

## **ENGINEERING EXHIBIT**

### **Application for Digital Television Station Construction Permit**

prepared for

#### **Bluestone License Holdings Inc.**

KECI-TV Missoula, MT

Facility ID 18084

Ch. 13 41.3 kW 610 m

*Bluestone License Holdings Inc.* (“*Bluestone*”) is the licensee of KECI-TV, Missoula, MT, Facility ID 18084. During the pre-transition period, KECI-TV operated on digital Channel 40 (BLCDT-20060817ACY). A Construction Permit (“CP”, BMPCDT-20080613ABF) authorizes construction of the KECI-TV post-transition digital facility on VHF Channel 13, its former analog channel. KECI-TV is presently operating on Channel 13 and a license application is pending to cover the construction (BLCDT-20090622AEJ). KECI-TV’s current operation on Channel 13 is at an increased ERP of 41.3 kW pursuant to Special Temporary Authority (“STA” BDSTA-20090812AAY, extension request pending BEDSTA-20100211ABI). The STA was sought shortly after the transition date in order to recover many viewers who lost reception when KECI-TV ceased analog transmission. *Bluestone* herein seeks a new CP to permanently increase the ERP to 41.3 kW while maintaining the authorized antenna location and height.

The transmitting antenna (RCA model TW-12A13P) is located on an antenna supporting structure having FCC Antenna Structure Registration number 1000779. No change to the overall structure height and no tower work are required to carry out this proposal.

A map is supplied as **Figure 1**, which depicts the standard predicted coverage contours. This map includes the location of Missoula, KECI-TV’s principal community. As demonstrated thereon, the proposed facility complies with §73.625(a)(1), as the entire principal community will be encompassed by the 43 dBμ contour.

The proposed KECI-TV facility's predicted service population provides a 104 percent match of the Appendix B facility, as detailed in the following table.

<b>Digital Television Population Summary</b>		
Population Summary (2000 Census) OET Bulletin 69 method	Appendix B	Proposed
Within Noise Limited Contour	183,489	207,562
Not affected by terrain losses	169,109	175,845
Lost to all interference	197	138
Net DTV Service	<b>168,912</b>	<b>175,707</b>
Match of Appendix B	---	<b>104.02%</b>

### **Maximum ERP per §73.622(f)(7)**

The proposed 41.3 kW ERP exceeds the §73.622(f)(7) power limit for 610 meters HAAT. *Bluestone* requests a waiver of §73.622(f)(7). As discussed in the following, and in a separate statement provided by *Bluestone*, the purpose of the power increase is not intended to expand KECI-TV's coverage area but rather to restore service losses that have been experienced within its principal community and other areas within the prior analog facility's Grade B service area with the transition to digital operation.

KECI-TV's VHF Channel 13 operation at 30 kW was unable to replicate the coverage achieved by its prior analog Channel 13 facility, as described in the request underlying BDSTA-20090812AAY. Approximately 350 calls and 100 e-mail messages were received regarding reception problems, particularly regarding indoor reception.<sup>1</sup> The STA authorizes KECI-TV to operate at 41.3 kW ERP. Based on experience subsequent to implementing the power increase, KECI-TV personnel believe that substantial progress has been made to resolve the reception problems.

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<sup>1</sup>KECI-TV's experience is similar to other stations using VHF channels in the post-transition period. It has been found that indoor reception is difficult for digital VHF stations such as KECI-TV due to the longer wavelength signal's inability to readily pass through buildings (the windows are smaller than the wavelength size), the ineffectiveness of many indoor antennas many of which were designed to emphasize the shorter wavelengths for UHF reception, and high levels of manmade and environmental noise.

## **Interference Analysis**

The proposed facility expands the KECI-TV service contour beyond that established by Appendix B values. A detailed interference study per OET Bulletin 69<sup>2</sup> shows that the proposal complies with the 0.5 percent limit of new interference caused to pertinent nearby digital television stations. The interference study output report is provided as **Table 1**. Protection requirements towards authorized Class A stations are also satisfied.

## **Other Allocation Considerations**

The site location is within the Canadian coordination zone (220 km to the Canada border). The 2008 written understanding<sup>3</sup> between Industry Canada and the FCC indicates that KECI-TV's facility has been coordinated with Canada on digital Channel 13 at 55 kW ERP and 610 m HAAT, which is not exceeded by the parameters as proposed herein. Thus, no further international coordination is necessary.

The nearest FCC monitoring station is 673 km distant at Ferndale, WA. This exceeds by a large margin 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 AM stations within 3.2 kilometers of the site, based on information contained within the Commission's database.

## **Human Exposure to Radiofrequency Electromagnetic Field (Environmental)**

The proposal will involve use of an existing transmitting antenna. The use of existing transmitting locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of §1.1306 of the FCC Rules. No tower construction or change in structure height is proposed. Therefore, it is believed that this application may be categorically excluded from environmental processing pursuant to §1.1306 of the Commission's rules.

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<sup>2</sup>FCC 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 standard cell size of 2 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.

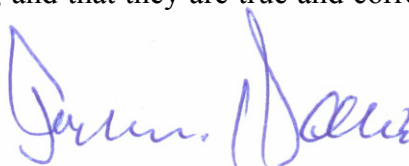
<sup>3</sup>Table B as referenced in the letter dated December 15, 2008 from Industry Canada to the FCC.

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 15 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  $6.0 \mu\text{W}/\text{cm}^2$ , which is 3.0 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 applicant will coordinate exposure procedures with all pertinent stations and will 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.

