI	---	none
49	NEW	LAKEPORT CA	275.3	APP	BNPDTL-20100609AFT	---	none
49	KMPH-CD	MERCED-MARIPOSA CA	228.7	APP	BSTA-20110930ALN	---	none
49	KMPH-CD	MERCED-MARIPOSA CA	228.7	LIC	BLDTL-20110110AAE	---	none
49	K49EO	MODESTO CA	235.6	LIC	BLTT-20000306AAN	---	none
49	K49CT-D	PARADISE CA	134.3	LIC	BLDTT-20100212ABA	---	none
49	KSAO-LD	SACRAMENTO CA	145.4	LIC	BLDTL-20100420AAG	---	none
49	KSAO-LD	SACRAMENTO CA	145.4	APP	BDFCDTL-20090220AEA	---	none
49	KSTS	SAN JOSE CA	287.3	LIC	BLCDT-20030507AAT	---	none
49	K49KS-D	SANTA ROSA CA	272.2	APP	BSTA-20110202ABS	---	none
49	K49KS-D	SANTA ROSA CA	272.2	LIC	BLDTL-20111006AHF	---	none
49	K49MD-D	TRUCKEE CA	29.6	CP	BNPDTT-20100617AAE	---	none
49	DKFRE-CA	TULARE CA	337.5	CP	BDISDTA-20090916ADC	---	none
49	K49IG-D	YREKA CA	335.0	LIC	BLDTL-20100923AFX	---	none
49	NEW	BATTLE MOUNTAIN NV	298.1	APP	BNPDTL-20100512AHP	---	none

Table 1

Interference Analysis Results Summary

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Chesapeake RF Consultants, LLC

Radiofrequency Consulting Engineers
Digital Television and Radio

<u>Ch.</u>	<u>Call</u>	<u>City/State</u>	<u>Dist</u>	<u>Status</u>	<u>Application Ref. No.</u>	<u>---Population (2000 Census)---</u>	
			<u>(km)</u>			<u>Baseline</u>	<u>New Interference</u>
49	K49LG-D	EUREKA NV	337.5	LIC	BLDTT-20100322ADI	---	none
49	K49BK-D	WINNEMUCCA NV	242.2	LIC	BLDTT-20070404AAJ	---	none
49	K49FZ	YERINGTON NV	89.1	LIC	BLTT-20020423AAY	---	none
50	KBIT-LD	CHICO CA	168.0	CP	BPDTL-20111107APL	---	none
50	KBIT-LD	CHICO CA	168.0	LIC	BLDTL-20101103ACX	---	none
50	K50HJ-D	LITCHFIELD CA	67.4	LIC	BLDTT-20111205AAV	---	none
50	K50AI-D	HAWTHORNE NV	160.9	LIC	BLDTT-20100120ACJ	---	none
50	K50LY-D	RENO NV	2.0	CP	BNPDTL-20091222AOW	---	none
50	K50LN-D	SILVER SPRINGS NV	55.2	CP	BNPDTL-20090825BOE	---	none
52	DK52FF	RENO NV	11.1	LIC	BLTTL-19970331JA	---	none
56	K56IG	NIXON NV	44.1	LIC	BLTT-20070309AFV	---	none