

ENGINEERING STATEMENT
APPLICATION FOR A DTV
CONSTRUCTION PERMIT FOR
AN EXISTING TELEVISION TRANSLATOR
K47IR, VIRGINIA, MINNESOTA
CHANNEL 47 0.092 WATTS MAX ERP 591.2 METERS RC/AMSL

MARCH 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)

Ryan Felmlee, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer of the Pennsylvania State University, has successfully completed the Engineer-In-Training examination ("EIT") in the State of Virginia, and is a staff engineer 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;

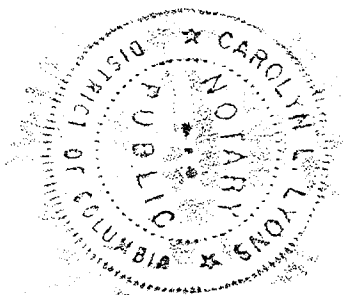
That the attached engineering report was prepared by him or under his supervision and direction and

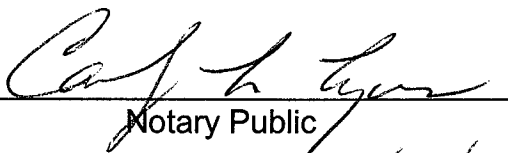
That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.



Ryan Felmlee
District of Columbia

Subscribed and sworn to before me this 29th day of March, 2006.





Notary Public

My Commission Expires: 2/28/2008

INTRODUCTION

This engineering statement has been prepared on behalf of KQDS Acquisition Corp., licensee of TV translator K47IR, Virginia, Minnesota. This statement supports the licensee's request to convert to DTV operation on the currently licensed analog Channel 47, commonly referred to as "flash-cut" with a DTV effective radiated power ("ERP") of 0.092 watts DA at a radiation center above mean sea level ("RCAMSL") of 591.2 meters.

TRANSMITTER SITE

The existing antenna will be utilized and no significant alteration of the tower is proposed. The existing tower is located on Midway Hill approximately 0.5 kilometers southeast of Midway, Minnesota. There is no change in transmitter site. The geographic coordinates of the site follow below.

North Latitude: 47° 29' 18"

West Longitude: 92° 31' 12"

NAD-27

ELEVATION DATA

Elevation of site above mean sea level	537.9 meters (1765 feet)
Center of radiation of antenna above ground level	53.3 meters (175 feet)
Center of radiation of antenna above mean sea level	591.2 meters (1940 feet)
Overall height of tower above ground level	82.3 meters (270 feet)

The Antenna Structure Registration Number ("ASRN") for the existing tower is 1027749.

EQUIPMENT DATA

Transmitter:	Type-approved
Transmission Line:	Andrew, Type HJ7-50A, 1-5/8", 50 ohm, 68.6 meters (225 feet) with 75.4% efficiency 0.575 dB loss/100 ft
Antenna:	Andrew, ALP12L2-HSOC with maximum gain of 13.32 dB

POWER DATA

Transmitter:	0.0057 kW	-22.44 dBk
Transmission Line Loss:	0.0014 kW	24.6%
Input Into Antenna:	0.0043 kW	-23.7 dBk
Antenna Gain:	21.48	13.32 dB
ERP:	0.092 kW	-10.36 dBk

As indicated above, the transmitter with typical power output of 5.7 watts will deliver 4.3 watts to the input of the antenna. The antenna, having a maximum gain of 13.32 dB will produce maximum ERP of 0.092 kW. A coverage map providing the protected contour of the proposed facility compared to the currently licensed operation of K47IR has been included as Exhibit E-1 of this report. The antenna elevation pattern with the associated tabulation and the horizontal pattern with the accompanying tabulation are on file at the Commission as this

antenna make and model has been designated as “Off-the-Shelf”, and is the currently licensed antenna for K47IR with no alterations proposed.

OTHER BROADCAST FACILITIES

A brief analysis was completed to determine the presence of stations in the vicinity of the K47IR tower using the March 16, 2006, data contained within the Commission’s Consolidated Database System (“CDBS”). Within 500 meters of the proposed site, four authorized FM radio stations were identified, no authorized DTV and NTSC television stations, and no other low-power analog television and television translator stations aside from K47IR were also found within 500 meters. There are two 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 K47IR 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 K47IR 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 0.092 kW directional operation will utilize an Andrew, Type ALP12L2-HSOC antenna (or equivalent) described above with a center of radiation above ground of 53.3 meters. The proposed antenna will be side-mounted on an existing tower with an overall height of 82.3 meters above ground.

The proposed operation of K47IR 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 guyed 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.