### **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.  
April 8, 2010

**Chesapeake RF Consultants, LLC**  
11993 Kahns Road  
Manassas, VA 20112  
703-650-9600

### List of Attachments

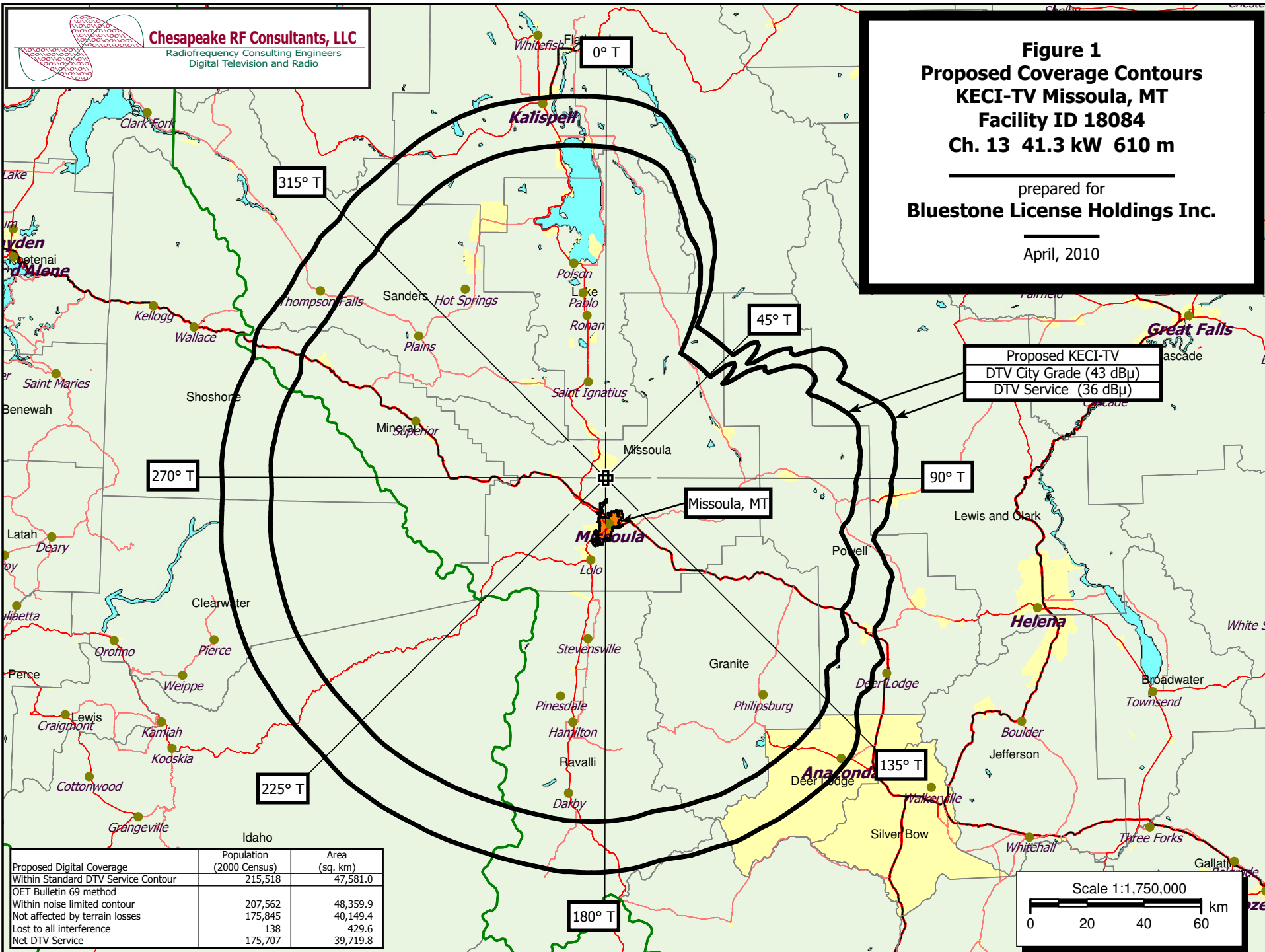
Figure 1	Proposed Coverage Contours
Table 1	OET Bulletin 69 Interference Study
Form 301	Saved Version of Engineering Sections from FCC Form at Time of Upload

*This material was entered April 8, 2010 for filing electronically. Since the FCC's electronic filing system may be accessed by anyone with the applicant's name and password, and electronic data may otherwise be altered in an unauthorized fashion, we cannot be responsible for changes made subsequent to our entry of this data and related attachments.*

**Figure 1**  
**Proposed Coverage Contours**  
**KECI-TV Missoula, MT**  
**Facility ID 18084**  
**Ch. 13 41.3 kW 610 m**

prepared for  
**Bluestone License Holdings Inc.**

April, 2010



**Table 1 KECI-TV OET Bulletin 69 Interference Study**

(worst-case scenarios shown page 1 of 10)

TW Census data selected 2000  
Post Transition Data Base Selected /space/software/cdbs/pt\_tvdb.sff

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 04-07-2010 Time: 16:48:38

Record Selected for Analysis

KECI-TV USERRECORD-01 MISSOULA MT US  
Channel 13 ERP 41.3 kW HAAT 650. m RCAMSL 02152 m  
Latitude 047-01-04 Longitude 0114-00-47  
Status APP Zone 2 Border  
Last update Cutoff date Docket  
Comments  
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility does not meet maximum height/power limits  
Channel 13 ERP = 41.30 HAAT = 650.

