

ENGINEERING STATEMENT
AMENDMENT TO PENDING APPLICATION
FOR DTV CONSTRUCTION PERMIT
(FCC FILE NO. BDFCDTT-20060403AKP)
FOR AN EXISTING TELEVISION TRANSLATOR
K33EA, COLUMBUS, MONTANA
CHANNEL 33 18 WATTS MAX ERP 1253 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)

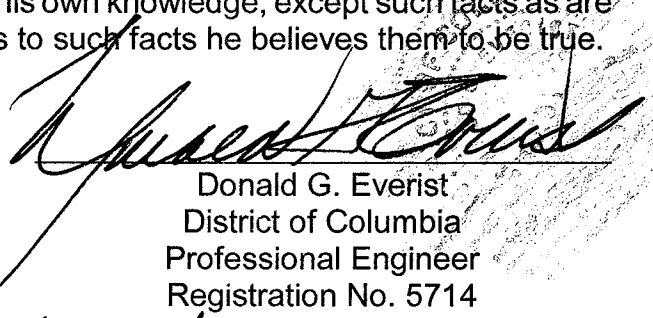
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

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;

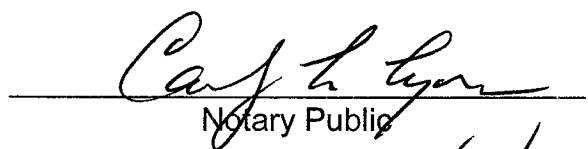
That the attached engineering report was prepared by him or under his supervision and direction and

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 13th 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 13th day of April, 2006.


Notary Public

My Commission Expires: 2/28/2008



INTRODUCTION

This engineering statement has been prepared on behalf of Nexstar Broadcasting, Inc., licensee of TV translator, K33EA, Columbus, Montana. This statement supports the licensee's amendment to its pending application (FCC File No. BDFCDTT-20060403AKP) to request to convert to DTV operation on the currently licensed analog Channel 33, commonly referred to as "flash-cut" with a DTV effective radiated power ("ERP") of 18 watts at a radiation center above mean sea level ("RCAMSL") of 1253 meters. The sole purpose of this amendment to the pending application is to provide certain technical data. No other changes are proposed.

TRANSMITTER SITE

The existing antenna will be utilized and no significant alteration of the tower is proposed. The existing tower is located at NE ¼ SE ¼ Section 19, Township 2S, Range 20E in Columbus, Montana. There is no change in transmitter site. The geographic coordinates of the site follow below.

North Latitude: 45° 38' 37"

West Longitude: 109° 17' 43"

NAD-27

ELEVATION DATA (unchanged)

Elevation of site above mean sea level	1248 meters (4094.5 feet)
Center of radiation of antenna above ground level	5 meters (16.4 feet)
Center of radiation of antenna above mean sea level	1253 meters (4110.9 feet)

Overall height of tower above ground	52.1 meters (170.9 feet)
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The Antenna Structure Registration Number (“ASRN”) for the existing tower is 1012460.

EQUIPMENT DATA

Transmitter:	Type-approved
Transmission Line:	Dielectric Flexline, 1-5/8" air dielectric, 10 meters (32.8 feet) with 95.5% efficiency [1.99 dB loss/100 m]
Antenna:	Scala, PR-450U with maximum gain of 16.1 dB and 0° electrical beam tilt

POWER DATA

Transmitter:	0.46 W	-3.35 dBW
Transmission Line Loss:	95.5%	0.2 dB
Input Into Antenna:	0.442 W	-3.55 dBW
Antenna Gain:	40.74	16.1 dB
ERP:	18 W	12.55 dBW

As indicated above, the transmitter with typical power output of 0.46 watts will deliver 0.442 watts to the input of the antenna. The antenna, having a maximum gain of 16.1 dB and an electrical beam tilt of 0°, will produce a maximum ERP of 18 watts. A map providing the protected contour of the proposed facility compared to the currently licensed operation of K33EA 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”, and the currently licensed antenna for K33EA with no alterations has been proposed.

