

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington DC 20554

ORIGINAL
FILED/ACCEPTED

AUG 21 2009

Federal Communications Commission
Office of the Secretary

In re:)
)
Gray Television Licensee, LLC) MB Docket No. _____
)
Petition for Rulemaking to Amend) Rulemaking No. _____
the DTV Table of Allotments for)
Station WKYT-TV, Lexington, Kentucky)

To: Office of the Secretary
Attn: Chief, Media Bureau

PETITION FOR RULEMAKING

Gray Television Licensee, LLC (“Gray”), licensee of Station WKYT-TV (“WKYT”), Lexington, Kentucky, by counsel hereby requests that the post-transition DTV Table of Allotments (the “DTV Table”)¹ be amended to change WKYT’s digital allotment from VHF Channel 13 to UHF Channel 36 with the technical parameters as set forth in the attached Engineering Statement. This channel substitution serves the public interest by i) resolving significant over-the-air reception problems in certain areas of WKYT’s predicted service area, ii) bringing consistency to the market, as all other stations in the Lexington market (including NBC, ABC, PBS and Fox) broadcast on a UHF channel, and iii) improving the possibility for service to viewers using hand-held and mobile devices. WKYT requests expedited action on this request so that it can begin to operate with a more robust digital signal as soon as possible.

Attached is an Engineering Statement of Chesapeake RF Consultants, LLC,² which sets forth in detail the proposed WKYT’s channel 36 DTV Table specifications.

¹ 47 C.F.R. §73.622(i).

² See Exhibit 1 (“Engineering Statement”).

No. of Copies rec'd 074
List ABCDE
MB - Video 09-52

This proposal is in compliance with all relevant technical requirements for amendment of the post-transition DTV Table, including the interference protection requirements of 47 C.F.R. §73.616 and the 0.5% de minimis interference standard with respect to all allotments and assignments, existing and proposed. As further reflected in the Engineering Statement, the proposed Channel 36 facility will provide full principal community coverage to Lexington, Kentucky.

Since WKYT ended analog broadcasts on April 16, 2009, the station has received an outpouring of calls and emails from viewers having difficulty receiving the station's over-the-air signal.³ After the threshold issues of coupons and converter boxes were resolved, the remaining complaints narrowed to one issue - the viewer can receive all other stations in the market except for WKYT. Even for a viewer with a UHF/VHF indoor antenna, the WKYT signal still proves elusive. What is most perplexing and upsetting to viewers and the station is the fact that it is frequently viewers well within the station's predicted service area who have lost service – specifically, those viewers who were predicted to receive a robust digital signal and previously received a strong analog signal. The problems with digital VHF reception have been well-documented in the months following the digital transition deadline. The real world experience of the digital transition has shown that, overall, UHF channels are received better by indoor antennas. Although WKYT staff has worked diligently with its viewers to resolve complaints concerning its digital signal, giving personal attention to each call or email, it is clear that the only solution that will resolve the majority of viewer problems is moving to a UHF channel.

³See Exhibit 2.

WKYT's reception problems have been compounded by the fact that all of the other stations in the Lexington market elected to operate on a UHF channel post-transition (including the NBC, ABC, PBS and Fox affiliates).⁴ Many viewers, it appears, purchased equipment that can receive only UHF signals. The proposed channel 36 facility will allow these viewers to receive WKYT's CBS programming without the need to make a significant investment in an outdoor antenna or other equipment necessary to receive the one VHF station in this market.

The proposed channel 36 facility specifies a top-mount antenna and 1000 kW power level, the maximize power level allowed for a UHF channel allotment. At these parameters, the proposed facility provides a 106.9 percent match to the Appendix B facility and increases the net total population served by 18,484 persons. However, the power limitation on UHF channels combined with the need to protect stations located to the north causes in a slight shift of the channel 36 digital contour toward the west, resulting in narrow bands along the perimeter of the post-transition digital contour where a very small percentage of persons would lose WKYT's service.⁵ The total loss area, located primarily in the mountainous regions of eastern Kentucky, includes a population of 36,342 persons. However, as noted in the Engineering Statement, actual coverage is significantly reduced by terrain blockage, leaving only 11,858 persons in the loss area who were predicted to receive a non-terrain blocked signal.⁶ Of this group, 941 persons are predicted to lose CBS service.⁷ No person located in this loss area was within

⁴ See Engineering Statement at 1.

⁵ See Engineering Statement at 3.

⁶ *Id.* and Figure 3A.

⁷ *Id.* at 4 and Figure 5A.