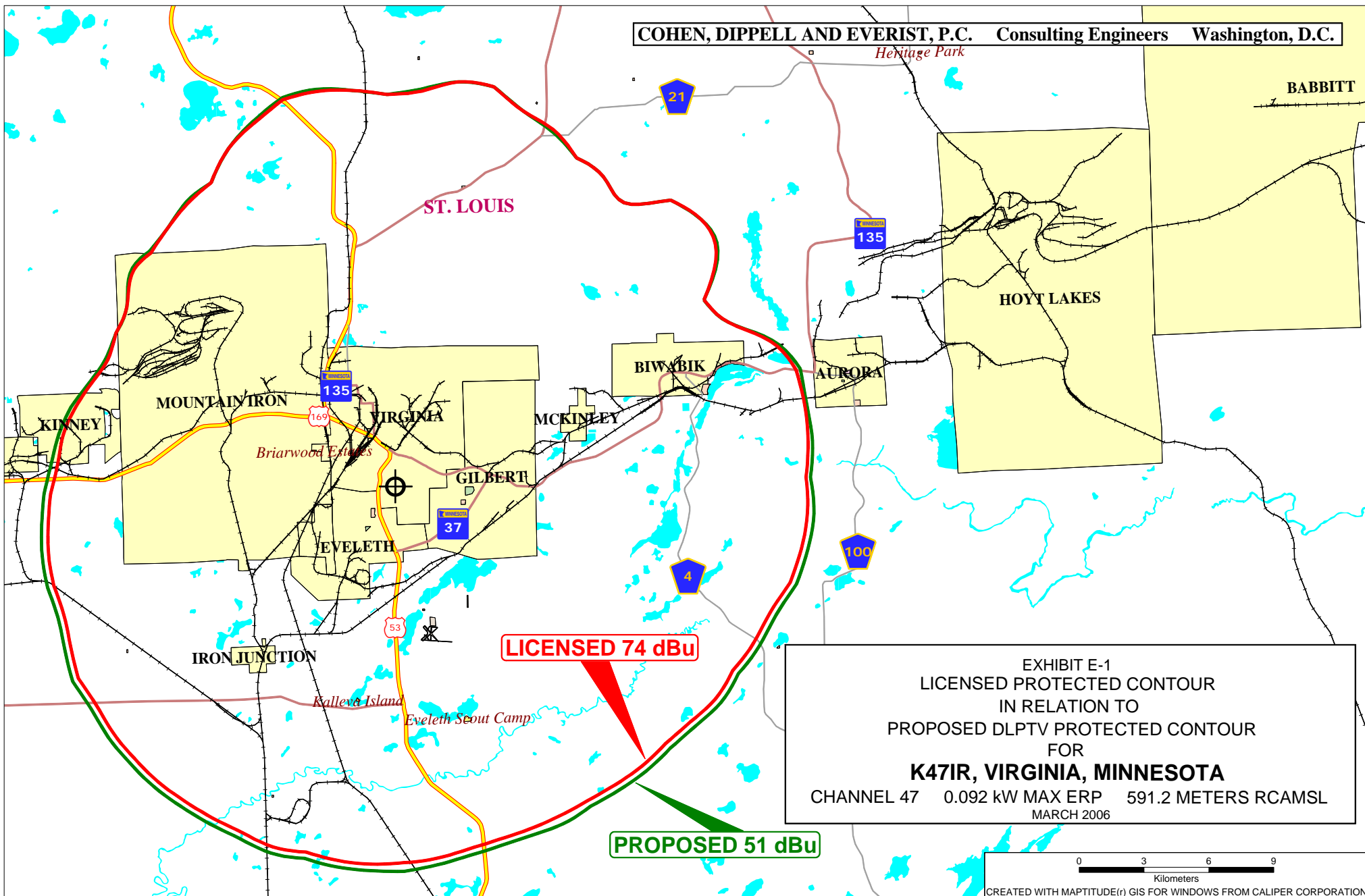


EXHIBIT E-2

DLPTV ANALYSIS RESULTS

FOR THE PROPOSED DIGITAL “FLASH-CUT”

OPERATION OF

K47IR, VIRGINIA, MINNESOTA

DLPTV Results - K47IR

1990 Census data selected
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 03-20-2006 Time: 15:30:43

Record Selected for Analysis

K47IR BLTTL -20060314TOM VIRGINIA MN US
Channel 47 ERP 0.0915 kW HAAT 146 m RCMSL 591 m
Latitude 47 -29-18 Longitude 92 -31-12
Status LIC Zone Border C Offset -
Dir Antenna Make CDB Model 00000000000939 Beam tilt N Ref Azimuth 30
Last update Cutoff date 18991231 Docket
Comments
Applicant KQDS ACQUISITION CORP.

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	0.062	124.7	16.5
45.0	0.089	117.0	17.8
90.0	0.083	157.3	20.7
135.0	0.048	171.9	19.0
180.0	0.031	168.4	16.6
225.0	0.039	162.5	17.2
270.0	0.036	156.2	16.4
315.0	0.033	123.6	13.9

Contour Overlap to Proposed Station

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 = 83.2km

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

DLPTV Results - K47IR

Channel	Call	Proposed Station	City/State	ARN	
47	K47IR		VIRGINIA MN	BLTTL	20060314TOM

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
39	W39CT	GRAND RAPIDS MN	73.5	CP	BNPTT	-20000831BYB
39	K39GT	INTERNATIONAL FALLS MN	139.2	CP	BNPTTL	-20000830BJU
40	NEW	DULUTH MN	90.0	APP	BNPTTL	-20000828AOT
44	NEW	INTERNATIONAL FALLS MN	139.2	APP	BNPTTL	-20000830ARC
45	NEW	HIBBING MN	32.3	APP	BNPTTL	-20000830BJS
45	NEW	INTERNATIONAL FALLS MN	134.5	APP	BNPTTL	-20000831BTY
46	K46HF	BEMIDJI MN	171.4	CP	BNPTT	-20000830BAN
46	KLKS-LP	BREEZY POINT MN	163.9	CP	BPTTL	-20020701AAR
46	NEW	CLOQUET MN	78.8	APP	BNPTTL	-20000831BQU
46	NEW	DULUTH MN	89.0	APP	BNPTTL	-20000830BSZ
46	NEW	DULUTH MN	83.6	APP	BNPTTL	-20000831BUH
46	NEW	DULUTH MN	90.0	APP	BNPTTL	-20000828AWR
46	NEW	DULUTH MN	83.3	APP	BNPTTL	-20000807ACB
46	NEW	DULUTH MN	83.3	APP	BNPTTL	-20000802ACT
46	NEW	DULUTH MN	90.0	APP	BNPTTL	-20000828AOV
47	K47IG	AITKIN MN	145.7	CP	BNPTTL	-20000831ALX
47	K47EA	GRANITE FALLS MN	380.1	LIC	BLTTT	-19930917JD
47	K47IV	MANKATO MN	398.1	CP	BNPTTL	-20000830ADB
47	K47JE	OLIVIA MN	355.2	CP	BNPTTL	-20000830BJX
47	K47IT	ROYALTON MN	224.2	CP	BNPTTL	-20000830ADA
47	K47JC	WADENA MN	228.0	CP	BNPTTL	-20000830BKA
47	WLEF-TV	PARK FALLS WI	242.3	LIC	BLEDT	-20040503AFO
47	W47CO	RIVER FALLS WI	287.7	APP	BDFCDTT	-20060209ABS
47	W47CO	RIVER FALLS WI	287.7	LIC	BLTT	-20040527ALC
48	NEW	BEMIDJI MN	178.0	APP	BNPTTL	-20000830BJK
48	K48IF	BRAINERD MN	180.0	LIC	BLTT	-20030917AEQ
48	K48IX	CLOQUET MN	78.8	CP	BNPTTL	-20000831BQV
48	K48JF	DULUTH MN	96.9	CP	BNPTTL	-20000831CKR
48	NEW	DULUTH MN	83.4	APP	BNPTTL	-20000830BJN
48	NEW	DULUTH MN	89.0	APP	BNPTTL	-20000830BCY
48	NEW	DULUTH MN	90.0	APP	BNPTTL	-20000828AWS
48	NEW	DULUTH MN	90.0	APP	BNPTTL	-20000828AOU
49	K49BU	INTERNATIONAL FALLS MN	134.5	LIC	BLTT	-19881121IF
50	K50IZ	DULUTH MN	83.3	CP	BNPTTL	-20000830BCZ
51	W51DN	DULUTH MN	83.3	CP	BNPTTL	-20000807ADR
51	K51CM	INTERNATIONAL FALLS MN	134.5	LIC	BLTT	-19881121IE
55	K55BY	NORTHOME, ETC. MN	139.5	LIC	BLTT	-19791207IE

