

ENGINEERING STATEMENT  
RE AMENDMENT TO PENDING APPLICATION  
FOR DTV DISPLACEMENT  
(FCC FILE NO. BDISDTT-20060403AFL)  
FOR AN EXISTING TELEVISION TRANSLATOR  
K58IH, COLSTRIP, ETC., MONTANA  
CHANNEL 35 150 WATTS MAX ERP 1468.7 METERS RC/AMSL

APRIL 2006

COHEN, DIPPELL AND EVERIST, P.C.  
CONSULTING ENGINEERS  
RADIO AND TELEVISION  
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington                    )  
  ) ss  
District of Columbia                )

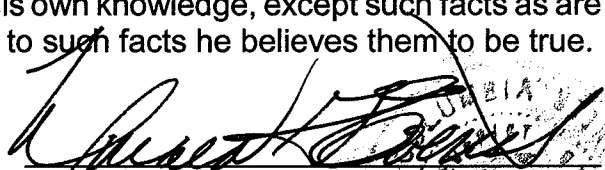
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President, Secretary and Treasurer of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

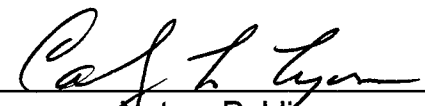
That his qualifications are a matter of record in the Federal Communications Commission;

That the attached engineering report was prepared by him or under his supervision and direction and

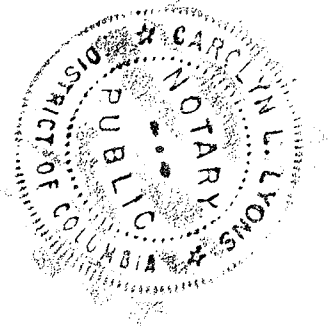
That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

  
Donald G. Everist  
District of Columbia  
Professional Engineer  
Registration No. 5714

Subscribed and sworn to before me this 13<sup>th</sup> day of April, 2006.

  
Notary Public

My Commission Expires: 2/28/2008



COHEN, DIPPELL AND EVERIST, P. C.

City of Washington                    )  
  ) ss  
District of Columbia                )

Martin R. Doczkat being duly sworn upon his oath, deposes and states that:

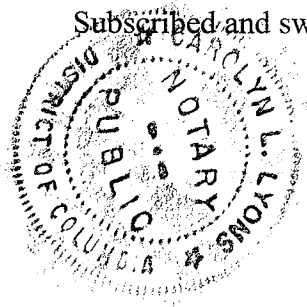
He is a graduate electrical engineer of the Pennsylvania State University, and is a staff engineer at Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

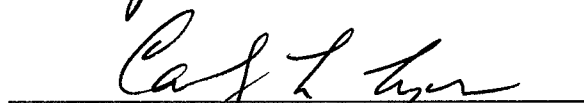
That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

  
\_\_\_\_\_  
Martin R. Doczkat

Subscribed and sworn to before me this 13<sup>th</sup> day of April, 2006.



  
\_\_\_\_\_  
Notary Public

My Commission Expires: 2/18/2008

### INTRODUCTION

This engineering statement has been prepared on behalf of Nexstar Broadcasting, Inc., licensee of TV translator K58IH, Colstrip, Etc., Montana. This statement supports the licensee's amendment to its pending application (FCC File No. BDISDTT-20060403AFL) to request for displacement to convert to DTV operation on a new Channel 35, commonly referred to as "flash-cut" with a DTV effective radiated power ("ERP") of 150 watts at a radiation center above mean sea level ("RCAMSL") of 1468.7 meters.

### TRANSMITTER SITE

The existing antenna will be utilized and no significant alteration of the tower is proposed. There is no change in transmitter site. The geographic coordinates of the site follow below.

North Latitude: 45° 50' 20"

West Longitude: 106° 54' 17"

NAD-27

### ELEVATION DATA

Elevation of site above mean sea level	1458 meters (4783.5 feet)
Center of radiation of antenna above ground level	10.7 meters (35.0 feet)
Center of radiation of antenna above mean sea level	1468.7 meters (4818.5 feet)
Overall height of tower above ground	31 meters (101.7 feet)

The existing tower does not require antenna structure registration. The existing structure is less than 200 feet and Towair indicates registration is not required. There are no airports within 8 kilometers (5 miles) of the existing site.

#### EQUIPMENT DATA

Transmitter:	Type-approved
Transmission Line:	Dielectric Flexline, 1-5/8" air dielectric, 15 meters with 93.3% efficiency [2.01 dB loss/100 m]
Antenna:	Andrew, ALP8L1-HSN (or equivalent) with maximum gain of 34.1 and 0.25° electrical beam tilt

#### POWER DATA

Transmitter:	4.7 W	6.73 dBW
Transmission Line Loss:	93.3%	0.3 dB
Input Into Antenna:	4.4 W	6.43 dBW
Antenna Gain:	34.1	15.33 dB
ERP:	150 W	21.76 dBW

As indicated above, the transmitter with typical power output of 4.7 watts will deliver 4.4 watts to the input of the antenna. The antenna, having a maximum gain of 34.1 and an electrical beam tilt of 0.25°, will produce maximum ERP of 150 watts. A map providing the protected contour of the proposed facility compared to the currently licensed operation of K58IH has been included as Exhibit E-1 of this report. The antenna elevation pattern and associated tabulation

and the horizontal pattern and accompanying tabulation are on file at the Commission as this antenna make and model has been designated as "Off-the-Shelf".