OTHER BROADCAST FACILITIES

A brief analysis was completed to determine the presence of stations in the vicinity of the K33EA tower using the March 22, 2006 data contained within the Commission’s Consolidated Database System (“CDBS”). Within 500 meters of the proposed site, no authorized FM radio stations, 2 FM translators, no authorized DTV and NTSC television stations, and no other low-power analog television or television translator stations aside from K33EA were identified. 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 K33EA 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. 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 K33EA digital translator facilities and all relevant stations listed in the FCC database as of March 16, 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 18 watt directional operation will utilize a Scala, Type PR-450U antenna (or equivalent) described above with a center of radiation above ground of 5 meters. The proposed antenna is side-mounted on a tower with an overall height of 52.1 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 full-service FM stations, 2 FM translators, no full-service television stations, and no other low-power analog television or television translator stations aside from K33EA 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 operation of K33EA is less than 100 watts maximum ERP; therefore, based upon the current OET Bulletin No. 65, Edition 97-01 dated August 1997 and Supplement A, this

proposal is exempt from demonstrating compliance with the FCC radiofrequency field ("RFF") guidelines under Part 74, Subpart G, 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.

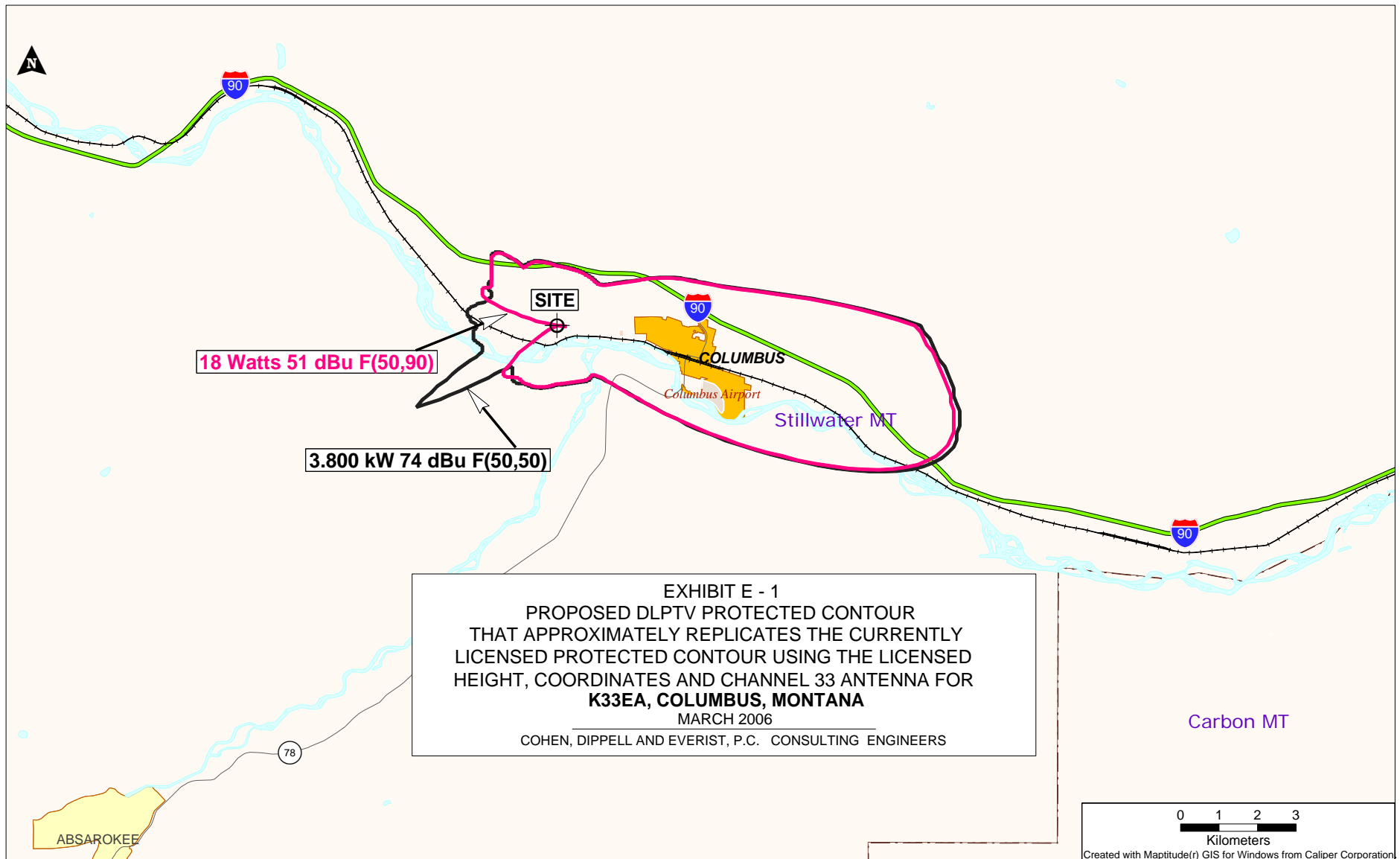


EXHIBIT E-2

DLPTV ANALYSIS RESULTS

FOR THE PROPOSED DIGITAL “FLASH-CUT”

OPERATION OF

K33EA, COLUMBUS, MONTANA

DLPTV Results - K33EA

1990 Census data selected

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 03-22-2006 Time: 15:38:14

Record Selected for Analysis

K33EA BLTT -20060314TOM COLUMBUS MT US
 Channel 33 ERP 0.0179 kW HAAT 14 m RCAMSL 1253 m
 Latitude 45 -38-37 Longitude 109 -17-43
 Status LIC Zone Border C Offset N
