

ENGINEERING STATEMENT
APPLICATION FOR A DTV
CONSTRUCTION PERMIT FOR
AN EXISTING TELEVISION TRANSLATOR STATION
W32CV, IRONWOOD, MICHIGAN
CHANNEL 32 8.452 KW MAX ERP 612.7 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;

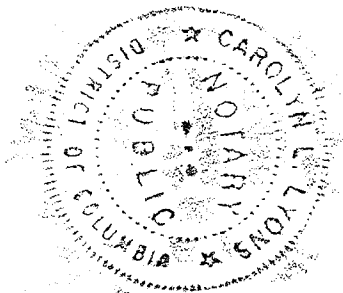
That the attached engineering report was prepared by him or under his supervision and direction and

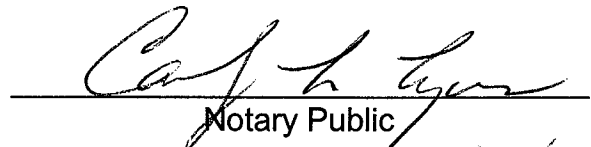
That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.



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, W32CV, Ironwood, Michigan. This statement supports the licensee's request to convert to DTV operation on the currently licensed analog Channel 32, commonly referred to as "flash-cut" with a DTV effective radiated power ("ERP") of 8.452 kW at a radiation center above mean sea level ("RCAMSL") of 612.7 meters.

TRANSMITTER SITE

The existing antenna will be utilized and no significant alteration of the tower is proposed. The existing tower is located at 133 Germania Street, Hurley, Wisconsin. There is no change in transmitter site. The geographic coordinates of the site follow below.

North Latitude: 46° 26' 28"

West Longitude: 90° 11' 26"

NAD-27

ELEVATION DATA

Elevation of site above mean sea level	506.0 meters (1660 feet)
Center of radiation of antenna above ground level	106.7 meters (350 feet)
Center of radiation of antenna above mean sea level	612.7 meters (2010 feet)
Overall height of tower above ground level	129.5 meters (425 feet)

The Antenna Structure Registration Number (“ASRN”) for the existing tower is 1064395.

EQUIPMENT DATA

Transmitter:	Type-approved
Transmission Line:	Andrew, Type HJ7-50A, 1-5/8”, 121.9 meters (400 feet) with 62% efficiency
Antenna:	Dielectric, TLP16-B with maximum gain of 14.35 dB and 1.0° electrical beam tilt

POWER DATA

Transmitter:	0.500 kW	-3.98 dBk
Transmission Line Loss:	0.190 kW	2.07 dB
Input Into Antenna:	0.310 kW	-5.08 dBk
Antenna Gain:	27.2	14.35 dB
ERP:	8.452 kW	9.26 dBk

As indicated above, the transmitter with typical power output of 0.5 kW will deliver 0.310 kW to the input of the antenna. The antenna, having a maximum gain of 14.35 dB and an electrical beam tilt of 1.0°, will produce maximum ERP of 8.452 kW. A map providing the protected contour of the proposed facility compared to the currently licensed operation of W32CV 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 W32CV with no alterations proposed.

OTHER BROADCAST FACILITIES

A brief analysis was completed to determine the presence of stations in the vicinity of the W32CV tower using the March 16, 2006 data contained within the Commission's Consolidated Database System ("CDBS"). Within 500 meters of the proposed site, there is one authorized FM radio station, no authorized DTV and NTSC television stations, and no authorized low-power analog television or television translator stations aside from W32CV. There is one AM facility 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 W32CV 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 W32CV 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 8.452 kW directional operation will utilize a Dielectric, Type TLP16-B antenna (or equivalent) described above with a center of radiation above ground of 106.7 meters. The proposed antenna is side-mounted on an existing tower with an overall height of 129.5 meters above ground. The proposed digital operation of W32CV will create a radiofrequency field level of $1.6 \mu\text{W}/\text{cm}^2$ at the base of the tower. This level is less than 0.4% of the Maximum Permissible Exposure ("MPE") limit for the general population and uncontrolled environment.

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.