#### OTHER BROADCAST FACILITIES

A brief analysis was completed to determine the presence of stations in the vicinity of the K58IH tower using the March 22, 20006, data contained within the Commission's Consolidated Database System ("CDBS"). Within 500 meters of the proposed site, no authorized FM radio stations were identified, no authorized DTV or NTSC television stations, and two other low-power analog television or television translator stations aside from K58IH were also found within 500 meters. There are no AM facilities within 3.2 km of the existing tower. Although no adverse technical affects are expected due to the proposed changes, the licensee will take measures to resolve any problems proven to be related to the changes proposed in this application.

#### Interference Analysis

A study of predicted interference caused by the proposed K58IH digital translator operation has been performed using the Longley-Rice program for which the source data has been posted by the Commission on its website at [http://www.fcc.gov/oet/dtv/dtv\\_apps.html](http://www.fcc.gov/oet/dtv/dtv_apps.html). The FCC's FORTRAN-77 code was modified only to the extent necessary (primarily input/output handling) for the program to run on a Microsoft Windows XP/Intel platform. Comparison of service/interference areas and population indicates this model closely matches the FCC's digital low-power TV/translator evaluation program. Best efforts have been made to use data and calculation identical to the FCC's program. The model employs the Longley-Rice propagation methodology and evaluates in grid cells of approximately 1 sq. km. Using 3-second terrain data

sampled approximately every 1.0 km at one-degree azimuth intervals with 1990 census centroids, all studies are based upon data in the current CDBS database update of the FCC's engineering database. A Longley-Rice study was performed with the proposed K58IH digital translator facilities and all relevant stations listed in the FCC database as of March 23, 2006. The study results and the included stations are listed in Exhibit E-2.

#### Other Licensed and Broadcast Facilities

No adverse technical effect is anticipated by the proposed DTV operation to any other FCC licensed facility. If required, the licensee will install filters or take other measures as necessary to resolve the problem.

#### FCC Rule, Section 1.1307

The proposed 150 watt directional operation will utilize an Andrew, Type ALP8L1-HSN antenna (or equivalent) described above with a center of radiation above ground of 10.7 meters. The proposed antenna is side-mounted on a steel lattice tower with an overall height of 31 meters above ground.

As previously indicated, there are no AM stations located within 3.2 km of the proposed tower site. According to the FCC database, there are also no FM stations, no full-service television stations, and two other low-power analog television or television translator stations aside from K58IH located within 500 meters of the proposed tower. Access to the tower property is prevented by a security fence with a locked gate.

The proposed 150 watt ERP operation of K58IH at 10.7 meters radiation center above ground on Channel 35 using the currently licensed Andrew, Type ALP8L1-HSN (or equivalent) (assumed 0.263 downward relative field value) based on calculations from the current OET

Bulletin No. 65, Edition 97-01 dated August 1997 and Supplement A produces less than 5  $\mu\text{W}/\text{cm}^2$  RFF which is less than 1.2% of the Maximum Permissible Exposure ("MPE") limit for an uncontrolled environment two meters above ground in the vicinity of the K58IH tower site. This proposal complies with the FCC radiofrequency field ("RFF") guidelines and the RFF element of Section 1.1307 of the FCC Rules.

Authorized personnel and rigging contractors will be alerted to the potential zone of high field levels on the tower, and if necessary, the station will operate with reduced power or terminate the operation of the transmitter as appropriate when it is necessary for authorized personnel or contractors to perform work on or near the tower. Workers and the general public, therefore, will not be subjected to RFF levels in excess of the current FCC guidelines.

#### Environmental Assessment

An environmental assessment ("EA") is categorically excluded under Section 1.1306 of the FCC Rules and Regulations as the tower was constructed prior to the requirements specified in WT Docket No. 03-128 and the applicant indicates:

- (a)(1) The existing tower is not located in an officially designated wilderness area.
- (a)(2) The existing tower is not located in an officially designated wildlife preserve.
- (a)(3) The proposed facilities will not affect any listed threatened or endangered species or habitats.
- (a)(3)(ii) The proposed facilities will not jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats.



- (a)(4) The proposed facilities located on a tower which was built prior to the adoption of WT Docket No. 03-128 and is grandfathered and has not affected any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.
- (a)(5) The existing tower is not located near any known Indian religious sites.
- (a)(6) The existing tower is not located in a flood plain.
- (a)(7) The installation of the DTV facilities on an existing tower will not involve a significant change in surface features of the ground in the vicinity of the tower.
- (a)(8) It is not proposed to equip the tower with high intensity white lights unless required by the FAA.
- (b) Workers and the general public will not be subjected to RFF levels in excess of the current FCC guidelines contained in OET Bulletin No. 65, Edition 97-01, dated August 1997 and Supplement A.