Azimuth (Deg)	ERP (kW)	HAAT (m)	36.0 dBu F(50,90) (km)
0.0	41.185	790.2	133.3
45.0	41.300	33.0	63.5
90.0	41.300	228.1	99.5
135.0	41.300	584.2	125.2
180.0	40.869	1010.6	138.5
225.0	40.828	1040.5	139.2
270.0	41.110	841.7	134.4
315.0	41.300	677.4	130.3

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is within the Canadian coordination distance  
Distance to border = 220.3km

Proposed facility is beyond the Mexican coordination distance

**Table 1 KECI-TV OET Bulletin 69 Interference Study**

(worst-case scenarios shown page 2 of 10)

Proposed station is OK toward AM broadcast stations

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Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
13	KECI-TV	MISSOULA MT	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KUID-TV	MOSCOW ID	227.9	PLN	DTVPLN	-DTVP0361
12	KUID-TV	MOSCOW ID	227.9	LIC	BLEDT	-20060804AFK
12	KTVH-DT	HELENA MT	176.2	CP	BPCDT	-20080619ADQ
12	KTVH	HELENA MT	176.2	PLN	DTVPLN	-DTVP0374
13	KTRV-TV	NAMPA ID	397.5	PLN	DTVPLN	-DTVP0421
13	KTRV-TV	NAMPA ID	397.5	LIC	BLCDT	-20050516ATS
13	KBZK	BOZEMAN MT	283.9	LIC	BLCDT	-20050825AAQ
13	KBZK	BOZEMAN MT	283.9	PLN	DTVPLN	-DTVP0437
13	KBAO	LEWISTOWN MT	339.3	PLN	DTVPLN	-DTVP0438
13	DKBAO	LEWISTOWN MT	339.3	CP	BPCDT	-20080619ACO
13	KTVR	LA GRANDE OR	343.5	CP	BPEDT	-20080620AAW
13	KTVR	LA GRANDE OR	343.5	PLN	DTVPLN	-DTVP0454
13	KXLY-TV	SPOKANE WA	233.4	APP	BPCDT	-20080619ACJ
13	KXLY-TV	SPOKANE WA	253.7	PLN	DTVPLN	-DTVP0474
13	KXLY-TV	SPOKANE WA	253.7	LIC	BLCDT	-19991104ABD

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Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
12	KUID-TV	MOSCOW ID	DTVPLN	-DTVP0361

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
11	KUFM-TV	MISSOULA MT	228.7	CP	BPEDT	-20090617ABA
11	KUFM-TV	MISSOULA MT	228.7	PLN	DTVPLN	-DTVP0317
11	KFFX-TV	PENDLETON OR	132.3	CP MOD	BMPCDT	-20080617AEB
11	KFFX-TV	PENDLETON OR	132.3	PLN	DTVPLN	-DTVP0330
12	KTVH-DT	HELENA MT	400.9	CP	BPCDT	-20080619ADQ
12	KTVH	HELENA MT	400.9	PLN	DTVPLN	-DTVP0374
13	KECI-TV	MISSOULA MT	227.9	PLN	DTVPLN	-DTVP0439
13	KTVR	LA GRANDE OR	163.5	CP	BPEDT	-20080620AAW
13	KTVR	LA GRANDE OR	163.5	PLN	DTVPLN	-DTVP0454
13	KXLY-TV	SPOKANE WA	108.7	APP	BPCDT	-20080619ACJ
13	KXLY-TV	SPOKANE WA	138.2	PLN	DTVPLN	-DTVP0474
13	KXLY-TV	SPOKANE WA	138.2	LIC	BLCDT	-19991104ABD
13	KECI-TV	MISSOULA MT	227.9	APP	USERRECORD-01	

Proposed station is beyond the site to  
nearest cell evaluation distance

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Analysis of Interference to Affected Station 2

Analysis of current record

**Table 1 KECI-TV OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 3 of 10)

Channel	Call	City/State	Application Ref. No.
12	KUID-TV	MOSCOW ID	BLEDT -20060804AFK

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
11	KUFM-TV	MISSOULA MT	228.7	CP	BPEDT -20090617ABA
11	KUFM-TV	MISSOULA MT	228.7	PLN	DTVPLN -DTVP0317
11	KFFX-TV	PENDLETON OR	132.3	CP MOD	BMPCDT -20080617AEB
11	KFFX-TV	PENDLETON OR	132.3	PLN	DTVPLN -DTVP0330
12	KTVH-DT	HELENA MT	400.9	CP	BPCDT -20080619ADQ
12	KTVH	HELENA MT	400.9	PLN	DTVPLN -DTVP0374
13	KECI-TV	MISSOULA MT	227.9	PLN	DTVPLN -DTVP0439
13	KTVR	LA GRANDE OR	163.5	CP	BPEDT -20080620AAW
13	KTVR	LA GRANDE OR	163.5	PLN	DTVPLN -DTVP0454
13	KXLY-TV	SPOKANE WA	108.7	APP	BPCDT -20080619ACJ
13	KXLY-TV	SPOKANE WA	138.2	PLN	DTVPLN -DTVP0474
13	KXLY-TV	SPOKANE WA	138.2	LIC	BLCDT -19991104ABD
13	KECI-TV	MISSOULA MT	227.9	APP	USERRECORD-01

Proposed station is beyond the site to nearest cell evaluation distance

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#### Analysis of Interference to Affected Station 3

##### Analysis of current record

Channel	Call	City/State	Application Ref. No.
12	KTVH-DT	HELENA MT	BPCDT -20080619ADQ

#### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
11	KUFM-TV	MISSOULA MT	172.2	CP	BPEDT -20090617ABA
11	KUFM-TV	MISSOULA MT	172.2	PLN	DTVPLN -DTVP0317
12	KUID-TV	MOSCOW ID	400.9	PLN	DTVPLN -DTVP0361
12	KUID-TV	MOSCOW ID	400.9	LIC	BLEDT -20060804AFK
13	KBZK	BOZEMAN MT	143.6	LIC	BLCDT -20050825AAQ
13	KBZK	BOZEMAN MT	143.6	PLN	DTVPLN -DTVP0437
13	KBAO	LEWISTOWN MT	169.4	PLN	DTVPLN -DTVP0438
13	DKBAO	LEWISTOWN MT	169.4	CP	BPCDT -20080619ACO
13	KECI-TV	MISSOULA MT	176.2	PLN	DTVPLN -DTVP0439
13	KECI-TV	MISSOULA MT	176.2	APP	USERRECORD-01

Proposal causes no interference

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#### Analysis of Interference to Affected Station 4

##### Analysis of current record

Channel	Call	City/State	Application Ref. No.
12	KTVH	HELENA MT	DTVPLN -DTVP0374

#### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
11	KUFM-TV	MISSOULA MT	172.2	CP	BPEDT -20090617ABA
11	KUFM-TV	MISSOULA MT	172.2	PLN	DTVPLN -DTVP0317
12	KUID-TV	MOSCOW ID	400.9	PLN	DTVPLN -DTVP0361
12	KUID-TV	MOSCOW ID	400.9	LIC	BLEDT -20060804AFK
13	KBZK	BOZEMAN MT	143.6	LIC	BLCDT -20050825AAQ

**Table 1 KECI-TV OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 4 of 10)

13	KBZK	BOZEMAN MT	143.6	PLN	DTVPLN -DTVP0437
13	KBAO	LEWISTOWN MT	169.4	PLN	DTVPLN -DTVP0438
13	DKBAO	LEWISTOWN MT	169.4	CP	BPCDT -20080619ACO
13	KECI-TV	MISSOULA MT	176.2	PLN	DTVPLN -DTVP0439
13	KECI-TV	MISSOULA MT	176.2	APP	USERRECORD-01

Proposal causes no interference

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#### Analysis of Interference to Affected Station 5

##### Analysis of current record

Channel	Call	City/State	Application Ref. No.
13	KTRV-TV	NAMPA ID	DTVPLN -DTVP0421

#### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
13	KECI-TV	MISSOULA MT	397.5	PLN	DTVPLN -DTVP0439
13	KTVR	LA GRANDE OR	215.9	CP	BPEDT -20080620AAW
13	KTVR	LA GRANDE OR	215.9	PLN	DTVPLN -DTVP0454
13	KECI-TV	MISSOULA MT	397.5	APP	USERRECORD-01

Proposal causes no interference

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#### Analysis of Interference to Affected Station 6

##### Analysis of current record

Channel	Call	City/State	Application Ref. No.
13	KTRV-TV	NAMPA ID	BLCDT -20050516ATS

#### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
13	KECI-TV	MISSOULA MT	397.5	PLN	DTVPLN -DTVP0439
13	KTVR	LA GRANDE OR	215.9	CP	BPEDT -20080620AAW
13	KTVR	LA GRANDE OR	215.9	PLN	DTVPLN -DTVP0454
13	KECI-TV	MISSOULA MT	397.5	APP	USERRECORD-01

Proposal causes no interference

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#### Analysis of Interference to Affected Station 7

##### Analysis of current record

Channel	Call	City/State	Application Ref. No.
13	KBZK	BOZEMAN MT	BLCDT -20050825AAQ

#### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
12	KTVH-DT	HELENA MT	143.6	CP	BPCDT -20080619ADQ
12	KTVH	HELENA MT	143.6	PLN	DTVPLN -DTVP0374
13	KBAO	LEWISTOWN MT	196.1	PLN	DTVPLN -DTVP0438
13	DKBAO	LEWISTOWN MT	196.1	CP	BPCDT -20080619ACO
13	KECI-TV	MISSOULA MT	283.9	PLN	DTVPLN -DTVP0439
13	KSGW-TV	SHERIDAN WY	316.4	PLN	DTVPLN -DTVP0479
13	KSGW-TV	SHERIDAN WY	316.4	LIC	BLCDT -20051206AEI
13	KECI-TV	MISSOULA MT	283.9	APP	USERRECORD-01