[illegible]

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Appl i cation Ref. No.
39	W39CT	GRAND RAPIDS MN	BNPTT -20000831BYB

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
36	WIRT	HIBBING MN	38.8	CP	BPCDT	-19991027ABC
36	WIRT-DT	HIBBING MN	38.7	PLN	DTVPLN	-DTVP0963
38	WDSE-DT	DULUTH MN	111.9	PLN	DTVPLN	-DTVP0994

DLPTV Results - K47IR

38	WDSE-TV	DULUTH MN	111.9	CP MOD	BMPEDT	-20000501AI O
38	881108KG	WALKER MN	85.1	APP	BPCT	-19881108KG
39	K39GG	AITKIN MN	85.7	LIC	BLTTL	-20021011AAV
39	WEAU-DT	EAU CLAIRE WI	345.5	PLN	DTVPLN	-DTVP1053
39	960220KF	MARSHFIELD WI	345.5	APP	BPCT	-19960220KF
43	WDIO-DT	DULUTH MN	112.2	PLN	DTVPLN	-DTVP1167
43	WDIO-TV	DULUTH MN	112.1	CP	BPCDT	-19991027ABA
47	K47IR	VIRGINIA MN	73.5	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	73.5	LIC	BLTTL	-20031107AAC

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.
39	K39GT	INTERNATIONAL FALLS MN	BNPTTL	-20000830BJU

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
36	WIRT	HIBBING MN	138.6	CP	BPCDT	-19991027ABC
36	WIRT-DT	HIBBING MN	138.6	PLN	DTVPLN	-DTVP0963
47	K47IR	VIRGINIA MN	139.2	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	139.2	LIC	BLTTL	-20031107AAC

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.
40	NEW	DULUTH MN	BNPTTL	-20000828AOT

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
33	KDLH	DULUTH MN	6.3	CP	BPCDT	-19991028ADK
33	KDLH-DT	DULUTH MN	6.3	PLN	DTVPLN	-DTVP0854
36	WIRT	HIBBING MN	97.1	CP	BPCDT	-19991027ABC
36	WIRT-DT	HIBBING MN	97.1	PLN	DTVPLN	-DTVP0963
38	WDSE-DT	DULUTH MN	7.0	PLN	DTVPLN	-DTVP0994
38	WDSE-TV	DULUTH MN	7.0	CP MOD	BMPEDT	-20000501AI O
40	KXLI-DT	ST. CLOUD MN	194.5	PLN	DTVPLN	-DTVP1070
40	WSAW-DT	WAUSAU WI	274.3	PLN	DTVPLN	-DTVP1087
41	K58CM	DULUTH MN	6.3	APP	BPTT	-20030616ABI
43	WDIO-DT	DULUTH MN	6.5	PLN	DTVPLN	-DTVP1167
43	WDIO-TV	DULUTH MN	6.6	CP	BPCDT	-19991027ABA
47	K47IR	VIRGINIA MN	90.0	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	90.0	LIC	BLTTL	-20031107AAC

Proposed station is beyond the site to
nearest cell evaluation distance

DLPTV Results - K47IR

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
44	NEW	INTERNATIONAL FALLS MN	BNPTTL	-20000830ARC

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
36	WIRT	HIBBING MN	138.6	CP	BPCDT	-19991027ABC
36	WIRT-DT	HIBBING MN	138.6	PLN	DTVPLN	-DTVP0963
44	KSTC-TV	MINNEAPOLIS MN	392.8	CP MOD	BMPEDT	-20020306ABH
44	KVBM-DT	MINNEAPOLIS MN	392.8	PLN	DTVPLN	-DTVP1207
45	NEW	INTERNATIONAL FALLS MN	6.5	APP	BNPTTL	-20000831BTY
47	K47IR	VIRGINIA MN	139.2	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	139.2	LIC	BLTTL	-20031107AAC

Proposed station is beyond the site to
nearest cell evaluation distance

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
45	NEW	HIBBING MN	BNPTTL	-20000830BJS

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
38	WDSE-DT	DULUTH MN	92.6	PLN	DTVPLN	-DTVP0994
38	WDSE-TV	DULUTH MN	92.6	CP MOD	BMPEDT	-20000501AIO
38	881108KG	WALKER MN	126.6	APP	BPCT	-19881108KG
43	WDIO-DT	DULUTH MN	93.0	PLN	DTVPLN	-DTVP1167
43	WDIO-TV	DULUTH MN	92.9	CP	BPCDT	-19991027ABA
45	KSTC-TV	MINNEAPOLIS-ST. PAUL MN	261.9	LIC	BLCT	-20020318AAJ
47	K47IR	VIRGINIA MN	32.3	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	32.3	LIC	BLTTL	-20031107AAC

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.
45	NEW	INTERNATIONAL FALLS MN	BNPTTL	-20000831BTY

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
44	NEW	INTERNATIONAL FALLS MN	6.5	APP	BNPTTL	-20000830ARC
45	KSTC-TV	MINNEAPOLIS-ST. PAUL MN	390.4	LIC	BLCT	-20020318AAJ

DLPTV Results - K47IR

47	K47IR	VIRGINIA MN	134.5	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	134.5	LIC	BLTTL	-20031107AAC

Proposed station is beyond the site to
nearest cell evaluation distance

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Analysis of Interference to Affected Station 7

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
46	K46HF	BEMIDJI MN	BNPTT	-20000830BAN

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
46	NEW	DULUTH MN	220.2	APP	BNPTTL	-20000831BUH
47	K47IR	VIRGINIA MN	171.4	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	171.4	LIC	BLTTL	-20031107AAC