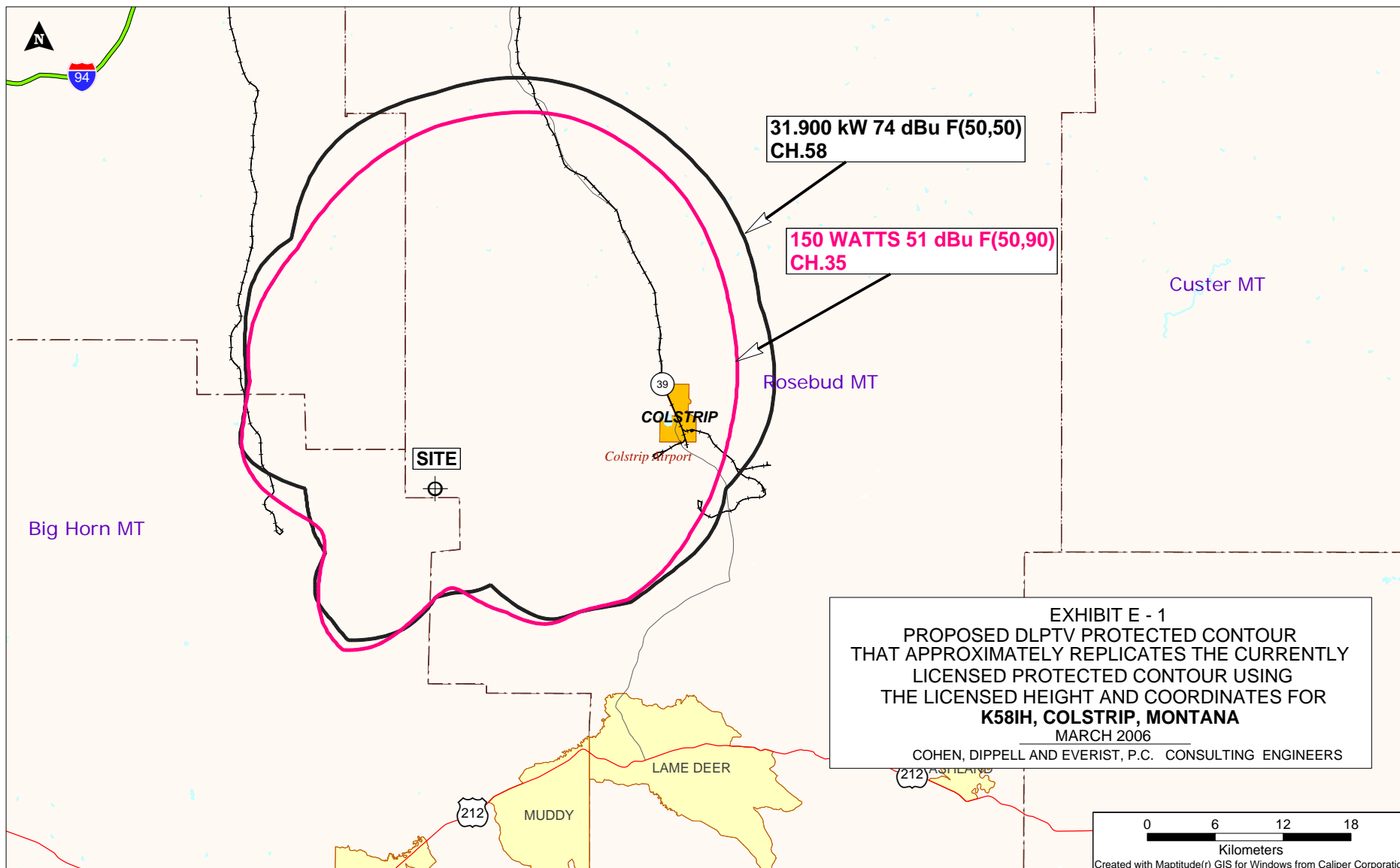


EXHIBIT E-2

DLPTV ANALYSIS RESULTS

FOR THE PROPOSED DIGITAL “FLASH-CUT”

OPERATION OF

K58IH, COLSTRIP, ETC., MONTANA

## DLPTV Results - K58IH

1990 Census data selected  
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 03-23-2006 Time: 17:33:16

Record Selected for Analysis

K58IH MRD -2107MRD COLSTRIP, ETC. MT US  
Channel 35 ERP 0.15 kW HAAT 352 m RCAMSL 1468 m  
Latitude 45 -50-20 Longitude 106 -54-17  
Status USR Zone 2 Border Offset  
Dir Antenna Make CDB Model 00000000000976 Beam tilt N Ref Azimuth 0  
Last update Cutoff date 18991231 Docket  
Comments  
Applicant

Cell Size for Service Analysis 1.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Not full service station

Facility meets maximum power limit

Azimuth (Deg)	ERP (kW)	HAAT (m)	51.0 dBu F(50, 90) (km)
0.0	0.150	432.7	34.3
45.0	0.150	410.9	33.7
90.0	0.150	345.0	31.7
135.0	0.150	292.7	30.1
180.0	0.150	259.2	28.8
225.0	0.150	346.4	31.8
270.0	0.150	395.1	33.2
315.0	0.150	337.7	31.5