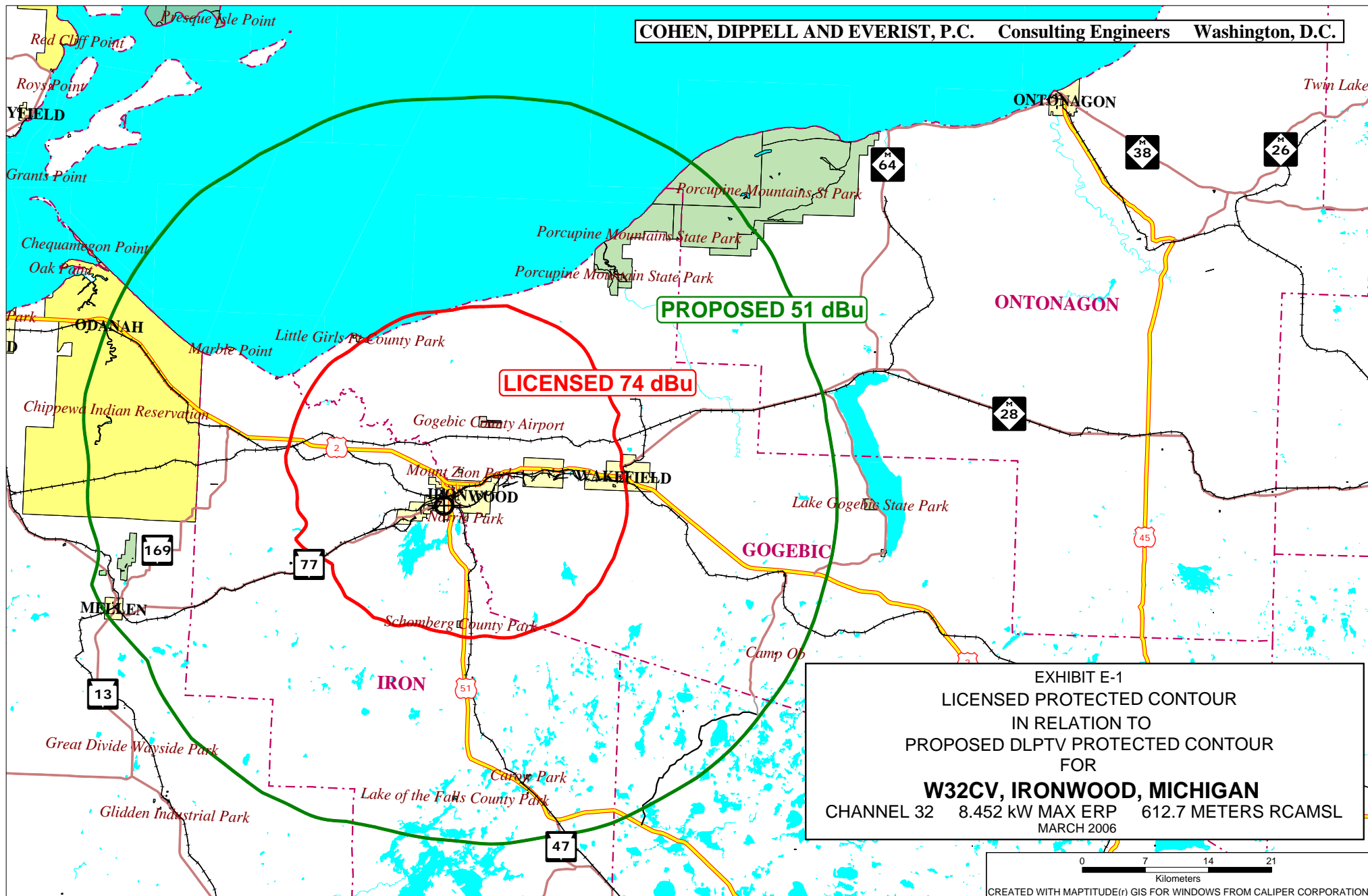


EXHIBIT E-2

DLPTV ANALYSIS RESULTS

FOR THE PROPOSED DIGITAL “FLASH-CUT”