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.
46	KLKS-LP	BREEZY POINT MN	BPTTL	-20020701AAR

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
46	NEW	CLOQUET MN	139.1	APP	BNPTTL	-20000831BQU
46	KXLT-DT	ROCHESTER MN	319.2	PLN	DTVPLN	-DTVP1265
46	KXLT-TV	ROCHESTER MN	355.8	CP	BPCDT	-19991026ABN
47	K47IR	VIRGINIA MN	163.9	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	163.9	LIC	BLTTL	-20031107AAC

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.
46	NEW	CLOQUET MN	BNPTTL	-20000831BQU

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
38	WDSE-DT	DULUTH MN	24.6	PLN	DTVPLN	-DTVP0994
38	WDSE-TV	DULUTH MN	24.6	CP MOD	BMPEDT	-20000501AIO

DLPTV Results - K47IR

Channel	Call	City/State	Dist(km)	Status	Application	Ref. No.
43	WDIO-DT	DULUTH MN	24.7	PLN	DTVPLN	-DTVP1167
43	WDIO-TV	DULUTH MN	24.6	CP	BPCDT	-19991027ABA
46	KLKS-LP	BREEZY POINT MN	139.1	CP	BPTTL	-20020701AAR
46	NEW	DULUTH MN	25.2	APP	BNPTTL	-20000830BSZ
46	NEW	DULUTH MN	25.2	APP	BNPTTL	-20000831BUH
46	NEW	DULUTH MN	27.0	APP	BNPTTL	-20000828AWR
46	NEW	DULUTH MN	24.5	APP	BNPTTL	-20000807ACB
46	NEW	DULUTH MN	24.5	APP	BNPTTL	-20000802ACT
46	NEW	DULUTH MN	27.0	APP	BNPTTL	-20000828AOV
46	KXLT-DT	ROCHESTER MN	304.2	PLN	DTVPLN	-DTVP1265
46	KXLT-TV	ROCHESTER MN	348.9	CP	BPCDT	-19991026ABN
46	WTPX	ANTI GO WI	299.8	LIC	BMLCDT	-20041015ADT
47	K47IR	VIRGINIA MN	78.8	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	78.8	LIC	BLTTL	-20031107AAC

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.
46	NEW	DULUTH MN	BNPTTL	-20000830BSZ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
38	WDSE-DT	DULUTH MN	6.3	PLN	DTVPLN	-DTVP0994
38	WDSE-TV	DULUTH MN	6.3	CP MOD	BMPEDT	-20000501AIO
43	WDIO-DT	DULUTH MN	5.7	PLN	DTVPLN	-DTVP1167
43	WDIO-TV	DULUTH MN	5.8	CP	BPCDT	-19991027ABA
46	NEW	CLOQUET MN	25.2	APP	BNPTTL	-20000831BQU
46	KXLT-DT	ROCHESTER MN	299.9	PLN	DTVPLN	-DTVP1265
46	KXLT-TV	ROCHESTER MN	345.2	CP	BPCDT	-19991026ABN
46	WTPX	ANTI GO WI	277.5	LIC	BMLCDT	-20041015ADT
47	K47IR	VIRGINIA MN	89.0	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	89.0	LIC	BLTTL	-20031107AAC

Proposal causes no interference

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Analysis of Interference to Affected Station 11

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
46	NEW	DULUTH MN	BNPTTL	-20000831BUH

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
38	WDSE-DT	DULUTH MN	0.7	PLN	DTVPLN	-DTVP0994
38	WDSE-TV	DULUTH MN	0.7	CP MOD	BMPEDT	-20000501AIO
43	WDIO-DT	DULUTH MN	0.6	PLN	DTVPLN	-DTVP1167
43	WDIO-TV	DULUTH MN	0.7	CP	BPCDT	-19991027ABA
46	NEW	CLOQUET MN	25.2	APP	BNPTTL	-20000831BQU
46	KXLT-DT	ROCHESTER MN	305.9	PLN	DTVPLN	-DTVP1265
46	KXLT-TV	ROCHESTER MN	351.2	CP	BPCDT	-19991026ABN
46	WTPX	ANTI GO WI	281.1	LIC	BMLCDT	-20041015ADT
47	K47IR	VIRGINIA MN	83.6	LIC	BLTTL	-20060314TOM

DLPTV Results - K47IR
 47 K47IR VIRGINIA MN 83.6 LIC BLTTL -20031107AAC
 Proposal causes no interference

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Analysis of Interference to Affected Station 12

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
46	NEW	DULUTH MN	BNPTTL	-20000828AWR

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
38	WDSE-DT	DULUTH MN	7.0	PLN	DTVPLN	-DTVP0994
38	WDSE-TV	DULUTH MN	7.0	CP MOD	BMPEDT	-20000501AIO
43	WDIO-DT	DULUTH MN	6.5	PLN	DTVPLN	-DTVP1167
43	WDIO-TV	DULUTH MN	6.6	CP	BPCDT	-19991027ABA
46	NEW	CLOQUET MN	27.0	APP	BNPTTL	-20000831BQU
46	KXLT-DT	ROCHESTER MN	299.5	PLN	DTVPLN	-DTVP1265
46	KXLT-TV	ROCHESTER MN	344.9	CP	BPCDT	-19991026ABN
46	WTPX	ANTI GO WI	275.9	LIC	BMLCDT	-20041015ADT
47	K47IR	VIRGINIA MN	90.0	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	90.0	LIC	BLTTL	-20031107AAC

Proposal causes no interference

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Analysis of Interference to Affected Station 13

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
46	NEW	DULUTH MN	BNPTTL	-20000807ACB

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
38	WDSE-DT	DULUTH MN	0.4	PLN	DTVPLN	-DTVP0994
38	WDSE-TV	DULUTH MN	0.3	CP MOD	BMPEDT	-20000501AIO
43	WDIO-DT	DULUTH MN	0.3	PLN	DTVPLN	-DTVP1167
43	WDIO-TV	DULUTH MN	0.2	CP	BPCDT	-19991027ABA
46	NEW	CLOQUET MN	24.5	APP	BNPTTL	-20000831BQU
46	KXLT-DT	ROCHESTER MN	305.8	PLN	DTVPLN	-DTVP1265
46	KXLT-TV	ROCHESTER MN	351.1	CP	BPCDT	-19991026ABN
46	WTPX	ANTI GO WI	281.7	LIC	BMLCDT	-20041015ADT
47	K47IR	VIRGINIA MN	83.3	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	83.3	LIC	BLTTL	-20031107AAC