Proposal causes no interference

**Table 1 KECI-TV OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 5 of 10)

#####						
Analysis of Interference to Affected Station 8						
Analysis of current record						
Channel	Call	City/State	Application	Ref. No.		
13	KBZK	BOZEMAN MT	DTVPLN	-DTVP0437		
Stations Potentially Affecting This Station						
Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KTVH-DT	HELENA MT	143.6	CP	BPCDT	-20080619ADQ
12	KTVH	HELENA MT	143.6	PLN	DTVPLN	-DTVP0374
13	KBAO	LEWISTOWN MT	196.1	PLN	DTVPLN	-DTVP0438
13	DKBAO	LEWISTOWN MT	196.1	CP	BPCDT	-20080619ACO
13	KECI-TV	MISSOULA MT	283.9	PLN	DTVPLN	-DTVP0439
13	KSGW-TV	SHERIDAN WY	316.4	PLN	DTVPLN	-DTVP0479
13	KSGW-TV	SHERIDAN WY	316.4	LIC	BLCDT	-20051206AEI
13	KECI-TV	MISSOULA MT	283.9	APP	USERRECORD-01	
Proposal causes no interference						
#####						
Analysis of Interference to Affected Station 9						
Analysis of current record						
Channel	Call	City/State	Application	Ref. No.		
13	KBAO	LEWISTOWN MT	DTVPLN	-DTVP0438		
Stations Potentially Affecting This Station						
Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KTVH-DT	HELENA MT	169.4	CP	BPCDT	-20080619ADQ
12	KTVH	HELENA MT	169.4	PLN	DTVPLN	-DTVP0374
13	KBZK	BOZEMAN MT	196.1	LIC	BLCDT	-20050825AAQ
13	KBZK	BOZEMAN MT	196.1	PLN	DTVPLN	-DTVP0437
13	KECI-TV	MISSOULA MT	339.3	PLN	DTVPLN	-DTVP0439
13	KSGW-TV	SHERIDAN WY	340.2	PLN	DTVPLN	-DTVP0479
13	KSGW-TV	SHERIDAN WY	340.2	LIC	BLCDT	-20051206AEI
13	KECI-TV	MISSOULA MT	339.3	APP	USERRECORD-01	
Proposal causes no interference						
#####						
Analysis of Interference to Affected Station 10						
Analysis of current record						
Channel	Call	City/State	Application	Ref. No.		
13	DKBAO	LEWISTOWN MT	BPCDT	-20080619ACO		
Stations Potentially Affecting This Station						
Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KTVH-DT	HELENA MT	169.4	CP	BPCDT	-20080619ADQ
12	KTVH	HELENA MT	169.4	PLN	DTVPLN	-DTVP0374
13	KBZK	BOZEMAN MT	196.1	LIC	BLCDT	-20050825AAQ
13	KBZK	BOZEMAN MT	196.1	PLN	DTVPLN	-DTVP0437
13	KECI-TV	MISSOULA MT	339.3	PLN	DTVPLN	-DTVP0439
13	KSGW-TV	SHERIDAN WY	340.2	PLN	DTVPLN	-DTVP0479
13	KSGW-TV	SHERIDAN WY	340.2	LIC	BLCDT	-20051206AEI
13	KECI-TV	MISSOULA MT	339.3	APP	USERRECORD-01	
Proposal causes no interference						

**Table 1 KECI-TV OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 6 of 10)

#####						
Analysis of Interference to Affected Station 11						
Analysis of current record						
Channel	Call	City/State	Application	Ref. No.		
13	KTVR	LA GRANDE OR	BPEDT	-20080620AAW		
Stations Potentially Affecting This Station						
Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KUID-TV	MOSCOW ID	163.5	PLN	DTVPLN	-DTVP0361
12	KUID-TV	MOSCOW ID	163.5	LIC	BLEDT	-20060804AFK
13	KTRV-TV	NAMPA ID	215.9	PLN	DTVPLN	-DTVP0421
13	KTRV-TV	NAMPA ID	215.9	LIC	BLCDT	-20050516ATS
13	KECI-TV	MISSOULA MT	343.5	PLN	DTVPLN	-DTVP0439
13	KXLY-TV	SPOKANE WA	267.8	APP	BPCDT	-20080619ACJ
13	KXLY-TV	SPOKANE WA	294.2	PLN	DTVPLN	-DTVP0474
13	KXLY-TV	SPOKANE WA	294.2	LIC	BLCDT	-19991104ABD
13	KECI-TV	MISSOULA MT	343.5	APP	USERRECORD-01	
Proposal causes no interference						
#####						
Analysis of Interference to Affected Station 12						
Analysis of current record						
Channel	Call	City/State	Application	Ref. No.		
13	KTVR	LA GRANDE OR	DTVPLN	-DTVP0454		
Stations Potentially Affecting This Station						
Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KUID-TV	MOSCOW ID	163.5	PLN	DTVPLN	-DTVP0361
12	KUID-TV	MOSCOW ID	163.5	LIC	BLEDT	-20060804AFK
13	KTRV-TV	NAMPA ID	215.9	PLN	DTVPLN	-DTVP0421
13	KTRV-TV	NAMPA ID	215.9	LIC	BLCDT	-20050516ATS
13	KECI-TV	MISSOULA MT	343.5	PLN	DTVPLN	-DTVP0439
13	KXLY-TV	SPOKANE WA	267.8	APP	BPCDT	-20080619ACJ
13	KXLY-TV	SPOKANE WA	294.2	PLN	DTVPLN	-DTVP0474
13	KXLY-TV	SPOKANE WA	294.2	LIC	BLCDT	-19991104ABD
13	KECI-TV	MISSOULA MT	343.5	APP	USERRECORD-01	
Proposal causes no interference						
#####						
Analysis of Interference to Affected Station 13						
Analysis of current record						
Channel	Call	City/State	Application	Ref. No.		
13	KXLY-TV	SPOKANE WA	BPCDT	-20080619ACJ		
Stations Potentially Affecting This Station						
Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KUID-TV	MOSCOW ID	108.7	PLN	DTVPLN	-DTVP0361
12	KUID-TV	MOSCOW ID	108.7	LIC	BLEDT	-20060804AFK
13	KECI-TV	MISSOULA MT	233.4	PLN	DTVPLN	-DTVP0439
13	KTVR	LA GRANDE OR	267.8	CP	BPEDT	-20080620AAW
13	KTVR	LA GRANDE OR	267.8	PLN	DTVPLN	-DTVP0454
13	KECI-TV	MISSOULA MT	233.4	APP	USERRECORD-01	