OPERATION OF

W32CV, IRONWOOD, MICHIGAN

Exhibit E-2.txt

1990 Census data selected

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 03-30-2006 Time: 15:56:05

Record Selected for Analysis

W32CV BLTT -20060314TOM IRONWOOD MI US
Channel 32 ERP 8.452 kW HAAT 168 m RCAMSL 612 m
Latitude 46 -26-28 Longitude 90 -11-26
Status LIC Zone Border C Offset +
Dir Antenna Make CDB Model 00000000000940 Beam tilt N Ref Azimuth 75
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	3.140	222.8	43.0
45.0	2.992	184.5	40.6
90.0	5.830	143.3	41.4
135.0	8.167	132.8	42.4
180.0	7.604	122.3	41.4
225.0	4.754	136.9	40.0
270.0	2.622	150.9	37.8
315.0	3.270	240.6	44.2

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 quite zone

Proposed facility OK toward Table Mountain

Proposed facility is within the Canadian coordination distance
Distance to border = 173.4km

Proposed facility is beyond the Mexican coordination distance

Exhibit E-2.txt

Proposed station is 2.37km from AM station

IRONWOOD MI WJMS Status: L Antenna: DAN

Start of Interference Analysis

Channel	Proposed Station	Call	City/State	ARN	
32	W32CV	IRONWOOD MI	BLTT	20060314TOM	

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
25	WAST-LP	ASHLAND WI	61.2	LIC	BLTTL	-20050906AAS
31	K31HF	ASHLAND WI	67.2	CP	BNPTT	-20000809AAR
31	K31GH	HAYWARD WI	105.5	LIC	BLTTL	-20020729AAS
32	W32DA	HOUGHTON MI	143.6	CP	BNPTT	-20000830BAA
32	K32FY	PARK RAPIDS MN	371.2	LIC	BLTT	-20020429AAS
32	WACY	APPLETON WI	288.7	LIC	BMLCT	-19990831LF
32	WBUW	JANESVILLE WI	380.9	LIC	BLCDT	-20040930BHL
32	K32GF	RHINELANDER WI	103.7	LIC	BLTT	-20050929AGL
33	KDLH	DULUTH MN	152.3	CP	BPCDT	-19991028ADK
33	KDLH	DULUTH MN	152.3	PRTCT	BDTV	-464707
34	WYOW	EAGLE RIVER WI	103.7	LIC	BLCT	-20001221ABO
36	WLEF-TV	PARK FALLS WI	55.5	LIC	BMLET	-20031211AAB

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Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
25	WAST-LP	ASHLAND WI	BLTTL	-20050906AAS

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	KNLD-DT	DULUTH MN	93.1	PLN	DTVPLN	-DTVP0255
25	K25IN	DULUTH MN	92.7	CP	BNPTTL	-20000830BBV
25	WLAX	LA CROSSE WI	322.6	LIC	BLCT	-20000314AAA
27	960920LP	DULUTH MN	93.5	APP	BPCT	-19960920LP
32	W32CV	IRONWOOD MI	61.2	LIC	BLTT	-20060314TOM
32	W32CV	IRONWOOD MI	61.2	LIC	BLTT	-20040217ACE
33	KDLH	DULUTH MN	93.1	CP	BPCDT	-19991028ADK
33	KDLH	DULUTH MN	93.1	PRTCT	BDTV	-464707
33	KDLH-DT	DULUTH MN	93.1	PLN	DTVPLN	-DTVP0854

Proposal causes no interference

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Analysis of Interference to Affected Station 2

Analysis of current record

Exhibit E-2.txt

Channel	Call	City/State	Application Ref. No.
31	K31HF	ASHLAND WI	BNPTT -20000809AAR