Proposal causes no interference

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Analysis of Interference to Affected Station 14

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
46	NEW	DULUTH MN	BNPTTL	-20000802ACT

DLPTV Results - K47IR
Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
38	WDSE-DT	DULUTH MN	0.4	PLN	DTVPLN	-DTVP0994
38	WDSE-TV	DULUTH MN	0.3	CP MOD	BMPEDT	-20000501AIO
43	WDIO-DT	DULUTH MN	0.3	PLN	DTVPLN	-DTVP1167
43	WDIO-TV	DULUTH MN	0.2	CP	BPCDT	-19991027ABA
46	NEW	CLOQUET MN	24.5	APP	BNPTTL	-20000831BQU
46	KXLT-DT	ROCHESTER MN	305.8	PLN	DTVPLN	-DTVP1265
46	KXLT-TV	ROCHESTER MN	351.1	CP	BPCDT	-19991026ABN
46	WTPX	ANTIGO WI	281.7	LIC	BMLCDT	-20041015ADT
47	K47IR	VIRGINIA MN	83.3	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	83.3	LIC	BLTTL	-20031107AAC

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.
46	NEW	DULUTH MN	BNPTTL	-20000828A0V

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
38	WDSE-DT	DULUTH MN	7.0	PLN	DTVPLN	-DTVP0994
38	WDSE-TV	DULUTH MN	7.0	CP MOD	BMPEDT	-20000501AIO
43	WDIO-DT	DULUTH MN	6.5	PLN	DTVPLN	-DTVP1167
43	WDIO-TV	DULUTH MN	6.6	CP	BPCDT	-19991027ABA
46	NEW	CLOQUET MN	27.0	APP	BNPTTL	-20000831BQU
46	KXLT-DT	ROCHESTER MN	299.5	PLN	DTVPLN	-DTVP1265
46	KXLT-TV	ROCHESTER MN	344.9	CP	BPCDT	-19991026ABN
46	WTPX	ANTIGO WI	275.9	LIC	BMLCDT	-20041015ADT
47	K47IR	VIRGINIA MN	90.0	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	90.0	LIC	BLTTL	-20031107AAC

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.
47	K47IG	AITKIN MN	BNPTTL	-20000831ALX

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
40	KXLI-DT	ST. CLOUD MN	128.4	PLN	DTVPLN	-DTVP1070
43	WDIO-DT	DULUTH MN	134.1	PLN	DTVPLN	-DTVP1167
43	WDIO-TV	DULUTH MN	134.0	CP	BPCDT	-19991027ABA
47	KXLT-TV	ROCHESTER MN	337.6	LIC	BLCT	-20030203CEL
47	K47IT	ROYALTON MN	80.2	CP	BNPTTL	-20000830ADA
47	K47IR	VIRGINIA MN	145.7	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	145.7	LIC	BLTTL	-20031107AAC
47	WLEF-DT	PARK FALLS WI	281.9	PLN	DTVPLN	-DTVP1312
47	WLEF-TV	PARK FALLS WI	282.0	LIC	BLEDT	-20040503AFO

Proposal causes no interference

DLPTV Results - K47IR

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Analysis of Interference to Affected Station 17

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
47	K47EA	GRANITE FALLS MN	BLTTL	-19930917JD

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	K47JE	OLIVIA MN	51.5	CP	BNPTTL	-20000830BJX
47	KXLT-TV	ROCHESTER MN	275.4	LIC	BLCT	-20030203CEL
47	K47IT	ROYALTON MN	155.9	CP	BNPTTL	-20000830ADA
47	K47IR	VIRGINIA MN	380.1	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	380.1	LIC	BLTTL	-20031107AAC
47	KDLT-TV	SIOUX FALLS SD	164.1	LIC	BLCDDT	-20050829AAT
47	NEW -DT	SIOUX FALLS SD	164.1	PLN	DTVPLN	-DTVP1305

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.
47	K47IV	MANKATO MN	BNPTTL	-20000830ADB

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
44	KSTC-TV	MINNEAPOLIS MN	136.5	CP MOD	BMPCDDT	-20020306ABH
44	KVBM-DT	MINNEAPOLIS MN	136.5	PLN	DTVPLN	-DTVP1207
47	KPXR	CEDAR RAPIDS IA	278.0	LIC	BLCDDT	-20020510AAO
47	KTVB-DT	CEDAR RAPIDS IA	278.0	PLN	DTVPLN	-DTVP1292
47	K47JE	OLIVIA MN	91.4	CP	BNPTTL	-20000830BJX
47	KXLT-TV	ROCHESTER MN	146.1	LIC	BLCT	-20030203CEL
47	K47IR	VIRGINIA MN	398.1	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	398.1	LIC	BLTTL	-20031107AAC
47	KDLT-TV	SIOUX FALLS SD	198.3	LIC	BLCDDT	-20050829AAT
47	NEW -DT	SIOUX FALLS SD	198.3	PLN	DTVPLN	-DTVP1305
47	WLEF-DT	PARK FALLS WI	371.6	PLN	DTVPLN	-DTVP1312
47	WLEF-TV	PARK FALLS WI	371.7	LIC	BLEDT	-20040503AFO
50	KSTP-DT	ST. PAUL MN	136.5	PLN	DTVPLN	-DTVP1381

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.
47	K47JE	OLIVIA MN	BNPTTL	-20000830BJX