 Dir Antenna Make CDB Model 00000000023501 Beam tilt N Ref Azimuth 95
 Last update Cutoff date 18991231 Docket
 Comments
 Applicant NEXSTAR BROADCASTING INC.

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	0.000	33.0	1.8
45.0	0.000	33.0	1.8
90.0	0.016	73.3	9.4
135.0	0.000	33.0	2.0
180.0	0.000	33.0	1.8
225.0	0.000	33.0	1.8
270.0	0.000	33.0	1.8
315.0	0.000	50.2	2.3

Contour Overlap to Proposed Station

Station
 K33EA 33 COLUMBUS MT BLTT19940902IF

Station inside contour of Digital LPTV station
 K33EA 33 COLUMBUS MT BLTT 20060314TOM

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 = 373.1km

DLPTV Results - K33EA
Proposed facility is beyond the Mexican coordination distance
Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station	Call	City/State	ARN	
33	K33EA		COLUMBUS MT	BLTT	20060314TOM

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
19	K19CO	EMIGRANT MT	113.9	LIC	BLTT	-19911118JH
25	K25BP	BILLINGS MT	66.5	LIC	BLTT	-19990723JD
26	K26GL	COLUMBUS MT	3.3	LIC	BLTT	-20040929AFE
30	K30IB	BILLINGS MT	40.9	CP	BNPTTL	-20000831BQW
30	NEW	BILLINGS MT	66.8	APP	BNPTTL	-20000823ABP
31	NEW	BILLINGS MT	66.5	APP	BNPTTL	-20000829AJW
31	NEW	BILLINGS MT	66.4	APP	BNPTTL	-20000828AFG
31	NEW	BILLINGS MT	63.2	APP	BNPTTL	-20000828AXA
32	NEW	BILLINGS MT	66.8	APP	BNPTTL	-20000823ABU
32	KBTZ-LP	BOZEMAN MT	153.3	CP MOD	BMPTTL	-20030829BDJ
32	KBTZ-LP	BOZEMAN MT	122.2	LIC	BLTT	-19990811JJ
32	K32CG	WEST YELLOWSTONE MT	178.9	LIC	BLTT	-19910625IE
33	NEW	IDAHO FALLS ID	305.3	APP	BNPTTL	-20000831CEU
33	NEW	IDAHO FALLS ID	322.9	APP	BNPTTL	-20000830BEG
33	KTVM	BUTTE MT	247.0	CP MOD	BMPCDT	-20010723AAI
33	K33HN	GREAT FALLS MT	286.3	CP	BNPTTL	-20000831BOA
33	NEW	HELENA MT	227.4	APP	BNPTTL	-20000829AJX
33	NEW	MISSOULA MT	392.8	APP	BNPTTL	-20000828AXQ
33	K33DS	FREEDOM-ETNA WY	323.7	LIC	BLTT	-19921130JH
34	NEW	BILLINGS MT	66.8	APP	BNPTTL	-20000823ABT
34	NEW	BILLINGS MT	66.6	APP	BNPTTL	-20000807AEO
34	K34FI	BOZEMAN MT	122.2	APP	BDFCDTT	-20051027ACR
34	K34FI	BOZEMAN MT	122.2	CP	BPTT	-20040303ABK
34	K34FI	BOZEMAN MT	134.8	LIC	BLTT	-20020521AAK
34	K34AW	WEST YELLOWSTONE MT	178.9	LIC	BLTT	-19880426ID
36	NEW	BOZEMAN MO	136.8	APP	BNPTT	-20000831AQV
40	KJCX-LP	BOZEMAN MT	136.8	CP	BNPTT	-20000831BSM