Contour Overlap to Proposed Station

NEW Station 35 SHERIDAN WY BNPTTL20000829AIC causes

Contour overlap to Digital LPTV station  
K58IH 35 COLSTRIP, ETC. MT MRD 2107MRD

Contour Overlap Evaluation to Proposed Station 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 = 351.4km

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

\*\*\*\*\*

Start of Interference Analysis

Channel	Call	Proposed Station City/State	ARN
35	K58IH	COLSTRIP, ETC. MT	MRD 2107MRD

Stations Potentially Affected by Proposed Station

## DLPTV Results - K58IH

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
20	K20HB	BILLINGS MT	120.6	LIC	BLTT	-20041123AKE
28	K28CB	COLSTRIP MT	22.3	LIC	BLTTL	-19910211IN
31	NEW	BILLINGS MT	120.6	APP	BNPTTL	-20000828AFG
31	NEW	BILLINGS MT	120.6	APP	BNPTTL	-20000829AJW
31	NEW	BILLINGS MT	124.2	APP	BNPTTL	-20000828AXA
31	NEW	SHERIDAN WY	135.3	APP	BNPTTL	-20000802ADF
31	NEW	SHERIDAN WY	136.7	APP	BNPTTL	-20000828AEX
31	NEW	SHERIDAN WY	136.2	APP	BNPTTL	-20000830AKC
31	NEW	SHERIDAN WY	136.7	APP	BNPTTL	-20000828BAI
32	NEW	BILLINGS MT	120.2	APP	BNPTTL	-20000823ABU
32	NEW	SHERIDAN WY	136.2	APP	BNPTTL	-20000829AIF
34	NEW	SHERIDAN WY	136.7	APP	BNPTTL	-20000828AJW
34	NEW	SHERIDAN WY	136.2	APP	BNPTTL	-20000828BAJ
35	NEW	SHERIDAN WY	136.2	APP	BNPTTL	-20000829AIC
35	K35CV	SHOSHONI WY	280.6	LIC	BLTT	-19910225JQ
36	K36EZ	BILLINGS MT	120.7	APP	BMAPTTL	-20000831CHP
36	K36EZ	BILLINGS MT	120.7	LIC	BLTTL	-20001227ABC
36	NEW	MILES CITY MT	119.6	APP	BNPTTL	-20000828AXO
36	NEW	MILES CITY MT	119.6	APP	BNPTTL	-20000828AKP
36	NEW	SHERIDAN WY	136.2	APP	BNPTTL	-20000802ADJ
38	NEW	BILLINGS MT	111.2	APP	BNPTTL	-20000828AXB
38	NEW	SHERIDAN WY	136.2	APP	BNPTTL	-20000829AIB
39	NEW	BILLINGS MT	120.5	APP	BNPTTL	-20000828BDI
39	NEW	BILLINGS MT	127.5	APP	BNPTTL	-20000830BAR
39	NEW	BILLINGS MT	111.2	APP	BNPTTL	-20000824AEC
39	NEW	SHERIDAN WY	136.2	APP	BNPTTL	-20000802ADM
42	K42GF	BILLINGS MT	93.3	CP	BNPTTL	-20000807ACW
43	NEW	BILLINGS MT	127.5	APP	BNPTTL	-20000831EIS
43	NEW	SHERIDAN WY	136.2	APP	BNPTTL	-20000802ADK

%%

## Analysis of Interference to Affected Station 1

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
20	K20HB	BILLINGS MT	BLTT	-20041123AKE

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	KTVO-DT	BILLINGS MT	0.0	PLN	DTVPLN	-DTVP0257
18	KSVI-DT	BILLINGS MT	10.1	PLN	DTVPLN	-DTVP0298
20	KUSM-DT	BOZEMAN MT	201.7	PLN	DTVPLN	-DTVP0385del
20	KFNB	CASPER WY	377.0	LIC	BLCT	-19950928KF
22	KHMT	HARDIN MT	24.9	CP	BPCDT	-19991101AKB
22	KHMT-DT	HARDIN MT	24.9	PLN	DTVPLN	-DTVP0463
35	K58IH	COLSTRIP, ETC. MT	120.6	USR	MRD	-2107MRD

Proposed station is beyond the site to  
nearest cell evaluation distance

#####

## Analysis of Interference to Affected Station 2

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
28	K28CB	COLSTRIP MT	BLTTL	-19910211IN

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
35	K58IH	COLSTRIP, ETC. MT	22.3	USR	MRD	-2107MRD

Proposal causes no interference

#####

## Analysis of Interference to Affected Station 3

## Analysis of current record

DLPTV Results - K58IH  
 Channel 31 Call NEW City/State BILLINGS MT Application Ref. No. BNPTTL -20000828AFG

#### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
30	K3OIB	BILLINGS MT	26.7	CP	BNPTTL -20000831BQW
31	NEW	SHERIDAN WY	173.5	APP	BNPTTL -20000802ADF
31	NEW	SHERIDAN WY	176.0	APP	BNPTTL -20000828AEX
31	NEW	SHERIDAN WY	176.0	APP	BNPTTL -20000828BAI
32	NEW	BILLINGS MT	0.8	APP	BNPTTL -20000823ABU
35	K58IH	COLSTRIP, ETC. MT	120.6	USR	MRD -2107MRD
46	NEW	BILLINGS MT	0.1	APP	BNPTTL -20000829AJT