**Table 1 KECI-TV OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 7 of 10)

Total scenarios = 4					
Result key: 2					
Scenario 2		Affected station 13			
Before Analysis					
Results for: 13A WA SPOKANE BPCDT 20080619ACJ APP					
HAAT 675.0 m, ATV ERP 35.0 kW					
		POPULATION	AREA (sq km)		
within Noise Limited Contour		722388	46338.1		
not affected by terrain losses		665628	38869.6		
lost to NTSC IX		0	0.0		
lost to additional IX by ATV		18113	595.7		
lost to ATV IX only		18113	595.7		
lost to all IX		18113	595.7		
Potential Interfering Stations Included in above Scenario 2					
12A ID MOSCOW		DTVPLN	DTVP0361 PLN		
13A OR LA GRANDE		DTVPLN	DTVP0454 PLN		
13A MT MISSOULA		DTVPLN	DTVP0439 PLN		
After Analysis					
Results for: 13A WA SPOKANE BPCDT 20080619ACJ APP					
HAAT 675.0 m, ATV ERP 35.0 kW					
		POPULATION	AREA (sq km)		
within Noise Limited Contour		722388	46338.1		
not affected by terrain losses		665628	38869.6		
lost to NTSC IX		0	0.0		
lost to additional IX by ATV		18447	643.7		
lost to ATV IX only		18447	643.7		
lost to all IX		18447	643.7		
Potential Interfering Stations Included in above Scenario 2					
12A ID MOSCOW		DTVPLN	DTVP0361 PLN		
13A OR LA GRANDE		DTVPLN	DTVP0454 PLN		
13A MT MISSOULA		USERRECORD01	APP		
Percent new IX = 0.0516%					
Worst case new IX 0.0516% Scenario 2					
#####					
Analysis of Interference to Affected Station 14					
Analysis of current record					
Channel	Call	City/State	Application Ref. No.		
13	KXLY-TV	SPOKANE WA	DTVPLN -DTVP0474		
Stations Potentially Affecting This Station					
Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
12	KUID-TV	MOSCOW ID	138.2	PLN	DTVPLN -DTVP0361
12	KUID-TV	MOSCOW ID	138.2	LIC	BLEDT -20060804AFK
13	KECI-TV	MISSOULA MT	253.7	PLN	DTVPLN -DTVP0439
13	KTVR	LA GRANDE OR	294.2	CP	BPEDT -20080620AAW
13	KTVR	LA GRANDE OR	294.2	PLN	DTVPLN -DTVP0454
13	KCPQ	TACOMA WA	427.5	CP MOD	BMPCDT -20080619AFY

**Table 1 KECI-TV OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 8 of 10)

13	KCPQ	TACOMA WA	427.5	PLN	DTVPLN	-DTVP0475
13	KECI-TV	MISSOULA MT	253.7	APP	USERRECORD-01	
Total scenarios = 4						
Result key: 5						
Scenario 1		Affected station		14		
Before Analysis						
Results for: 13A WA SPOKANE			DTVPLN	DTVP0474	PLN	
HAAT 936.0 m, ATV ERP 23.3 kW						
		POPULATION	AREA (sq km)			
within Noise Limited Contour		692731	52899.9			
not affected by terrain losses		656720	46555.3			
lost to NTSC IX		0	0.0			
lost to additional IX by ATV		1708	467.3			
lost to ATV IX only		1708	467.3			
lost to all IX		1708	467.3			
Potential Interfering Stations Included in above Scenario						1
12A ID MOSCOW		DTVPLN	DTVP0361	PLN		
13A OR LA GRANDE		BPEDT	20080620AAW	CP		
13A MT MISSOULA		DTVPLN	DTVP0439	PLN		
After Analysis						
Results for: 13A WA SPOKANE			DTVPLN	DTVP0474	PLN	
HAAT 936.0 m, ATV ERP 23.3 kW						
		POPULATION	AREA (sq km)			
within Noise Limited Contour		692731	52899.9			
not affected by terrain losses		656720	46555.3			
lost to NTSC IX		0	0.0			
lost to additional IX by ATV		1745	487.4			
lost to ATV IX only		1745	487.4			
lost to all IX		1745	487.4			
Potential Interfering Stations Included in above Scenario						1
12A ID MOSCOW		DTVPLN	DTVP0361	PLN		
13A OR LA GRANDE		BPEDT	20080620AAW	CP		
13A MT MISSOULA		USERRECORD01	APP			
Percent new IX = 0.0056%						
Worst case new IX		0.0056% Scenario		1		
#####						
Analysis of Interference to Affected Station 15						
Analysis of current record						
Channel	Call	City/State	Application Ref. No.			
13	KXLY-TV	SPOKANE WA	BLCDT	-19991104ABD		
Stations Potentially Affecting This Station						
Chan	Call	City/State	Dist(km)	Status	Application Ref. No.	
12	KUID-TV	MOSCOW ID	138.2	PLN	DTVPLN	-DTVP0361
12	KUID-TV	MOSCOW ID	138.2	LIC	BLEDT	-20060804AFK
13	KECI-TV	MISSOULA MT	253.7	PLN	DTVPLN	-DTVP0439

**Table 1 KECI-TV OET Bulletin 69 Interference Study**

(worst-case scenarios shown page 9 of 10)

13	KTVR	LA GRANDE OR	294.2	CP	BPEDT	-20080620AAW
13	KTVR	LA GRANDE OR	294.2	PLN	DTVPLN	-DTVP0454
13	KCPQ	TACOMA WA	427.5	CP MOD	BMPCDT	-20080619AFY
13	KCPQ	TACOMA WA	427.5	PLN	DTVPLN	-DTVP0475
13	KECI-TV	MISSOULA MT	253.7	APP	USERRECORD-01	