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Analysis of Interference to Affected Station 1

Analysis of current record					
Channel	Call	City/State	Application	Ref. No.	
19	K19CO	EMIGRANT MT	BLTT	-19911118JH	

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
16	KCTZ-DT	BOZEMAN MT	40.0	PLN	DTVPLN	-DTVP0219del
19	KWYB	BUTTE MT	155.2	CP	BPCDT	-19991101AJX
19	KWYB-DT	BUTTE MT	155.2	PLN	DTVPLN	-DTVP0343
20	KUSM-DT	BOZEMAN MT	46.5	PLN	DTVPLN	-DTVP0385del
33	K33EA	COLUMBUS MT	113.9	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	113.9	LIC	BLTT	-19940902IF

DLPTV Results - K33EA

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

Channel	Call	City/State	Application	Ref. No.
25	K25BP	BILLINGS MT	BLTTL	-19990723JD

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	KTVQ-DT	BILLINGS MT	0.1	PLN	DTVPLN	-DTVP0257
18	KSVI	BILLINGS MT	10.1	CP	BPCDT	-19991029ACI
18	KSVI-DT	BILLINGS MT	10.1	PLN	DTVPLN	-DTVP0298
22	KHMT	HARDIN MT	24.9	CP	BPCDT	-19991101AKB
22	KHMT-DT	HARDIN MT	24.9	PLN	DTVPLN	-DTVP0463
33	K33EA	COLUMBUS MT	66.5	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	66.5	LIC	BLTT	-19940902IF

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.
26	K26GL	COLUMBUS MT	BLTT	-20040929AFE

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
18	KSVI	BILLINGS MT	74.1	CP	BPCDT	-19991029ACI
18	KSVI-DT	BILLINGS MT	74.1	PLN	DTVPLN	-DTVP0298
22	KHMT	HARDIN MT	88.0	CP	BPCDT	-19991101AKB
22	KHMT-DT	HARDIN MT	88.0	PLN	DTVPLN	-DTVP0463
26	K26DE	BOZEMAN MT	156.0	LIC	BLTTL	-19940207JC
26	KLMN	GREAT FALLS MT	262.9	LIC	BLCT	-20030611ABD
33	K33EA	COLUMBUS MT	3.3	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	3.3	LIC	BLTT	-19940902IF

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.
30	K30IB	BILLINGS MT	BNPTTL	-20000831BQW

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
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DLPTV Results - K33EA

22	KHMT	HARDIN MT	49.7	CP	BPCDT	-19991101AKB
22	KHMT-DT	HARDIN MT	49.7	PLN	DTVPLN	-DTVP0463
33	K33EA	COLUMBUS MT	40.9	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	40.9	LIC	BLTT	-19940902IF

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.
30	NEW	BILLINGS MT	BNPTTL	-20000823ABP

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
22	KHMT	HARDIN MT	24.4	CP	BPCDT	-19991101AKB
22	KHMT-DT	HARDIN MT	24.3	PLN	DTVPLN	-DTVP0463
31	NEW	BILLINGS MT	0.9	APP	BNPTTL	-20000829AJW
31	NEW	BILLINGS MT	0.8	APP	BNPTTL	-20000828AFG
31	NEW	BILLINGS MT	4.8	APP	BNPTTL	-20000828AXA
33	K33EA	COLUMBUS MT	66.8	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	66.8	LIC	BLTT	-19940902IF

Proposed station is beyond the site to nearest cell evaluation distance

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Analysis of Interference to Affected Station 6