Proposed station is beyond the site to nearest cell evaluation distance

#####

#### Analysis of Interference to Affected Station 4

Analysis of current record  
 Channel 31 Call NEW City/State BILLINGS MT Application Ref. No. BNPTTL -20000829AJW

#### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
30	K3OIB	BILLINGS MT	26.7	CP	BNPTTL -20000831BQW
31	NEW	SHERIDAN WY	173.6	APP	BNPTTL -20000802ADF
31	NEW	SHERIDAN WY	176.0	APP	BNPTTL -20000828AEX
31	NEW	SHERIDAN WY	176.0	APP	BNPTTL -20000828BAI
32	NEW	BILLINGS MT	0.9	APP	BNPTTL -20000823ABU
35	K58IH	COLSTRIP, ETC. MT	120.6	USR	MRD -2107MRD
46	NEW	BILLINGS MT	0.0	APP	BNPTTL -20000829AJT

Proposed station is beyond the site to nearest cell evaluation distance

#####

#### Analysis of Interference to Affected Station 5

Analysis of current record  
 Channel 31 Call NEW City/State BILLINGS MT Application Ref. No. BNPTTL -20000828AXA

#### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
31	NEW	SHERIDAN WY	177.3	APP	BNPTTL -20000802ADF
31	NEW	SHERIDAN WY	179.8	APP	BNPTTL -20000828AEX
31	NEW	SHERIDAN WY	179.8	APP	BNPTTL -20000828BAI
32	NEW	BILLINGS MT	4.8	APP	BNPTTL -20000823ABU
35	K58IH	COLSTRIP, ETC. MT	124.2	USR	MRD -2107MRD
46	NEW	BILLINGS MT	4.1	APP	BNPTTL -20000829AJT

Proposed station is beyond the site to nearest cell evaluation distance

#####

#### Analysis of Interference to Affected Station 6

Analysis of current record  
 Channel 31 Call NEW City/State SHERIDAN WY Application Ref. No. BNPTTL -20000802ADF

#### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
31	NEW	BILLINGS MT	173.5	APP	BNPTTL -20000828AFG

				DLPTV Results - K58IH		
31	NEW	BILLINGS MT	173.6	APP	BNPTTL	-20000829AJW
31	NEW	BILLINGS MT	177.3	APP	BNPTTL	-20000828AXA
32	NEW	SHERIDAN WY	13.1	APP	BNPTTL	-20000829AIF
35	K58IH	COLSTRIP, ETC. MT	135.3	USR	MRD	-2107MRD
46	NEW	SHERIDAN WY	2.5	APP	BNPTTL	-20000804ADL

Proposed station is beyond the site to  
nearest cell evaluation distance

#####

#### Analysis of Interference to Affected Station 7

##### Analysis of current record

Channel	Call	City/State	Application Ref. No.
31	NEW	SHERIDAN WY	BNPTTL -20000828AEX

##### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
31	NEW	BILLINGS MT	176.0	APP	BNPTTL -20000828AFG
31	NEW	BILLINGS MT	176.0	APP	BNPTTL -20000829AJW
31	NEW	BILLINGS MT	179.8	APP	BNPTTL -20000828AXA
32	NEW	SHERIDAN WY	15.2	APP	BNPTTL -20000829AIF
35	K58IH	COLSTRIP, ETC. MT	136.7	USR	MRD -2107MRD
46	NEW	SHERIDAN WY	0.0	APP	BNPTTL -20000804ADL

Proposed station is beyond the site to  
nearest cell evaluation distance

#####

#### Analysis of Interference to Affected Station 8

##### Analysis of current record

Channel	Call	City/State	Application Ref. No.
31	NEW	SHERIDAN WY	BNPTTL -20000830AKC

##### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
31	NEW	BILLINGS MT	164.9	APP	BNPTTL -20000828AFG
31	NEW	BILLINGS MT	165.0	APP	BNPTTL -20000829AJW
31	NEW	BILLINGS MT	168.7	APP	BNPTTL -20000828AXA
32	NEW	SHERIDAN WY	0.0	APP	BNPTTL -20000829AIF
35	K58IH	COLSTRIP, ETC. MT	136.2	USR	MRD -2107MRD
46	NEW	SHERIDAN WY	15.3	APP	BNPTTL -20000804ADL

Proposed station is beyond the site to  
nearest cell evaluation distance

#####

#### Analysis of Interference to Affected Station 9

##### Analysis of current record

Channel	Call	City/State	Application Ref. No.
31	NEW	SHERIDAN WY	BNPTTL -20000828BAI

##### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
31	NEW	BILLINGS MT	176.0	APP	BNPTTL -20000828AFG
31	NEW	BILLINGS MT	176.0	APP	BNPTTL -20000829AJW
31	NEW	BILLINGS MT	179.8	APP	BNPTTL -20000828AXA
32	NEW	SHERIDAN WY	15.2	APP	BNPTTL -20000829AIF
35	K58IH	COLSTRIP, ETC. MT	136.7	USR	MRD -2107MRD
46	NEW	SHERIDAN WY	0.0	APP	BNPTTL -20000804ADL