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
31	WRPT	HIBBING MN	167.3	PRTCT	BNPEDT -20030605AFB
31	K31GH	HAYWARD WI	83.4	LIC	BLTTTL -20020729AAS
31	WHLA-TV	LA CROSSE WI	322.2	LIC	BMLET -20041013AAM
32	W32CV	IRONWOOD MI	67.2	LIC	BLTT -20060314TOM
32	W32CV	IRONWOOD MI	67.2	LIC	BLTT -20040217ACE
33	KDLH	DULUTH MN	86.7	CP	BPCDT -19991028ADK
33	KDLH	DULUTH MN	86.7	PRTCT	BDTV -464707
33	KDLH-DT	DULUTH MN	86.7	PLN	DTVPLN -DTVP0854
38	WDSE-DT	DULUTH MN	86.9	PLN	DTVPLN -DTVP0994
38	WDSE-TV	DULUTH MN	86.9	CP MOD	BMPEDT -20000501AIO

Proposal causes no interference

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application Ref. No.
31	K31GH	HAYWARD WI	BLTTTL -20020729AAS

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
27	WHWC-DT	MENOMONIE WI	111.6	PLN	DTVPLN -DTVP0657
31	KWCM-DT	APPLETON MN	369.2	PLN	DTVPLN -DTVP0779
31	KWCM-TV	APPLETON MN	369.2	CP	BPEDT -20000501AIK
31	WRPT	HIBBING MN	194.0	PRTCT	BNPEDT -20030605AFB
31	WDMI-LP	MINNEAPOLIS MN	184.6	CP	BPTTL -20040428ABC
31	K31HF	ASHLAND WI	83.4	CP	BNPTT -20000809AAR
31	WHLA-TV	LA CROSSE WI	243.8	LIC	BMLET -20041013AAM
32	W32CV	IRONWOOD MI	105.5	LIC	BLTT -20060314TOM
32	W32CV	IRONWOOD MI	105.5	LIC	BLTT -20040217ACE
33	KDLH	DULUTH MN	103.4	CP	BPCDT -19991028ADK
33	KDLH	DULUTH MN	103.4	PRTCT	BDTV -464707
33	KDLH-DT	DULUTH MN	103.4	PLN	DTVPLN -DTVP0854
38	WDSE-DT	DULUTH MN	104.0	PLN	DTVPLN -DTVP0994
38	WDSE-TV	DULUTH MN	104.0	CP MOD	BMPEDT -20000501AIO

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.
32	W32DA	HOUGHTON MI	BNPTT -20000830BAA

Stations Potentially Affecting This Station

Exhibit E-2.txt

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	W32CV	IRONWOOD MI	143.6	LIC	BLTT	-20060314TOM
32	W32CV	IRONWOOD MI	143.6	LIC	BLTT	-20040217ACE
32	WACY	APPLETON WI	308.3	LIC	BMLCT	-19990831LF
32	K32GF	RHINELANDER WI	156.4	LIC	BLTT	-20050929AGL
33	WNMU	MARQUETTE MI	105.2	CP	BPEDT	-20000501AGD
33	WNMU-DT	MARQUETTE MI	99.3	PLN	DTVPLN	-DTVP0852
35	WLUC-DT	MARQUETTE MI	101.3	PLN	DTVPLN	-DTVP0924
35	WLUC-TV	MARQUETTE MI	101.3	CP	BPCDT	-20041021ADR
35	WLUC-TV	MARQUETTE MI	101.3	LIC	BLCDDT	-20040202ALY

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.
32	K32FY	PARK RAPIDS MN	BLTT	-20020429AAS

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
24	KCCO-DT	ALEXANDRIA MN	138.9	PLN	DTVPLN	-DTVP0538
24	KCCO-TV	ALEXANDRIA MN	138.7	CP	BPCDT	-19991025ACO
28	KAWB-DT	BRAINERD MN	70.2	PLN	DTVPLN	-DTVP0673
32	W32CV	IRONWOOD MI	371.2	LIC	BLTT	-20060314TOM
32	W32CV	IRONWOOD MI	371.2	LIC	BLTT	-20040217ACE
32	WCCO-DT	MINNEAPOLIS MN	252.8	PLN	DTVPLN	-DTVP0818
32	KBRR	THIEF RIVER FALLS MN	158.7	CP	BPCDT	-19991028AAV
36	KSAX	ALEXANDRIA MN	137.5	CP MOD	BMPCDT	-20020605AAX

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.
32	WACY	APPLETON WI	BMLCT	-19990831LF