WKYT's analog Grade B contour and given the significant problems WKYT has experienced with its VHF digital signal, the station is unsure if anyone located in this loss area was ever able to receive WKYT's channel 13 digital signal. These small loss areas are offset by predicted gains in coverage to the south and west where 48,801 persons are predicted to gain WKYT's service.⁸ Additionally, WKYT's proposed channel 36 facility will allow 202 persons to gain CBS service.⁹

Moreover, UHF channels provide better coverage for hand-held and mobile devices. While WKYT's primary concern is restoring service to its analog viewers, the station would embrace the opportunity to bring over-the-air mobile video to Lexington.

⁸ The total number of persons in the contour gain area is 58,202, however, of this total, 9,401 persons are terrain-blocked. *Id.* at fn. 1 and Figure 3 and 5.

⁹ The total number of persons within the CBS gain area is 1,029, however, of this total, 827 persons are terrain-blocked. *Id.* at fn. 3.

Accordingly, WKYT requests that it be authorized to operate on channel 36, a UHF channel that would restore over-the-air service to its viewers. For the foregoing reasons, the proposed amendment to the DTV Table of Allotments will clearly serve the public interest. Gray therefore respectfully requests that the DTV Table be amended in accordance with the specifications set forth in the attached Engineering Statement.

Respectfully submitted,

GRAY TELEVISION LICENSEE, LLC



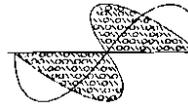
John M. Burgett
Joan Stewart

Wiley Rein LLP
1776 K Street NW
Washington DC 20006
202.719.7000
Its Attorneys

Dated: August 21, 2009

Exhibit 1

**Engineering Statement of
Chesapeake RF Consultants, LLC**

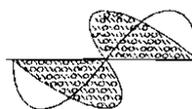


Engineering Statement
Post Transition Digital Television Channel Change
prepared for
Gray Television Licensee, LLC
WKYT-TV Lexington, KY
Facility ID 24914
Ch. 36 1000 kW 299 m

This engineering statement has been prepared on behalf of *Gray Television Licensee, LLC* (“*Gray*”), licensee of WKYT-TV (Facility ID 24914, Lexington, KY) in support of a *Petition for Rulemaking* to change the WKYT-TV digital television post-transition channel assignment. WKYT-TV, which operated on analog Channel 27, remains on its pre-transition digital Channel 13 for operation in the post-transition period using its licensed digital facility, as established in Appendix B of the Seventh Report and Order in MB Docket 87-268.

Gray proposes herein to substitute digital Channel 36 in lieu of the current digital Channel 13 allotment. Since the termination of analog service, many of WKYT-TV’s analog viewers have experienced significant difficulty in receiving the station’s Channel 13 digital signal. Problems with digital VHF reception by stations in many markets have been widely publicized since the transition date. It has been found that indoor reception is difficult for digital VHF stations such as WKYT-TV due to the longer wavelength signal’s inability to readily pass through buildings (the windows are smaller than the wavelength size), the ineffectiveness of many indoor antennas many of which were designed to emphasize the shorter wavelengths for UHF reception, and issues regarding manmade and environmental noise.

WKYT-TV, a CBS network affiliate, is the only station licensed to Lexington with a VHF post-transition allotment, and *Gray* reports that viewers in the market are able to receive the UHF stations much more reliably. The other stations licensed to Lexington are WLEX-TV (Ch. 39, NBC affiliate), WTVQ-DT (Ch. 40, ABC affiliate), and WKLE (Ch. 42, PBS affiliate). Additionally, the market’s Fox affiliate WDKY-TV, Danville, KY, is operating on Channel 31. Further, *Gray*



believes that changing to a UHF channel, in lieu of the current VHF channel, will result in better reception for mobile/handheld devices

The proposal specifies use of the licensed WKYT-TV site location and a top-mounted antenna, as summarized in the following.

Present Channel 13 Parameters (Appendix B)

Facility ID	State and City		NTSC	DTV								
			Chan	Chan	ERP (kW)	HAAT (m)	Antenna ID	Latitude (DDMMSS)	Longitude (DDMMSS)	Area (sq km)	Population (thous)	% Interf. Received
24914	KY	LEXINGTON	27	13	30	282	40363	380223	842410	23841	919	3.2

Antenna C/R AMSL: 575 meters

Proposed Channel 36 Parameters

Facility ID	State and City		NTSC	DTV								
			Chan	Chan	ERP (kW)	HAAT (m)	Antenna ID	Latitude (DDMMSS)	Longitude (DDMMSS)	Area (sq km)	Population (thous)	% Interf. Received
24914	KY	LEXINGTON	27	36	1000	299	Fig-1	380223	842410	25581	983	1.7

Antenna C/R AMSL: 592 meters

The proposed Channel 36 directional antenna pattern data is provided in **Figure 1**.

Population and Coverage

A map is supplied as **Figure 2**, which depicts the standard predicted coverage contours. This map includes the boundaries of Lexington, KY, WKYT-TV's principal community. As demonstrated thereon, the proposed facility complies with §73.625(a)(1), as the entire principal community will be encompassed by the 48 dBμ contour.