DLPTV Results - K47IR
Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
40	KXLI-DT	ST. CLOUD MN	118.1	PLN	DTVPLN	-DTVP1070
44	KSTC-TV	MINNEAPOLIS MN	144.9	CP MOD	BMPCDT	-20020306ABH
44	KVBM-DT	MINNEAPOLIS MN	144.9	PLN	DTVPLN	-DTVP1207
46	K46FY	REDWOOD FALLS MN	23.9	LIC	BLTTL	-20011219AAH
47	KPXR	CEDAR RAPIDS IA	368.8	LIC	BLCDDT	-20020510AAO
47	KTVB-DT	CEDAR RAPIDS IA	368.8	PLN	DTVPLN	-DTVP1292
47	K47EA	GRANITE FALLS MN	51.5	LIC	BLTTL	-19930917JD
47	K47IV	MANKATO MN	91.4	CP	BNPTTL	-20000830ADB
47	KXLT-TV	ROCHESTER MN	228.5	LIC	BLCT	-20030203CEL
47	K47IR	VIRGINIA MN	355.2	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	355.2	LIC	BLTTL	-20031107AAC
47	K47IC	MILBANK SD	168.1	LIC	BLTTL	-20030305ABB
47	KDLT-TV	SIOUX FALLS SD	190.7	LIC	BLCDDT	-20050829AAT
47	NEW -DT	SIOUX FALLS SD	190.8	PLN	DTVPLN	-DTVP1305
47	WLEF-DT	PARK FALLS WI	386.6	PLN	DTVPLN	-DTVP1312
47	WLEF-TV	PARK FALLS WI	386.7	LIC	BLEDT	-20040503AFO
48	K48GQ	REDWOOD FALLS MN	23.9	LIC	BLTTL	-20011219AAI
50	KSTP-DT	ST. PAUL MN	144.8	PLN	DTVPLN	-DTVP1381

Proposal causes no interference

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Analysis of Interference to Affected Station 20

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
47	K47IT	ROYALTON MN	BNPTTL	-20000830ADA

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
40	KXLI-DT	ST. CLOUD MN	74.8	PLN	DTVPLN	-DTVP1070
44	KSTC-TV	MINNEAPOLIS MN	131.2	CP MOD	BMPCDT	-20020306ABH
44	KVBM-DT	MINNEAPOLIS MN	131.3	PLN	DTVPLN	-DTVP1207
45	KSTC-TV	MINNEAPOLIS-ST. PAUL MN	131.2	LIC	BLCT	-20020318AAJ
47	K47IG	AITKIN MN	80.2	CP	BNPTTL	-20000831ALX
47	KXLT-TV	ROCHESTER MN	288.2	LIC	BLCT	-20030203CEL
47	K47IR	VIRGINIA MN	224.2	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	224.2	LIC	BLTTL	-20031107AAC
47	K47JC	WADENA MN	84.6	CP	BNPTTL	-20000830BKA
47	KDLT-TV	SIOUX FALLS SD	318.8	LIC	BLCDDT	-20050829AAT
47	NEW -DT	SIOUX FALLS SD	318.9	PLN	DTVPLN	-DTVP1305
47	WLEF-DT	PARK FALLS WI	313.5	PLN	DTVPLN	-DTVP1312
47	WLEF-TV	PARK FALLS WI	313.7	LIC	BLEDT	-20040503AFO
50	KSTP-DT	ST. PAUL MN	131.2	PLN	DTVPLN	-DTVP1381

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.
47	K47JC	WADENA MN	BNPTTL	-20000830BKA

Stations Potentially Affecting This Station

DLPTV Results - K47IR

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	KXLT-TV	ROCHESTER MN	370.7	LIC	BLCT	-20030203CEL
47	K47IT	ROYALTON MN	84.6	CP	BNPTTL	-20000830ADA
47	K47IR	VIRGINIA MN	228.0	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	228.0	LIC	BLTTL	-20031107AAC
47	KDLT-TV	SIOUX FALLS SD	345.5	LIC	BLCDT	-20050829AAT
47	NEW -DT	SIOUX FALLS SD	345.5	PLN	DTVPLN	-DTVP1305
47	WLEF-DT	PARK FALLS WI	375.4	PLN	DTVPLN	-DTVP1312
47	WLEF-TV	PARK FALLS WI	375.6	LIC	BLEDT	-20040503AFO

Proposal causes no interference

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Analysis of Interference to Affected Station 22

DTV Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
47	WLEF-DT	PARK FALLS WI	DTVPLN	-DTVP1312

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
46	NEW	ANTIGO WI	126.9	PLN	DTVPLN	-NPLN1684
47	KTVB-DT	CEDAR RAPIDS IA	426.2	PLN	DTVPLN	-DTVP1292
47	KXLT-TV	ROCHESTER MN	269.3	PLN	DTVPLN	-NPLN0897
47	WMSNTV	MADISON WI	326.5	PLN	DTVPLN	-NPLN1687
48	WEUX	CHIPPewa FALLS WI	154.5	PLN	DTVPLN	-NPLN1688

Results for: 47A WI PARK FALLS DTVPLN DTVP1312 PLN

HAAT 445.0 m, ATV ERP 50.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	107786	20511.4
not affected by terrain losses	106897	19974.0
lost to NTSC IX	0	1.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	1.0

NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
36	WLEFTV	PARK FALLS WI	DTVPLN	-NPLN1743

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
34	WYOW	EAGLE RIVER WI	81.6	PLN	DTVPLN	-NPLN1674
35	WLUC-DT	MARQUETTE MI	191.8	PLN	DTVPLN	-DTVP0924
36	WIRT-DT	HIBBING MN	259.4	PLN	DTVPLN	-DTVP0963
36	KTTC-DT	ROCHESTER MN	313.8	PLN	DTVPLN	-DTVP0964
40	WSAW-DT	WAUSAU WI	122.6	PLN	DTVPLN	-DTVP1087

Results for: 36N WI PARK FALLS DTVPLN NPLN1743 PLN

	POPULATION	AREA (sq km)
within Noise Limited Contour	107786	20511.4
not affected by terrain losses	104887	19452.6
lost to NTSC IX	6857	216.3
lost to additional IX by ATV	1981	369.9
lost to all IX	8838	586.2

Analysis of current record

DLPTV Results - K47IR

Channel	Call	City/State	Application	Ref. No.
47	WLEF-TV	PARK FALLS WI	BLEDT	-20040503AFO

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
46	WTPX	ANTIGO WI	117.2	LIC	BMLCDT	-20041015ADT
47	KPXR	CEDAR RAPIDS IA	426.3	LIC	BLCDT	-20020510AAO
47	KTVB-DT	CEDAR RAPIDS IA	426.3	PLN	DTVPLN	-DTVP1292
47	WFOX-TV	CADILLAC MI	427.7	CP MOD	BMPCDT	-20040507ABB
47	KXLT-TV	ROCHESTER MN	311.6	LIC	BLCT	-20030203CEL
47	K47IR	VIRGINIA MN	242.3	LIC	BLTTL	-20060314TOM
47	WMSN-TV	MADISON WI	326.4	LIC	BMLCT	-20010817AAS
48	WEUX	CHIPPewa FALLS WI	154.6	LIC	BLCT	-19981224KJ