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
24	WCGV-TV	MILWAUKEE WI	141.4	LIC	BLCT	-19920902KF
25	WCGV-DT	MILWAUKEE WI	141.4	PLN	DTVPLN	-DTVP0589
28	WTMJ-DT	MILWAUKEE WI	141.0	PLN	DTVPLN	-DTVP0690
28	WTMJ-TV	MILWAUKEE WI	141.0	LIC	BLCDDT	-20001218ACR
30	WVCY-TV	MILWAUKEE WI	141.4	LIC	BLCT	-19830119KI
32	KRIN	WATERLOO IA	387.0	LIC	BLET	-19860923KQ
32	WFLD	CHICAGO IL	274.9	LIC	BLCT	-19830408KG
32	W32CV	IRONWOOD MI	288.7	LIC	BLTT	-20060314TOM
32	WBUW	JANESVILLE WI	189.2	LIC	BLCDDT	-20040930BHL

Exhibit E-2.txt

32	WJNW-DT	JANESVILLE WI	207.4	PLN	DTVPLN	-DTVP0838
33	WITI	MILWAUKEE WI	141.1	CP	BPCDT	-19991004ABL
33	WITI-DT	MILWAUKEE WI	141.1	PLN	DTVPLN	-DTVP0869
34	WISN-DT	MILWAUKEE WI	138.7	PLN	DTVPLN	-DTVP0906
34	WISN-TV	MILWAUKEE WI	138.6	LIC	BLCDDT	-20050412ADP
35	WMVT	MILWAUKEE WI	140.4	CP MOD	BMPEDT	-20040618AAN
35	WMVT-DT	MILWAUKEE WI	140.4	PLN	DTVPLN	-DTVP0943
36	WMVT	MILWAUKEE WI	140.4	LIC	BLET	-20050623ABQ
39	WFRV-TV	GREEN BAY WI	2.8	CP MOD	BMPCDT	-20041129AEH
40	WPXE	KENOSHA WI	140.5	LIC	BLCDDT	-20040206AAT
46	WTPX	ANTIGO WI	140.6	LIC	BMLCDDT	-20041015ADT
46	WDJT-DT	MILWAUKEE WI	138.6	PLN	DTVPLN	-DTVP1281
46	WDJT-TV	MILWAUKEE WI	138.6	CP MOD	BMPCDT	-20000419ABR
47	WMSN-TV	MADISON WI	191.2	LIC	BMLCT	-20010817AAS

Proposal causes no interference

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Analysis of Interference to Affected Station 7

DTV Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
32	WJNW-DT	JANESVILLE WI	DTVPLN	-DTVP0838

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
31	WFLD-DT	CHICAGO IL	161.1	PLN	DTVPLN	-DTVP0774
32	KRIN	WATERLOO IA	220.0	PLN	DTVPLN	-NPLN0475
32	WFLD	CHICAGO IL	161.1	PLN	DTVPLN	-NPLN0476
32	WCCO-DT	MINNEAPOLIS MN	406.5	PLN	DTVPLN	-DTVP0818
33	WITI-DT	MILWAUKEE WI	115.9	PLN	DTVPLN	-DTVP0869

Results for: 32A WI JANESVILLE DTVPLN DTVP0838 PLN

HAAT 342.0 m, ATV ERP 79.3 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1103294	17011.9
not affected by terrain losses	1095928	16831.4
lost to NTSC IX	30802	796.8
lost to additional IX by ATV	1367	26.6
lost to ATV IX only	6244	109.5
lost to all IX	32169	823.4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
32	WBUW	JANESVILLE WI	BLCDDT	-20040930BHL

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
31	WFLD	CHICAGO IL	200.0	CP	BPCDT	-20010604AAX
31	WFLD	CHICAGO IL	200.0	LIC	BLCDDT	-19990728LD
31	WFLD-DT	CHICAGO IL	199.3	PLN	DTVPLN	-DTVP0774
31	WHLA-TV	LA CROSSE WI	173.4	LIC	BMLET	-20041013AAM
32	KRIN	WATERLOO IA	210.3	LIC	BLET	-19860923KQ
32	WFLD	CHICAGO IL	199.3	LIC	BLCT	-19830408KG
32	WTJR	QUINCY IL	375.0	PRTCT	BDTV	-395818