Proposed station is beyond the site to  
nearest cell evaluation distance

## DLPTV Results - K58IH

#####

## Analysis of Interference to Affected Station 10

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
32	NEW	BILLINGS MT	BNPTTL	-20000823ABU

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
31	NEW	BILLINGS MT	0.8	APP	BNPTTL	-20000828AFG
31	NEW	BILLINGS MT	0.9	APP	BNPTTL	-20000829AJW
31	NEW	BILLINGS MT	4.8	APP	BNPTTL	-20000828AXA
32	NEW	SHERIDAN WY	164.2	APP	BNPTTL	-20000829AIF
35	K58IH	COLSTRIP, ETC. MT	120.2	USR	MRD	-2107MRD

Proposed station is beyond the site to  
nearest cell evaluation distance

#####

## Analysis of Interference to Affected Station 11

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
32	NEW	SHERIDAN WY	BNPTTL	-20000829AIF

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
31	NEW	SHERIDAN WY	13.1	APP	BNPTTL	-20000802ADF
31	NEW	SHERIDAN WY	15.2	APP	BNPTTL	-20000828AEX
31	NEW	SHERIDAN WY	0.0	APP	BNPTTL	-20000830AKC
31	NEW	SHERIDAN WY	15.2	APP	BNPTTL	-20000828BAI
35	K58IH	COLSTRIP, ETC. MT	136.2	USR	MRD	-2107MRD

Proposed station is beyond the site to  
nearest cell evaluation distance

#####

## Analysis of Interference to Affected Station 12

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
34	NEW	SHERIDAN WY	BNPTTL	-20000828AJW

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
35	K58IH	COLSTRIP, ETC. MT	136.7	USR	MRD	-2107MRD
35	NEW	SHERIDAN WY	15.2	APP	BNPTTL	-20000829AIC

Proposal causes no interference

#####

## Analysis of Interference to Affected Station 13

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
34	NEW	SHERIDAN WY	BNPTTL	-20000828BAJ

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
35	K58IH	COLSTRIP, ETC. MT	136.2	USR	MRD	-2107MRD
35	NEW	SHERIDAN WY	0.0	APP	BNPTTL	-20000829AIC

Proposal causes no interference



## DLPTV Results - K581H

#####

## Analysis of Interference to Affected Station 14

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
35	NEW	SHERIDAN WY	BNPTTL	-20000829AIC

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
34	NEW	SHERIDAN WY	15.2	APP	BNPTTL	-20000828AJW
34	NEW	SHERIDAN WY	0.0	APP	BNPTTL	-20000828BAJ
35	K581H	COLSTRIP, ETC. MT	136.2	USR	MRD	-2107MRD
35	K35CV	SHOSHONI WY	149.4	LIC	BLTT	-19910225JQ
36	NEW	SHERIDAN WY	0.0	APP	BNPTTL	-20000802ADJ

Proposal causes no interference

#####

## Analysis of Interference to Affected Station 15

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
35	K35CV	SHOSHONI WY	BLTT	-19910225JQ

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
35	K581H	COLSTRIP, ETC. MT	280.6	USR	MRD	-2107MRD
35	NEW	SHERIDAN WY	149.4	APP	BNPTTL	-20000829AIC

Proposal causes no interference

#####

## Analysis of Interference to Affected Station 16

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
36	K36EZ	BILLINGS MT	BMAPTTL	-20000831CHP

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
35	K581H	COLSTRIP, ETC. MT	120.7	USR	MRD	-2107MRD
36	NEW	MILES CITY MT	229.5	APP	BNPTTL	-20000828AX0
36	NEW	MILES CITY MT	229.5	APP	BNPTTL	-20000828AKP
36	NEW	SHERIDAN WY	165.2	APP	BNPTTL	-20000802ADJ

Proposal causes no interference

#####

## Analysis of Interference to Affected Station 17

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
36	K36EZ	BILLINGS MT	BLTTL	-20001227ABC

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
35	K581H	COLSTRIP, ETC. MT	120.7	USR	MRD	-2107MRD
36	NEW	SHERIDAN WY	165.2	APP	BNPTTL	-20000802ADJ

Proposed station is beyond the site to nearest cell evaluation distance

#####

DLPTV Results - K581H  
Analysis of Interference to Affected Station 18

Analysis of current record

Channel	Call	City/State	Application Ref. No.
36	NEW	MILES CITY MT	BNPTTL -20000828AX0

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
35	K581H	COLSTRIP, ETC. MT	119.6	USR	MRD -2107MRD
36	K36EZ	BILLINGS MT	229.5	APP	BMAPTTL -20000831CHP

Proposal causes no interference

#####

Analysis of Interference to Affected Station 19

Analysis of current record

Channel	Call	City/State	Application Ref. No.
36	NEW	MILES CITY MT	BNPTTL -20000828AKP

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
35	K581H	COLSTRIP, ETC. MT	119.6	USR	MRD -2107MRD
36	K36EZ	BILLINGS MT	229.5	APP	BMAPTTL -20000831CHP