Analysis of current record

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

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
30	K30IB	BILLINGS MT	26.7	CP	BNPTTL	-20000831BQW
32	NEW	BILLINGS MT	0.9	APP	BNPTTL	-20000823ABU
33	K33EA	COLUMBUS MT	66.5	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	66.5	LIC	BLTT	-19940902IF

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.
31	NEW	BILLINGS MT	BNPTTL	-20000828AFG

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
30	K30IB	BILLINGS MT	26.7	CP	BNPTTL	-20000831BQW

				DLPTV Results - K33EA			
32	NEW	BILLINGS MT	0.8	APP	BNPTTL	-20000823ABU	
33	K33EA	COLUMBUS MT	66.4	LIC	BLTT	-20060314TOM	
33	K33EA	COLUMBUS MT	66.4	LIC	BLTT	-19940902IF	

Proposed station is beyond the site to nearest cell evaluation distance

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Analysis of Interference to Affected Station 8

Analysis of current record

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

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
32	NEW	BILLINGS MT	4.8	APP	BNPTTL -20000823ABU
33	K33EA	COLUMBUS MT	63.2	LIC	BLTT -20060314TOM
33	K33EA	COLUMBUS MT	63.2	LIC	BLTT -19940902IF

Proposed station is beyond the site to nearest cell evaluation distance

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Analysis of Interference to Affected Station 9

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	0.9	APP	BNPTTL -20000829AJW
31	NEW	BILLINGS MT	0.8	APP	BNPTTL -20000828AFG
31	NEW	BILLINGS MT	4.8	APP	BNPTTL -20000828AXA
33	K33EA	COLUMBUS MT	66.8	LIC	BLTT -20060314TOM
33	K33EA	COLUMBUS MT	66.8	LIC	BLTT -19940902IF

Proposal causes no interference

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Analysis of Interference to Affected Station 10

Analysis of current record

Channel	Call	City/State	Application Ref. No.
32	KBTZ-LP	BOZEMAN MT	BMP TTL -20030829BDJ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
29	KAQR-DT	HELENA MT	132.7	PLN	DTVPLN -DTVP0705
33	KTVM	BUTTE MT	99.7	CP MOD	BMPCDT -20010723AAI
33	K33EA	COLUMBUS MT	153.3	LIC	BLTT -20060314TOM

DLPTV Results - K33EA
 33 K33EA COLUMBUS MT 153.3 LIC BLTT -19940902IF

Proposed station is beyond the site to
 nearest cell evaluation distance

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Analysis of Interference to Affected Station 11

Analysis of current record
 Channel Call City/State Application Ref. No.
 32 KBTZ-LP BOZEMAN MT BLTT -19990811JJ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	NEW	BILLINGS MT	187.8	APP	BNPTTL	-20000823ABU
33	KTVM	BUTTE MT	127.4	CP MOD	BMPCDT	-20010723AAI
33	K33EA	COLUMBUS MT	122.2	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	122.2	LIC	BLTT	-19940902IF

Proposed station is beyond the site to
 nearest cell evaluation distance

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Analysis of Interference to Affected Station 12

Analysis of current record
 Channel Call City/State Application Ref. No.
 32 K32CG WEST YELLOWSTONE MT BLTT -19910625IE

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	KBTZ-LP	BOZEMAN MT	98.6	CP MOD	BMPTTL	-20030829BDJ
33	K33EA	COLUMBUS MT	178.9	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	178.9	LIC	BLTT	-19940902IF

Proposed station is beyond the site to
 nearest cell evaluation distance

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Analysis of Interference to Affected Station 13

Analysis of current record
 Channel Call City/State Application Ref. No.
 33 NEW IDAHO FALLS ID BNPTTL -20000831CEU

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	KTVM	BUTTE MT	243.2	CP MOD	BMPCDT	-20010723AAI
33	K33EA	COLUMBUS MT	305.3	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	305.3	LIC	BLTT	-19940902IF

Proposal causes no interference

DLPTV Results - K33EA

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Analysis of Interference to Affected Station 14

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
33	NEW	IDAHO FALLS ID	BNPTTL	-20000830BEG