Figure 3 provides a coverage contour comparison, demonstrating that the channel substitution would not result in any loss area from the pre-transition analog facility. The proposed WKYT-TV allotment's predicted service population provides a 106.9 percent match of the current Appendix B facility, as detailed in the following table.

Post-Transition Population Summary

Population Summary (2000 Census) OET Bulletin 69 method	Ch. 13 Appendix B	Ch. 36 Proposed
Within Noise Limited Contour	987,905	1,017,857
Not affected by terrain losses	950,194	1,000,138
Lost to all interference	30,618	17,078
Net DTV Service	919,576	983,060
Match of Appendix B	---	106.90%

Although the proposed channel substitution provides a 106.9 percent match of the Appendix B population and covers all of the analog Grade B contour area, as depicted in **Figure 3** the proposed channel change will result in a minor shift in the WKYT-TV digital service contour area and the creation of a DTV coverage contour loss area having a population of 36,342 persons. An offsetting gain population of 58,202 persons will result.

The contour loss area is generally a narrow region along a portion of the edge of the licensed Channel 13 coverage contour. Actual coverage in the contour loss area is reduced by terrain blockage, owing to the mountainous topography of eastern Kentucky. **Figure 3A** provides a Longley-Rice predicted coverage map of the licensed WKYT-TV DTV Channel 13 facility, showing that predicted signal levels within much of the contour loss area are below the 36 dBμ reception threshold. Analysis of the Longley-Rice predicted signal levels shows that 11,858 persons can currently obtain non-terrain blocked service within the contour loss area. In other words, of the 36,342 persons within the contour loss area, 24,484 are at terrain-blocked locations and not expected to presently receive service from the licensed WKYT-TV Channel 13 facility.¹

As depicted in **Figure 4**, nearly all of the entire contour loss area is considered “well served” since at least five other authorized post-transition facilities provide contour overlap. DTV service contours² from 36 other authorized post-transition facilities overlap portions of the loss and/or gain areas (listed in **Table 1**). A small portion of the contour loss area will have three or four remaining services available. A population of 1,977 persons (71.0 sq. km) would have four remaining services, and 256 persons (32.5 sq. km) would have three remaining services. No portion of the loss area would have less than three remaining services available. The population with less than five

¹Of the 58,202 persons in the contour gain area, Longley-Rice analysis shows that 48,801 persons are not terrain-blocked and are predicted to receive Channel 36 signal levels above the noise threshold.

²Contour levels are pursuant to §73.622(e).

remaining services is 2,233 persons, which is 0.23 percent of the licensed DTV Channel 13 service contour population (987,467 persons).

The Longley-Rice map provided as **Figure 4A** provides further analysis of the loss areas where less than five alternative services will remain. Due to terrain blockage, only 474 persons are predicted to experience actual service loss within these areas. Thus, the population not subject to terrain blockage (with less than five alternate services) is 474 persons, which is 0.05 percent of the licensed DTV Channel 13 service contour population.

Most of the loss area is within the service contour of another station of the same network affiliation (CBS). **Figure 5** supplies a contour map of the overlapping contours from other nearby CBS Network stations. The overlapping CBS Network station contours cover all of the loss area except for two areas totaling 302.2 sq. km containing a population of 4,068 persons. This represents 0.41 percent of the licensed DTV Channel 13 population. These areas are also substantially terrain-blocked from the licensed WKYT-TV facility. As with the previous paragraphs, the Longley-Rice map of **Figure 5A** is provided regarding the CBS Network loss area, showing that only 941 persons within the CBS loss area are predicted to currently receive WKYT-TV. Thus, the CBS loss population not subject to terrain blockage is 941 persons, which is 0.10 percent of the licensed DTV Channel 13 service contour population.³

Allocation and Interference

A detailed interference study per OET Bulletin 69⁴ shows that the proposal complies with the 0.5 percent limit of new interference caused to the Appendix B facilities and current post-transition authorizations of pertinent nearby stations. The interference study output report is provided as **Table 2**. Protection requirements towards authorized Class A stations are also satisfied.

³ The area of CBS Network coverage contour gain is 1,029 persons and 70.7 sq. km. Of that area, Longley-Rice analysis shows that 202 persons are not terrain-blocked and are predicted to receive Channel 36 signal levels above the noise threshold.

⁴ FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 ("OET-69"). The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. A standard cell size of 2 km was employed. Comparisons of various results of this computer program (run on a Sun Sparc processor) to the Commission's implementation of OET-69 show excellent correlation.

Certification

The undersigned hereby certifies that the foregoing statement was prepared by him or under his direction, and that it is true and correct to the best of his knowledge and belief.