Exhibit E-2.txt

32	W32CV	IRONWOOD MI	380.9	LIC	BLTT	-20060314TOM
32	WCCO-DT	MINNEAPOLIS MN	367.5	PLN	DTVPLN	-DTVP0818
32	WACY	APPLETON WI	189.2	LIC	BMLCT	-19990831LF
33	WITI	MILWAUKEE WI	129.2	CP	BPCDT	-19991004ABL
33	WITI-DT	MILWAUKEE WI	129.2	PLN	DTVPLN	-DTVP0869

Proposal causes no interference

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Analysis of Interference to Affected Station 8

Analysis of current record

Channel	Call	City/State	Application Ref. No.
32	K32GF	RHINELANDER WI	BLTT -20050929AGL

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
24	WHRM-DT	WAUSAU WI	101.0	PLN	DTVPLN -DTVP0556
24	WHRM-TV	WAUSAU WI	101.0	CP MOD	BMPEDT -20050912ABR
24	WHRM-TV	WAUSAU WI	101.0	LIC	BLEDT -20030821ACV
28	WYOW	EAGLE RIVER WI	0.1	CP MOD	BMPCDT -20041001ANY
28	WYOW-DT	EAGLE RIVER WI	0.1	PLN	DTVPLN -DTVP0689
29	WAOW-DT	WAUSAU WI	101.0	PLN	DTVPLN -DTVP0727
29	WAOW-TV	WAUSAU WI	101.0	CP	BPCDT -19991026ABQ
32	W32DA	HOUGHTON MI	156.4	CP	BNPTT -20000830BAA
32	W32CV	IRONWOOD MI	103.7	LIC	BLTT -20060314TOM
32	W32CV	IRONWOOD MI	103.7	LIC	BLTT -20040217ACE
32	WCCO-DT	MINNEAPOLIS MN	313.7	PLN	DTVPLN -DTVP0818
32	WACY	APPLETON WI	186.2	LIC	BMLCT -19990831LF
32	WBUW	JANESVILLE WI	303.3	LIC	BLCDDT -20040930BHL
32	WJNW-DT	JANESVILLE WI	338.6	PLN	DTVPLN -DTVP0838
33	WNMU-DT	MARQUETTE MI	124.9	PLN	DTVPLN -DTVP0852
35	WLUC-DT	MARQUETTE MI	124.7	PLN	DTVPLN -DTVP0924
35	WLUC-TV	MARQUETTE MI	124.7	CP	BPCDT -20041021ADR
35	WLUC-TV	MARQUETTE MI	124.7	LIC	BLCDDT -20040202ALY
36	WLEF-TV	PARK FALLS WI	81.7	PRTCT	BDTV -455643
40	WSAW-DT	WAUSAU WI	101.0	PLN	DTVPLN -DTVP1087
40	WSAW-TV	WAUSAU WI	101.0	APP	BMPCDT -20051103AAF
40	WSAW-TV	WAUSAU WI	101.0	CP	BPCDT -19991029ADR
46	WTPX	ANTIGO WI	81.6	LIC	BMLCDDT -20041015ADT
47	WLEF-DT	PARK FALLS WI	81.7	PLN	DTVPLN -DTVP1312
47	WLEF-TV	PARK FALLS WI	81.6	LIC	BLEDT -20040503AFO

Proposal causes no interference

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Analysis of Interference to Affected Station 9

DTV Baseline Analysis

Channel	Call	City/State	Application Ref. No.
33	KDLH-DT	DULUTH MN	DTVPLN -DTVP0854

Stations Potentially Affecting This Station

Exhibit E-2.txt

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	WCCO-DT	MINNEAPOLIS MN	207.0	PLN	DTVPLN	-DTVP0818
33	WNMU-DT	MARQUETTE MI	329.2	PLN	DTVPLN	-DTVP0852
33	KAAL-DT	AUSTIN MN	360.1	PLN	DTVPLN	-DTVP0853
34	KTCA-DT	ST. PAUL MN	207.0	PLN	DTVPLN	-DTVP0888