Total scenarios = 4

Result key: 9  
Scenario 1 Affected station 15  
Before Analysis

Results for: 13A WA SPOKANE BLCDDT 19991104ABD LIC

HAAT 936.0 m, ATV ERP 23.3 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	692731	52899.9
not affected by terrain losses	656720	46555.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1708	467.3
lost to ATV IX only	1708	467.3
lost to all IX	1708	467.3

Potential Interfering Stations Included in above Scenario 1

12A ID MOSCOW	DTVPLN	DTVP0361	PLN
13A OR LA GRANDE	BPEDT	20080620AAW	CP
13A MT MISSOULA	DTVPLN	DTVP0439	PLN

After Analysis

Results for: 13A WA SPOKANE BLCDDT 19991104ABD LIC

HAAT 936.0 m, ATV ERP 23.3 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	692731	52899.9
not affected by terrain losses	656720	46555.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1745	487.4
lost to ATV IX only	1745	487.4
lost to all IX	1745	487.4

Potential Interfering Stations Included in above Scenario 1

12A ID MOSCOW	DTVPLN	DTVP0361	PLN
13A OR LA GRANDE	BPEDT	20080620AAW	CP
13A MT MISSOULA	USERRECORD01		APP

Percent new IX = 0.0056%

Worst case new IX 0.0056% Scenario 1

#####

Analysis of Interference to Affected Station 16

Analysis of current record			
Channel	Call	City/State	Application Ref. No.
13	KECI-TV	MISSOULA MT	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
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**Table 1 KECI-TV OET Bulletin 69 Interference Study**

(worst-case scenarios shown page 10 of 10)

12	KUID-TV	MOSCOW ID	227.9	PLN	DTVPLN	-DTVP0361
12	KUID-TV	MOSCOW ID	227.9	LIC	BLDDT	-20060804AFK
12	KTVH-DT	HELENA MT	176.2	CP	BPCDDT	-20080619ADQ
12	KTVH	HELENA MT	176.2	PLN	DTVPLN	-DTVP0374
13	KTRV-TV	NAMPA ID	397.5	PLN	DTVPLN	-DTVP0421
13	KTRV-TV	NAMPA ID	397.5	LIC	BLDDT	-20050516ATS
13	KBZK	BOZEMAN MT	283.9	LIC	BLDDT	-20050825AAQ
13	KBZK	BOZEMAN MT	283.9	PLN	DTVPLN	-DTVP0437
13	KBAA	LEWISTOWN MT	339.3	PLN	DTVPLN	-DTVP0438
13	DKBAO	LEWISTOWN MT	339.3	CP	BPCDDT	-20080619ACO
13	KTVR	LA GRANDE OR	343.5	CP	BPEDT	-20080620AAW
13	KTVR	LA GRANDE OR	343.5	PLN	DTVPLN	-DTVP0454
13	KXLY-TV	SPOKANE WA	233.4	APP	BPCDDT	-20080619ACJ
13	KXLY-TV	SPOKANE WA	253.7	PLN	DTVPLN	-DTVP0474
13	KXLY-TV	SPOKANE WA	253.7	LIC	BLDDT	-19991104ABD

Total scenarios = 6

Result key: 14  
Scenario 2 Affected station 16  
Before Analysis

Results for: 13A MT MISSOULA USERRECORD01 APP

HAAT 650.0 m, ATV ERP 41.3 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	207562	48359.9
not affected by terrain losses	175845	40149.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	138	429.6
lost to ATV IX only	138	429.6
lost to all IX	138	429.6

Potential Interfering Stations Included in above Scenario 2

13A MT BOZEMAN	BLCDDT	20050825AAQ	LIC
13A WA SPOKANE	BLCDDT	19991104ABD	LIC

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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED

SECTION III-D - DTV Engineering	
Complete Questions 1-5, and provide all data and information for the proposed facility, as requested in Technical Specifications, Items 1-13.	
<p><b>Pre-Transition Certification Checklist:</b> An application concerning a pre-transition channel must complete questions 1(a)-(c), and 2-5. A correct answer of "Yes" to all of the questions will ensure an expeditious grant of a construction permit application to change pre-transition facilities. However, if the proposed facility is located within the Canadian or Mexican borders, coordination of the proposal under the appropriate treaties may be required prior to grant of the application. An answer of "No" will require additional evaluation of the applicable information in this form before a construction permit can be granted.</p> <p><b>Post-Transition Expedited Processing.</b> An application concerning a post-transition channel must complete questions 1(a), (d)-(e), and 2-5. A station applying for a construction permit to build its post-transition channel will receive expedited processing if its application (1) does not seek to expand the noise-limited service contour in any direction beyond that established by Appendix B of the Seventh Report and Order in MB Docket No. 87-268 establishing the new DTV Table of Allotments in 47 C.F.R. § 73.622(i) ("new DTV Table Appendix B"); (2) specifies facilities that match or closely approximate those defined in the new DTV Table Appendix B facilities; and (3) is filed within 45 days of the effective date of Section 73.616 of the rules adopted in the Report and Order in the Third DTV Periodic Review proceeding, MB Docket No. 07-91.</p>	
1. The proposed DTV facility complies with 47 C.F.R. Section 73.622 in the following respects:	
(a) It will operate on the DTV channel for this station as established in 47 C.F.R. Section 73.622.	<input checked="" type="radio"/> Yes <input type="radio"/> No
(b) It will operate a pre-transition facility from a transmitting antenna located within 5.0 km (3.1 miles) of the DTV reference site for this station as established in 47 C.F.R. Section 73.622.	<input type="radio"/> Yes <input type="radio"/> No
(c) It will operate a pre-transition facility with an effective radiated power (ERP) and antenna height above average terrain (HAAT) that do not exceed the DTV reference ERP and HAAT for this station as established in 47 C.F.R. Section 73.622.	<input type="radio"/> Yes <input type="radio"/> No
(d) It will operate at post-transition facilities that do not expand the noise-limited service contour in any direction beyond that established by Appendix B of the Seventh Report and Order in MB Docket No. 87-268 establishing the new DTV Table of Allotments in 47 C.F.R. § 73.622(i) ("new DTV Table Appendix B").	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A
(e) It will operate at post-transition facilities that match or reduce by no more than five percent with respect to predicted population from those defined in the new DTV Table Appendix B.	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
2. The proposed facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RF radiation exceeding the applicable health and safety guidelines, and therefore will not come within 47 C.F.R. Section 1.1307. Applicant must <b>submit the Exhibit</b> called for in Item 13.	<input checked="" type="radio"/> Yes <input type="radio"/> No
3. Pursuant to 47 C.F.R. Section 73.625, the DTV coverage contour of the proposed facility will encompass the allotted principal community.	<input checked="" type="radio"/> Yes <input type="radio"/> No
4. The requirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, radio receiving installations and FCC monitoring stations have either been satisfied or are not applicable.	<input checked="" type="radio"/> Yes <input type="radio"/> No
5. The antenna structure to be used by this facility has been registered by the Commission and will not require registration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely effect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7.	<input checked="" type="radio"/> Yes <input type="radio"/> No