Proposal causes no interference

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Analysis of Interference to Affected Station 23

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
47	W47CO	RIVER FALLS WI	BDFCDTT	-20060209ABS

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
39	WEAU-DT	EAU CLAIRE WI	139.0	PLN	DTVPLN	-DTVP1053
40	KXLI-DT	ST. CLOUD MN	96.0	PLN	DTVPLN	-DTVP1070
44	KSTC-TV	MINNEAPOLIS MN	39.4	CP MOD	BMPCDT	-20020306ABH
44	KVBM-DT	MINNEAPOLIS MN	39.4	PLN	DTVPLN	-DTVP1207
46	KXLT-DT	ROCHESTER MN	98.2	PLN	DTVPLN	-DTVP1265
47	KPXR	CEDAR RAPIDS IA	297.8	LIC	BLCDT	-20020510AAO
47	KTVB-DT	CEDAR RAPIDS IA	297.8	PLN	DTVPLN	-DTVP1292
47	KXLT-TV	ROCHESTER MN	140.7	LIC	BLCT	-20030203CEL
47	K47IR	VIRGINIA MN	287.7	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	287.7	LIC	BLTTL	-20031107AAC
47	KDLT-TV	SIOUX FALLS SD	344.9	LIC	BLCDT	-20050829AAT
47	NEW -DT	SIOUX FALLS SD	344.9	PLN	DTVPLN	-DTVP1305
47	WMSN-TV	MADISON WI	325.3	LIC	BMLCT	-20010817AAS
47	WLEF-DT	PARK FALLS WI	221.3	PLN	DTVPLN	-DTVP1312
47	WLEF-TV	PARK FALLS WI	221.4	LIC	BLEDT	-20040503AFO
48	WEUX	CHIPPewa FALLS WI	80.8	LIC	BLCT	-19981224KJ
49	WEUX-DT	CHIPPewa FALLS WI	80.7	PLN	DTVPLN	-DTVP1366
50	KSTP-DT	ST. PAUL MN	39.5	PLN	DTVPLN	-DTVP1381

Proposal causes no interference

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Analysis of Interference to Affected Station 24

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
47	W47CO	RIVER FALLS WI	BLTT	-20040527ALC

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
39	WEAU-DT	EAU CLAIRE WI	139.0	PLN	DTVPLN	-DTVP1053

DLPTV Results - K47IR

40	KXLI-DT	ST. CLOUD MN	96.0	PLN	DTVPLN	-DTVP1070
44	KSTC-TV	MINNEAPOLIS MN	39.4	CP MOD	BMPCDT	-20020306ABH
44	KVBM-DT	MINNEAPOLIS MN	39.4	PLN	DTVPLN	-DTVP1207
46	KXLT-DT	ROCHESTER MN	98.2	PLN	DTVPLN	-DTVP1265
47	KPXR	CEDAR RAPIDS IA	297.8	LIC	BLCDT	-20020510AAO
47	KTVB-DT	CEDAR RAPIDS IA	297.8	PLN	DTVPLN	-DTVP1292
47	K47IR	MANKATO MN	150.4	CP	BNPTTL	-20000830ADB
47	KXLT-TV	ROCHESTER MN	140.7	LIC	BLCT	-20030203CEL
47	K47IR	VIRGINIA MN	287.7	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	287.7	LIC	BLTTL	-20031107AAC
47	KDLT-TV	SIOUX FALLS SD	344.9	LIC	BLCDT	-20050829AAT
47	NEW -DT	SIOUX FALLS SD	344.9	PLN	DTVPLN	-DTVP1305
47	WMSN-TV	MADISON WI	325.3	LIC	BMLCT	-20010817AAS
47	WLEF-DT	PARK FALLS WI	221.3	PLN	DTVPLN	-DTVP1312
47	WLEF-TV	PARK FALLS WI	221.4	LIC	BLEDT	-20040503AFO
48	WEUX	CHIPPEWA FALLS WI	80.8	LIC	BLCT	-19981224KJ
49	WEUX-DT	CHIPPEWA FALLS WI	80.7	PLN	DTVPLN	-DTVP1366
50	KSTP-DT	ST. PAUL MN	39.5	PLN	DTVPLN	-DTVP1381

Proposal causes no interference

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Analysis of Interference to Affected Station 25

Analysis of current record

Channel	Call	City/State	Application Ref. No.
48	NEW	BEMIDJI MN	BNPTTL -20000830BJK

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
47	K47IR	VIRGINIA MN	178.0	LIC	BLTTL -20060314TOM
47	K47IR	VIRGINIA MN	178.0	LIC	BLTTL -20031107AAC
48	K48IF	BRAINERD MN	140.3	LIC	BLTT -20030917AEQ
48	WEUX	CHIPPEWA FALLS WI	374.5	LIC	BLCT -19981224KJ

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.
48	K48IF	BRAINERD MN	BLTT -20030917AEQ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
40	KXLI-DT	ST. CLOUD MN	110.2	PLN	DTVPLN -DTVP1070
41	KPXM	ST. CLOUD MN	110.2	LIC	BLCT -19850822KK
47	K47IR	VIRGINIA MN	180.0	LIC	BLTTL -20060314TOM
47	K47IR	VIRGINIA MN	180.0	LIC	BLTTL -20031107AAC
48	NEW	BEMIDJI MN	140.3	APP	BNPTTL -20000830BJK
48	K48IX	CLOQUET MN	141.0	CP	BNPTTL -20000831BQV
48	WEUX	CHIPPEWA FALLS WI	246.4	LIC	BLCT -19981224KJ

Proposed station is beyond the site to

DLPTV Results - K47IR

nearest cell evaluation distance

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Analysis of Interference to Affected Station 27

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
48	K48IX	CLOQUET MN	BNPTTL	-20000831BQV

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	K47IR	VIRGINIA MN	78.8	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	78.8	LIC	BLTTL	-20031107AAC
48	K48IF	BRAINERD MN	141.0	LIC	BLTT	-20030917AEQ
48	K48JF	DULUTH MN	36.0	CP	BNPTTL	-20000831CKR
48	WEUX	CHIPPEWA FALLS WI	211.5	LIC	BLCT	-19981224KJ