Proposal causes no interference

#####

Analysis of Interference to Affected Station 20

Analysis of current record

Channel	Call	City/State	Application Ref. No.
36	NEW	SHERIDAN WY	BNPTTL -20000802ADJ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
35	K581H	COLSTRIP, ETC. MT	136.2	USR	MRD -2107MRD
35	NEW	SHERIDAN WY	0.0	APP	BNPTTL -20000829AIC
36	K36EZ	BILLINGS MT	165.2	APP	BMAPTTL -20000831CHP

Proposal causes no interference

#####

Analysis of Interference to Affected Station 21

Analysis of current record

Channel	Call	City/State	Application Ref. No.
38	NEW	BILLINGS MT	BNPTTL -20000828AXB

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
35	K581H	COLSTRIP, ETC. MT	111.2	USR	MRD -2107MRD
38	NEW	SHERIDAN WY	162.9	APP	BNPTTL -20000829AIB
39	NEW	BILLINGS MT	10.2	APP	BNPTTL -20000828BDI
39	NEW	BILLINGS MT	17.3	APP	BNPTTL -20000830BAR
39	NEW	BILLINGS MT	0.0	APP	BNPTTL -20000824AEC

Proposed station is beyond the site to  
nearest cell evaluation distance

#####

Analysis of Interference to Affected Station 22

Analysis of current record

DLPTV Results - K58IH  
Channel 38 Call NEW City/State SHERIDAN WY Application Ref. No. BNPTTL -20000829AIB

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
35	K58IH	COLSTRIP, ETC. MT	136.2	USR	MRD -2107MRD
38	NEW	BILLINGS MT	162.9	APP	BNPTTL -20000828AXB
39	NEW	SHERIDAN WY	0.0	APP	BNPTTL -20000802ADM

Proposed station is beyond the site to nearest cell evaluation distance

#####

Analysis of Interference to Affected Station 23

Analysis of current record  
Channel 39 Call NEW City/State BILLINGS MT Application Ref. No. BNPTTL -20000828BDI

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
35	K58IH	COLSTRIP, ETC. MT	120.5	USR	MRD -2107MRD
38	NEW	BILLINGS MT	10.2	APP	BNPTTL -20000828AXB
39	NEW	SHERIDAN WY	164.6	APP	BNPTTL -20000802ADM

Proposed station is beyond the site to nearest cell evaluation distance

#####

Analysis of Interference to Affected Station 24

Analysis of current record  
Channel 39 Call NEW City/State BILLINGS MT Application Ref. No. BNPTTL -20000830BAR

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
35	K58IH	COLSTRIP, ETC. MT	127.5	USR	MRD -2107MRD
38	NEW	BILLINGS MT	17.3	APP	BNPTTL -20000828AXB
39	NEW	SHERIDAN WY	167.4	APP	BNPTTL -20000802ADM

Proposed station is beyond the site to nearest cell evaluation distance

#####

Analysis of Interference to Affected Station 25

Analysis of current record  
Channel 39 Call NEW City/State BILLINGS MT Application Ref. No. BNPTTL -20000824AEC

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
35	K58IH	COLSTRIP, ETC. MT	111.2	USR	MRD -2107MRD
38	NEW	BILLINGS MT	0.0	APP	BNPTTL -20000828AXB
39	NEW	SHERIDAN WY	162.9	APP	BNPTTL -20000802ADM

Proposed station is beyond the site to nearest cell evaluation distance

#####

Analysis of Interference to Affected Station 26

## DLPTV Results - K58IH

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
39	NEW	SHERIDAN WY	BNPTTL	-20000802ADM

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
35	K58IH	COLSTRIP, ETC. MT	136.2	USR	MRD	-2107MRD
38	NEW	SHERIDAN WY	0.0	APP	BNPTTL	-20000829AIB
39	NEW	BILLINGS MT	164.6	APP	BNPTTL	-20000828BDI
39	NEW	BILLINGS MT	162.9	APP	BNPTTL	-20000824AEC

Proposed station is beyond the site to  
nearest cell evaluation distance

#####

## Analysis of Interference to Affected Station 27

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
42	K42GF	BILLINGS MT	BNPTTL	-20000807ACW

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
35	K58IH	COLSTRIP, ETC. MT	93.3	USR	MRD	-2107MRD

Proposed station is beyond the site to  
nearest cell evaluation distance

#####

## Analysis of Interference to Affected Station 28

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
43	NEW	BILLINGS MT	BNPTTL	-20000831EIS

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
35	K58IH	COLSTRIP, ETC. MT	127.5	USR	MRD	-2107MRD
43	NEW	SHERIDAN WY	167.4	APP	BNPTTL	-20000802ADK

Proposed station is beyond the site to  
nearest cell evaluation distance

#####

## Analysis of Interference to Affected Station 29

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
43	NEW	SHERIDAN WY	BNPTTL	-20000802ADK

## Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
35	K58IH	COLSTRIP, ETC. MT	136.2	USR	MRD	-2107MRD