SECTION III-D - DTV Engineering	
TECHNICAL SPECIFICATIONS	
Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.	
<b>TECH BOX</b>	
1.	Channel Number: DTV 13 Analog TV, if any
2.	Zone: <input type="radio"/> I <input checked="" type="radio"/> II <input type="radio"/> III
3.	Antenna Location Coordinates: (NAD 27) Latitude: Degrees 47 Minutes 01 Seconds 04 <input checked="" type="radio"/> North <input type="radio"/> South Longitude: Degrees 114 Minutes 00 Seconds 47 <input checked="" type="radio"/> West <input type="radio"/> East
4.	Antenna Structure Registration Number: 1000779 <input type="checkbox"/> Not Applicable <input type="checkbox"/> Notification filed with FAA
5.	Antenna Location Site Elevation Above Mean Sea Level: 2078 meters
6.	Overall Tower Height Above Ground Level: 88 meters
7.	Height of Radiation Center Above Ground Level: 74 meters
8.	Height of Radiation Center Above Average Terrain : 610 meters
9.	Maximum Effective Radiated Power (average power): 41.3 kW

10.	Antenna Specifications:	
	a. Manufacturer RCA    Model TW-12A13P	
	b. Electrical Beam Tilt: 1.0 degrees <input type="checkbox"/> Not Applicable	
	c. Mechanical Beam Tilt: degrees toward azimuth degrees True <input checked="" type="checkbox"/> Not Applicable Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c). [Exhibit 43]	
	d. Polarization: <input checked="" type="radio"/> Horizontal <input type="radio"/> Circular <input type="radio"/> Elliptical	
	e. Directional Antenna Relative Field Values: <input checked="" type="checkbox"/> Not applicable (Nondirectional)	
	[For a composite directional (not off-the-shelf) antenna, press the following button to fill in the relative field values subform.] [Relative Field Values]	
	If a directional antenna is proposed, the requirements of 47 C.F.R. Sections 73.625(c) must be satisfied. <b>Exhibit required.</b> [Exhibit 44]	
11.	Does the proposed facility satisfy the pre-transition interference protection provisions of 47 C.F.R. Section 73.623(a) (Applicable only if <b>Certification Checklist</b> Items 1(a), (b), or (c) are answered "No.") and/or the post-transition interference protection provisions of 47 C.F.R. Section 73.616?  If "No," attach as an Exhibit justification therefor, including a summary of any related previously granted waivers.	<input checked="" type="radio"/> Yes <input type="radio"/> No [Exhibit 45]
12.	If the proposed facility will not satisfy the coverage requirement of 47 C.F.R. Section 73.625, attach as an Exhibit justification therefore. (Applicable only if <b>Certification Checklist</b> item 3 is answered "No.")	[Exhibit 46]
13.	<b>Environmental Protection Act. Submit in an Exhibit</b> the following: If <b>Certification Checklist</b> Item 2 is answered "Yes," a brief explanation of why an Environmental Assessment is not required. Also describe in the Exhibit the steps that will be taken to limit RF radiation exposure to the public and to persons authorized access to the tower site.  By checking "Yes" to <b>Certification Checklist</b> Item 2, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.  If <b>Certification Checklist</b> Item 2 is answered "No," an Environmental Assessment as required by 47 C.F.R Section 1.1311.	[Exhibit 47]
<b>PREPARERS CERTIFICATION ON SECTION III MUST BE COMPLETED AND SIGNED.</b>		

### SECTION III - PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name JOSEPH M. DAVIS, P.E.	Relationship to Applicant (e.g., Consulting Engineer) CONSULTING ENGINEER	
Signature	Date 4/8/2010	
Mailing Address CHESAPEAKE RF CONSULTANTS, LLC 11993 KAHNS ROAD		
City MANASSAS	State or Country (if foreign address) VA	Zip Code 20112 -
Telephone Number (include area code) 7036509600	E-Mail Address (if available) JOSEPH.DAVIS@RF-CONSULTANTS.COM	