Results for: 33A MN DULUTH DTVPLN DTVP0854 PLN
 HAAT 302.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	300301	33543.0
not affected by terrain losses	287099	32773.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	4029	555.5
lost to ATV IX only	4029	555.5
lost to all IX	4029	555.5

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
33	KDLH	DULUTH MN	BPCDT	-19991028ADK

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	W32CV	IRONWOOD MI	152.3	LIC	BLTT	-20060314TOM
32	WCCO-DT	MINNEAPOLIS MN	207.0	PLN	DTVPLN	-DTVP0818
33	WNMU	MARQUETTE MI	354.9	CP	BPEDT	-20000501AGD
33	WNMU-DT	MARQUETTE MI	329.2	PLN	DTVPLN	-DTVP0852
33	KAAL	AUSTIN MN	360.1	CP	BPCDT	-19991022ABU
33	KAAL-DT	AUSTIN MN	360.1	PLN	DTVPLN	-DTVP0853
34	KTCA-TV	SAINT PAUL MN	207.0	CP MOD	BMPEDT	-20050322AGE
34	KTCA-DT	ST. PAUL MN	207.0	PLN	DTVPLN	-DTVP0888
34	KTCA-TV	ST. PAUL MN	207.0	PRTCT	BDTV	-450330

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.
33	KDLH	DULUTH MN	BDTV	-464707

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	W32CV	IRONWOOD MI	152.3	LIC	BLTT	-20060314TOM
32	WCCO-DT	MINNEAPOLIS MN	207.0	PLN	DTVPLN	-DTVP0818
33	WNMU	MARQUETTE MI	354.9	CP	BPEDT	-20000501AGD
33	WNMU-DT	MARQUETTE MI	329.2	PLN	DTVPLN	-DTVP0852
33	KAAL	AUSTIN MN	360.1	CP	BPCDT	-19991022ABU
33	KAAL-DT	AUSTIN MN	360.1	PLN	DTVPLN	-DTVP0853
34	KTCA-TV	SAINT PAUL MN	207.0	CP MOD	BMPEDT	-20050322AGE
34	KTCA-DT	ST. PAUL MN	207.0	PLN	DTVPLN	-DTVP0888
34	KTCA-TV	ST. PAUL MN	207.0	PRTCT	BDTV	-450330

Proposal causes no interference

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Exhibit E-2.txt

Analysis of Interference to Affected Station 11

NTSC Baseline Analysis

Channel	Call	City/State	Application Ref. No.
34	WYOW	EAGLE RIVER WI	DTVPLN -NPLN1674

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
33	WNMU-DT	MARQUETTE MI	124.9	PLN	DTVPLN -DTVP0852
34	KTCA-DT	ST. PAUL MN	312.7	PLN	DTVPLN -DTVP0888
34	WISN-DT	MILWAUKEE WI	314.1	PLN	DTVPLN -DTVP0906
35	WLUC-DT	MARQUETTE MI	124.7	PLN	DTVPLN -DTVP0924

Results for: 34N WI EAGLE RIVER		DTVPLN	NPLN1674	PLN
		POPULATION	AREA (sq km)	
within Noise Limited Contour		71812	10237.2	
not affected by terrain losses		70699	10047.5	
lost to NTSC IX		0	0.0	
lost to additional IX by ATV		380	132.0	
lost to all IX		380	132.0	

Analysis of current record

Channel	Call	City/State	Application Ref. No.
34	WYOW	EAGLE RIVER WI	BLCT -20001221ABO