Proposal causes no interference

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Analysis of Interference to Affected Station 28

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
48	K48JF	DULUTH MN	BNPTTL	-20000831CKR

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	K47IR	VIRGINIA MN	96.9	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	96.9	LIC	BLTTL	-20031107AAC
48	K48IX	CLOQUET MN	36.0	CP	BNPTTL	-20000831BQV
48	WEUX	CHIPPEWA FALLS WI	194.8	LIC	BLCT	-19981224KJ

Proposal causes no interference

#####

Analysis of Interference to Affected Station 29

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
48	NEW	DULUTH MN	BNPTTL	-20000830BJN

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	K47IR	VIRGINIA MN	83.4	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	83.4	LIC	BLTTL	-20031107AAC
48	K48IX	CLOQUET MN	24.9	CP	BNPTTL	-20000831BQV
48	WEUX	CHIPPEWA FALLS WI	206.7	LIC	BLCT	-19981224KJ

Proposal causes no interference

#####

DLPTV Results - K47IR
Analysis of Interference to Affected Station 30

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
48	NEW	DULUTH MN	BNPTTL	-20000830BCY

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	K47IR	VIRGINIA MN	89.0	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	89.0	LIC	BLTTL	-20031107AAC
48	K48IX	CLOQUET MN	25.2	CP	BNPTTL	-20000831BQV
48	WEUX	CHIPPEWA FALLS WI	200.8	LIC	BLCT	-19981224KJ

Proposal causes no interference

#####

Analysis of Interference to Affected Station 31

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
48	NEW	DULUTH MN	BNPTTL	-20000828AWS

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	K47IR	VIRGINIA MN	90.0	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	90.0	LIC	BLTTL	-20031107AAC
48	K48IX	CLOQUET MN	27.0	CP	BNPTTL	-20000831BQV
48	WEUX	CHIPPEWA FALLS WI	200.0	LIC	BLCT	-19981224KJ

Proposal causes no interference

#####

Analysis of Interference to Affected Station 32

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
48	NEW	DULUTH MN	BNPTTL	-20000828A0U

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	K47IR	VIRGINIA MN	90.0	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	90.0	LIC	BLTTL	-20031107AAC
48	K48IX	CLOQUET MN	27.0	CP	BNPTTL	-20000831BQV
48	WEUX	CHIPPEWA FALLS WI	200.0	LIC	BLCT	-19981224KJ

Proposal causes no interference

#####

Analysis of Interference to Affected Station 33

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
49	K49BU	INTERNATIONAL FALLS MN	BLTT	-19881121IF

DLPTV Results - K47IR

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
47	K47IR	VIRGINIA MN	134.5	LIC	BLTTL -20060314TOM
47	K47IR	VIRGINIA MN	134.5	LIC	BLTTL -20031107AAC

Proposed station is beyond the site to nearest cell evaluation distance

#####

Analysis of Interference to Affected Station 34

Analysis of current record

Channel	Call	City/State	Application Ref. No.
50	K50IZ	DULUTH MN	BNPTTL -20000830BCZ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
43	WDIO-DT	DULUTH MN	0.3	PLN	DTVPLN -DTVP1167
43	WDIO-TV	DULUTH MN	0.2	CP	BPCDT -19991027ABA
47	K47IR	VIRGINIA MN	83.3	LIC	BLTTL -20060314TOM
47	K47IR	VIRGINIA MN	83.3	LIC	BLTTL -20031107AAC
50	KSTP-DT	ST. PAUL MN	207.3	PLN	DTVPLN -DTVP1381
51	W51DN	DULUTH MN	0.0	CP	BNPTTL -20000807ADR

Proposed station is beyond the site to nearest cell evaluation distance

#####

Analysis of Interference to Affected Station 35

Analysis of current record

Channel	Call	City/State	Application Ref. No.
51	W51DN	DULUTH MN	BNPTTL -20000807ADR

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
43	WDIO-DT	DULUTH MN	0.3	PLN	DTVPLN -DTVP1167
43	WDIO-TV	DULUTH MN	0.2	CP	BPCDT -19991027ABA
47	K47IR	VIRGINIA MN	83.3	LIC	BLTTL -20060314TOM
47	K47IR	VIRGINIA MN	83.3	LIC	BLTTL -20031107AAC
50	K50IZ	DULUTH MN	0.0	CP	BNPTTL -20000830BCZ
51	NEW	BRAINERD MN	163.4	APP	BNPTTL -20000830BJL

Proposed station is beyond the site to nearest cell evaluation distance

#####

Analysis of Interference to Affected Station 36

Analysis of current record

DLPTV Results - K47IR

Channel	Call	City/State	Application	Ref. No.
51	K51CM	INTERNATIONAL FALLS MN	BLTT	-19881121IE

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	K47IR	VIRGINIA MN	134.5	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	134.5	LIC	BLTTL	-20031107AAC

Proposed station is beyond the site to
nearest cell evaluation distance

#####

Analysis of Interference to Affected Station 37

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
55	K55BY	NORTHOME, ETC. MN	BLTT	-19791207IE

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	K47IR	VIRGINIA MN	139.5	LIC	BLTTL	-20060314TOM
47	K47IR	VIRGINIA MN	139.5	LIC	BLTTL	-20031107AAC
55	K55BH	BAUDETTE MN	96.3	LIC	BLTT	-2105
55	K55DY	GRYGLA MN	112.8	LIC	BLTT	-19850122IC

Proposed station is beyond the site to
nearest cell evaluation distance

#####

Analysis of Interference to Affected Station 38

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
47	K47IR	VIRGINIA MN	BLTTL	-20060314TOM

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	WLEF-DT	PARK FALLS WI	242.3	PLN	DTVPLN	-DTVP1312
47	WLEF-TV	PARK FALLS WI	242.3	LIC	BLEDT	-20040503AFO

Total scenarios = 1

Result key: 1
Scenario 1 Affected station 38
Before Analysis

Results for: 47A MN VIRGINIA BLTTL 20060314TOM LIC
HAAT 146.0 m, ATV ERP 0.1 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	26574	860.8
not affected by terrain losses	26525	843.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0

DLPTV Results - K47IR

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 ("Off-the-shelf") ☐ 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		Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature		Date	
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).