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	KTVM	BUTTE MT	281.3	CP MOD	BMPCDT	-20010723AAI
33	K33EA	COLUMBUS MT	322.9	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	322.9	LIC	BLTT	-19940902IF

Proposal causes no interference

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Analysis of Interference to Affected Station 15

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
33	KTVM	BUTTE MT	BMPCDT	-20010723AAI

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	K33EA	COLUMBUS MT	247.0	LIC	BLTT	-20060314TOM

Proposal causes no interference

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Analysis of Interference to Affected Station 16

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
33	K33HN	GREAT FALLS MT	BNPTTL	-20000831B0A

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
26	KLMN	GREAT FALLS MT	62.3	LIC	BLCT	-20030611ABD
29	KAQR-DT	HELENA MT	87.6	PLN	DTVPLN	-DTVP0705
33	KTVM	BUTTE MT	153.9	CP MOD	BMPCDT	-20010723AAI
33	K33EA	COLUMBUS MT	286.3	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	286.3	LIC	BLTT	-19940902IF
33	NEW	HELENA MT	66.4	APP	BNPTTL	-20000829AJX

Proposal causes no interference

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Analysis of Interference to Affected Station 17

Analysis of current record

DLPTV Results - K33EA

Channel	Call	City/State	Application	Ref. No.
33	NEW	HELENA MT	BNPTTL	-20000829AJX

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
26	KLMN	GREAT FALLS MT	85.5	LIC	BLCT	-20030611ABD
29	KAQR-DT	HELENA MT	51.5	PLN	DTVPLN	-DTVP0705
33	KTVM	BUTTE MT	106.9	CP MOD	BMPCDT	-20010723AAI
33	K33EA	COLUMBUS MT	227.4	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	227.4	LIC	BLTT	-19940902IF
33	K33HN	GREAT FALLS MT	66.4	CP	BNPTTL	-20000831BOA
33	NEW	MISSOULA MT	176.1	APP	BNPTTL	-20000828AXQ
34	KJJC-LP	HELENA MT	24.7	LIC	BLTTL	-20050912AAF

Proposal causes no interference

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Analysis of Interference to Affected Station 18

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
33	NEW	MISSOULA MT	BNPTTL	-20000828AXQ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
29	KAQR-DT	HELENA MT	138.6	PLN	DTVPLN	-DTVP0705
32	K32EU	MISSOULA MT	0.1	LIC	BLTT	-20000424AAW
33	KTVM	BUTTE MT	164.4	CP MOD	BMPCDT	-20010723AAI
33	K33EA	COLUMBUS MT	392.8	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	392.8	LIC	BLTT	-19940902IF
33	NEW	HELENA MT	176.1	APP	BNPTTL	-20000829AJX
35	KPAX-DT	MISSOULA MT	0.0	PLN	DTVPLN	-DTVP0928del
36	KTMF-DT	MISSOULA MT	0.2	PLN	DTVPLN	-DTVP0967
40	KECI-DT	MISSOULA MT	0.1	PLN	DTVPLN	-DTVP1071

Proposed station is beyond the site to nearest cell evaluation distance

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Analysis of Interference to Affected Station 19

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
33	K33DS	FREEDOM-ETNA WY	BLTT	-19921130JH

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	NEW	IDAHO FALLS ID	127.3	APP	BNPTTL	-20000831CEU
33	KTVM	BUTTE MT	349.0	CP MOD	BMPCDT	-20010723AAI
33	K33EA	COLUMBUS MT	323.7	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	323.7	LIC	BLTT	-19940902IF

Proposal causes no interference

#####

DLPTV Results - K33EA

Analysis of Interference to Affected Station 20

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
34	NEW	BILLINGS MT	BNPTTL	-20000823ABT

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	K33EA	COLUMBUS MT	66.8	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	66.8	LIC	BLTT	-19940902IF
34	K34FI	BOZEMAN MT	187.7	CP	BPTT	-20040303ABK

Proposal causes no interference

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Analysis of Interference to Affected Station 21

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
34	NEW	BILLINGS MT	BNPTTL	-20000807AEO

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	K33EA	COLUMBUS MT	66.6	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	66.6	LIC	BLTT	-19940902IF

Proposal causes no interference

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Analysis of Interference to Affected Station 22