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
32	W32CV	IRONWOOD MI	103.7	LIC	BLTT -20060314TOM
33	WNMU	MARQUETTE MI	158.7	CP	BPEDT -20000501AGD
33	WNMU-DT	MARQUETTE MI	124.9	PLN	DTVPLN -DTVP0852
34	KTCA-TV	SAINT PAUL MN	312.7	CP MOD	BMPEDT -20050322AGE
34	KTCA-DT	ST. PAUL MN	312.7	PLN	DTVPLN -DTVP0888
34	KTCA-TV	ST. PAUL MN	312.7	PRTCT	BDTV -450330
34	WISN-DT	MILWAUKEE WI	314.1	PLN	DTVPLN -DTVP0906
34	WISN-TV	MILWAUKEE WI	314.0	LIC	BLCDDT -20050412ADP
35	WLUC-DT	MARQUETTE MI	124.7	PLN	DTVPLN -DTVP0924
35	WLUC-TV	MARQUETTE MI	124.7	CP	BPCDDT -20041021ADR
35	WLUC-TV	MARQUETTE MI	124.7	LIC	BLCDDT -20040202ALY
36	WLEF-TV	PARK FALLS WI	81.6	PRTCT	BDTV -455643
36	WLEF-TV	PARK FALLS WI	81.5	LIC	BMLET -20031211AAB

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.
36	WLEF-TV	PARK FALLS WI	BMLET -20031211AAB

Stations Potentially Affecting This Station

Exhibit E-2.txt

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
28	WYOW	EAGLE RIVER WI	81.5	CP MOD	BMPCDT	-20041001ANY
28	WYOW-DT	EAGLE RIVER WI	81.5	PLN	DTVPLN	-DTVP0689
29	WAOW-DT	WAUSAU WI	122.6	PLN	DTVPLN	-DTVP0727
29	WAOW-TV	WAUSAU WI	122.6	CP	BPCDT	-19991026ABQ
32	W32CV	IRONWOOD MI	55.5	LIC	BLTT	-20060314TOM
34	WYOW	EAGLE RIVER WI	81.5	LIC	BLCT	-20001221ABO
35	WLUC-DT	MARQUETTE MI	191.7	PLN	DTVPLN	-DTVP0924
35	WLUC-TV	MARQUETTE MI	191.7	CP	BPCDT	-20041021ADR
35	WLUC-TV	MARQUETTE MI	191.7	LIC	BLCDT	-20040202ALY
36	KSAX	ALEXANDRIA MN	380.7	CP MOD	BMPCDT	-20020605AAX
36	KAAL	AUSTIN MN	343.4	PRTCT	BFRCT	-20050304ABP
36	WIRT	HIBBING MN	259.4	CP	BPCDT	-19991027ABC
36	WIRT-DT	HIBBING MN	259.4	PLN	DTVPLN	-DTVP0963
36	KTTC	ROCHESTER MN	311.6	CP	BPCDT	-19991101AIF
36	KTTC-DT	ROCHESTER MN	313.9	PLN	DTVPLN	-DTVP0964
36	WMVT	MILWAUKEE WI	368.1	LIC	BLET	-20050623ABQ
40	WSAW-DT	WAUSAU WI	122.6	PLN	DTVPLN	-DTVP1087
40	WSAW-TV	WAUSAU WI	122.6	APP	BMPCDT	-20051103AAF
40	WSAW-TV	WAUSAU WI	122.6	CP	BPCDT	-19991029ADR

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.
32	W32CV	IRONWOOD MI	BLTT	-20060314TOM

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
32	WCCO-DT	MINNEAPOLIS MN	275.2	PLN	DTVPLN	-DTVP0818
32	WACY	APPLETON WI	288.7	LIC	BMLCT	-19990831LF
32	WBUW	JANESVILLE WI	380.9	LIC	BLCDT	-20040930BHL
36	WLEF-TV	PARK FALLS WI	55.5	PRTCT	BDTV	-455643
47	WLEF-DT	PARK FALLS WI	55.5	PLN	DTVPLN	-DTVP1312
47	WLEF-TV	PARK FALLS WI	55.5	LIC	BLEDT	-20040503AFO

Total scenarios = 1

Result key: 1
 Scenario 1 Affected station 13
 Before Analysis

Results for: 32A MI IRONWOOD BLTT 20060314TOM LIC
 HAAT 168.0 m, ATV ERP 8.5 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	25530	5553.6
not affected by terrain losses	25510	5458.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	175	25.7
lost to ATV IX only	175	25.7
lost to all IX	175	25.7

Potential Interfering Stations Included in above Scenario 1

32A MN MINNEAPOLIS DTVPLN DTVP0818 PLN

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