Proposed station is beyond the site to  
nearest cell evaluation distance

#####

## Analysis of Interference to Affected Station 30

## Analysis of current record

Channel  
35

Call  
K58IH

City/State  
COLSTRIP, ETC. MT

DLPTV Results - K58IH

Application Ref. No.  
MRD -2107MRD

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
Total scenarios =		1			

Result key: 1

Scenario 1 Affected station 30

Before Analysis

Results for: 35A MT COLSTRIP, ETC.		MRD	2107MRD	USR
HAAT	352.0 m, ATV ERP	0.2 kW		
	POPULATION	AREA (sq km)		
within Noise Limited Contour	4442	3274.8		
not affected by terrain losses	2950	2685.7		
lost to NTSC IX	0	0.0		
lost to additional IX by ATV	0	0.0		
lost to ATV IX only	0	0.0		
lost to all IX	0	0.0		

Potential Interfering Stations Included in above Scenario 1

#####

FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED

### Section III - Engineering (Digital)

#### 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.

#### TECH BOX

1. Channel: \_\_\_\_\_
2. Translator Input Channel No. \_\_\_\_\_
3. Station proposed to be rebroadcast:

Call Sign	City	State	Channel
-----------	------	-------	---------

4. Antenna Location Coordinates: (NAD 27)

\_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ " ☐ N ☐ S Latitude  
\_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ " ☐ E ☐ W Longitude

5. Antenna Structure Registration Number: \_\_\_\_\_

☐

Not applicable

See Explanation  
in Exhibit No.

☐

FAA Notification Filed with FAA

6. Antenna Location Site Elevation Above Mean Sea Level: \_\_\_\_\_ meters
7. Overall Tower Height Above Ground Level: \_\_\_\_\_ meters
8. Height of Radiation Center Above Ground Level: \_\_\_\_\_ meters
9. Maximum Effective Radiated Power (ERP): \_\_\_\_\_ kW
10. Transmitter Output Power: \_\_\_\_\_ kW
11. a. Transmitting Antenna: ☐ Nondirectional ☐ Directional ("Off-the-shelf") ☐ Directional composite

Manufacturer	Model
--------------	-------

- b. Electrical Beam Tilt: \_\_\_\_\_ degrees ☐ Not applicable

c. Directional Antenna Relative Field Values:

Rotation: \_\_\_\_\_ ° ☐ No rotation ☐ N/A (Nondirectional)

Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value
0		60		120		180		240		300	
10		70		130		190		250		310	
20		80		140		200		260		320	
30		90		150		210		270		330	
40		100		160		220		280		340	
50		110		170		230		290		350	
Additional Azimuths											

**NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.**

12. **Out-of-Channel Emission Mask:** Simple ☐ Stringent ☐

**CERTIFICATION**

13. **Interference.** The proposed facility complies with all of the following applicable rule sections. 47 C.F.R. Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b) and 73.1030. ☐ Yes ☐ No 

See Explanation in Exhibit No.

14. **Environmental Protection Act.** The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1306 (*i.e.*, the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine RF compliance. An **Exhibit is required.** ☐ Yes ☐ No 

See Explanation in Exhibit No.

Exhibit No.

By checking "Yes" above, 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.

15. **Channels 52-59.** If the proposed channel is within channels 52-59, the applicant certifies compliance with the following requirements, as applicable:

☐ The applicant is applying for a digital companion channel for which no suitable channel from channel 2-51 is available.

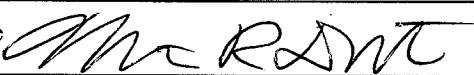
☐ Pursuant to Section 74.786(d), the applicant has notified, within 30 days of filing this application, all commercial wireless licensees of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.

**PREPARER'S CERTIFICATION ON PAGE 8 MUST BE COMPLETED AND SIGNED.**

16. **Channels 60-69.** If the proposed channel is within channels 60-69, the applicant certifies compliance with the following requirements, as applicable:

- ☐ Pursuant to Section 74.786(e), the applicant has notified, within 30 days of filing this application, all commercial wireless licensees of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees,
- ☐ Pursuant to Section 74.786(e), the applicant proposing operation on channel 63, 64, 68 and 69 ("public safety channels") has secured a coordinated spectrum use agreement(s) with 700 MHz public safety regional planning committee(s) and state frequency administrator(s) of the region(s) and state(s) within which the antenna site of the digital LPTV or TV translator station is proposed to locate, and those adjoining regions and states with boundaries within 75 miles of the proposed station location.
- ☐ Pursuant to Section 74.786(e), an applicant for a channel adjacent to channel 63, 64, 68 or 69 has notified, within 30 days of filing this application, the 700 MHz public safety regional planning committee(s) and state administrator(s) of the region and state containing the proposed digital LPTV or TV translator antenna site and regions and states whose geographic boundaries lie within 50 miles of the proposed LPTV or TV translator antenna site.

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 Martin R. Doczkat		Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature 		Date April 13, 2006	
Mailing Address Cohen, Dippell and Everist, P.C., 1300 L Street, N.W., Suite 1100			
City Washington		State or Country (if foreign address) DC	ZIP Code 20005
Telephone Number (include area code) (202) 898-0111		E-Mail Address (if available) cde@attglobal.net	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).