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
34	K34FI	BOZEMAN MT	BDFCDT	-20051027ACR

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	KTVM	BUTTE MT	127.4	CP MOD	BMPCDT	-20010723AAI
33	K33EA	COLUMBUS MT	122.2	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	122.2	LIC	BLTT	-19940902IF
34	K34FI	BUTTE MT	136.1	CP	BNPTTL	-20000807ADB

Proposal causes no interference

#####

Analysis of Interference to Affected Station 23

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
34	K34FI	BOZEMAN MT	BPTT	-20040303ABK

Stations Potentially Affecting This Station

DLPTV Results - K33EA

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	KTVM	BUTTE MT	127.4	CP MOD	BMPCDT	-20010723AAI
33	K33EA	COLUMBUS MT	122.2	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	122.2	LIC	BLTT	-19940902IF
34	NEW	BILLINGS MT	187.7	APP	BNPTTL	-20000823ABT
34	K34II	BUTTE MT	136.1	CP	BNPTTL	-20000807ADB
34	KJJCLP	HELENA MT	150.9	LIC	BLTTL	-20050912AAF

Proposed station is beyond the site to
nearest cell evaluation distance

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Analysis of Interference to Affected Station 24

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
34	K34FI	BOZEMAN MT	BLTTL	-20020521AAK

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	KTVM	BUTTE MT	114.7	CP MOD	BMPCDT	-20010723AAI
33	K33EA	COLUMBUS MT	134.8	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	134.8	LIC	BLTT	-19940902IF
34	K34II	BUTTE MT	123.4	CP	BNPTTL	-20000807ADB
34	KJJCLP	HELENA MT	141.7	LIC	BLTTL	-20050912AAF

Proposed station is beyond the site to
nearest cell evaluation distance

#####

Analysis of Interference to Affected Station 25

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
34	K34AW	WEST YELLOWSTONE MT	BLTT	-19880426ID

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	K33EA	COLUMBUS MT	178.9	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	178.9	LIC	BLTT	-19940902IF
34	K34FI	BOZEMAN MT	105.6	APP	BDFCDTT	-20051027ACR
34	K34FI	BOZEMAN MT	105.6	CP	BPTT	-20040303ABK

Proposed station is beyond the site to
nearest cell evaluation distance

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Analysis of Interference to Affected Station 26

Analysis of current record

Channel	Call	City/State	Application	Ref. No.

DLPTV Results - K33EA
 36 NEW BOZEMAN MO BNPTT -20000831AQV

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
29	KAQR-DT	HELENA MT	141.3	PLN	DTVPLN	-DTVP0705
33	KTVM	BUTTE MT	114.1	CP MOD	BMPCDT	-20010723AAI
33	K33EA	COLUMBUS MT	136.8	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	136.8	LIC	BLTT	-19940902IF
36	KTMF-DT	MISSOULA MT	272.6	PLN	DTVPLN	-DTVP0967

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.
 40 KJCX-LP BOZEMAN MT BNPTT -20000831BSM

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	KTVM	BUTTE MT	114.1	CP MOD	BMPCDT	-20010723AAI
33	K33EA	COLUMBUS MT	136.8	LIC	BLTT	-20060314TOM
33	K33EA	COLUMBUS MT	136.8	LIC	BLTT	-19940902IF
40	KECI-DT	MISSOULA MT	272.5	PLN	DTVPLN	-DTVP1071
40	K4OHL	WHITEHALL MT	80.2	LIC	BLTT	-20051107AFJ

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.
 33 K33EA COLUMBUS MT BLTT -20060314TOM

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	KTVM	BUTTE MT	247.0	CP MOD	BMPCDT	-20010723AAI
33	NEW	HELENA MT	227.4	APP	BNPTTL	-20000829AJX

Total scenarios = 1

Result key: 1
 Scenario 1 Affected station 28
 Before Analysis

Results for: 33A MT COLUMBUS BLTT 20060314TOM LIC
 HAAT 14.0 m, ATV ERP 0.0 kW
 within Noise Limited Contour POPULATION 1785 AREA (sq km) 37.3

DLPTV Results - K33EA		
not affected by terrain losses	1785	37.3
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
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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 ☐ Directional composite

Manufacturer	Model
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-
- 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, NW 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).