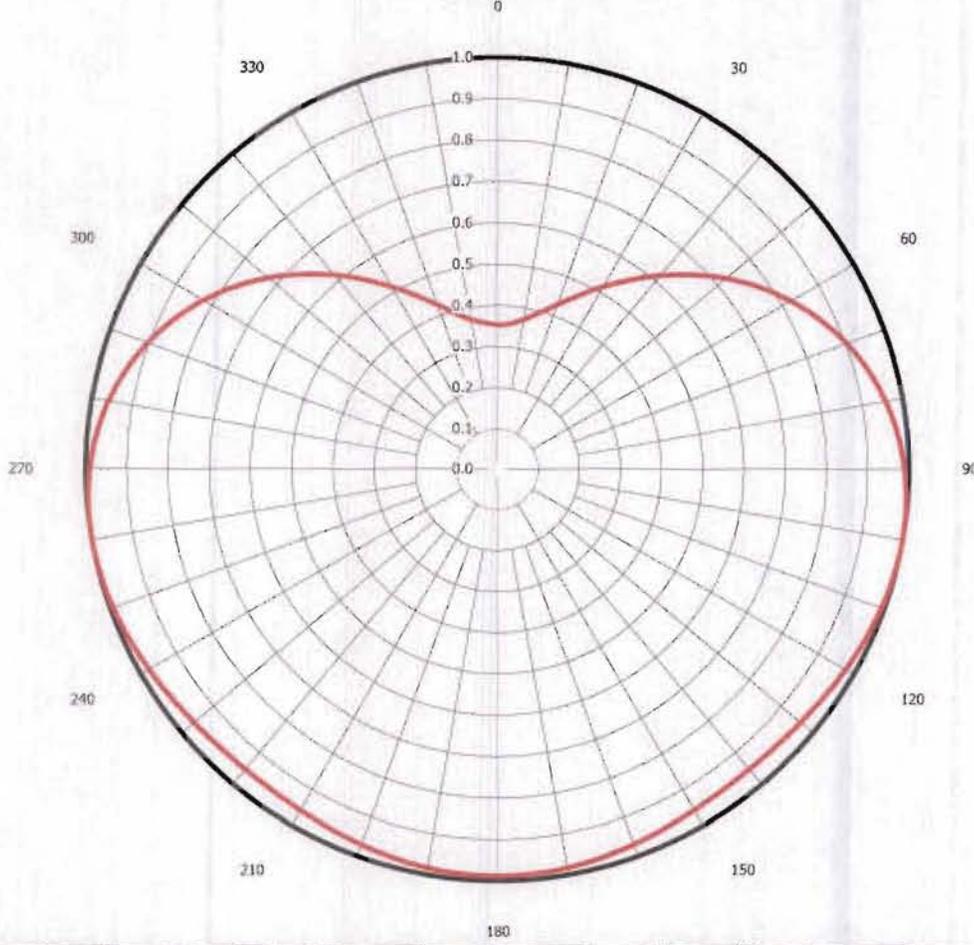
Joseph M. Davis, P.E.
August 20, 2009

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

List of Attachments

Figure 1	Antenna Horizontal Plane Pattern
Figure 2	Proposed Coverage Contours
Figure 3	Coverage Contour Comparison - Gain and Loss Areas
Figure 3A	Longley-Rice Predicted Coverage - Licensed Facility - Loss Area
Figure 4	Alternative Post-Transition DTV Services in Gain and Loss Areas
Figure 4A	Longley-Rice Predicted Coverage - Licensed Facility - DTV Loss Area
Figure 5	CBS Network DTV Services in Gain and Loss Areas
Figure 5A	Longley-Rice Predicted Coverage - Licensed Facility - CBS Loss Area
Table 1	Alternative DTV Services in Gain and Loss Areas
Table 2	OET Bulletin 69 Interference Study

**Azimuth Pattern - Relative Field
(True North)**



Azimuth (°T)	Relative Field						
0	0.353	90	0.990	180	0.988	270	0.990
10	0.372	100	1.000	190	0.983	280	0.959
20	0.428	110	0.993	200	0.970	290	0.903
30	0.515	120	0.977	210	0.957	300	0.824
40	0.618	130	0.961	220	0.953	310	0.726
50	0.726	140	0.953	230	0.981	320	0.618
60	0.824	150	0.957	240	0.977	330	0.515
70	0.903	160	0.970	250	0.993	340	0.428
80	0.959	170	0.983	260	1.000	350	0.372



Figure 1
Antenna Horizontal Plane Pattern
WKYT-TV Lexington, KY
Facility ID 24914
Ch. 36 1000 kW 299 m

prepared for
Gray Television Licensee, LLC

August, 2009

Chesapeake RF Consultants, LLC
 Radiofrequency Consulting Engineers
 Digital Television and Radio

Figure 2
Proposed Coverage Contours
WKYT-TV Lexington, KY
Facility ID 24914
Ch. 36 1000 kW 299 m

prepared for
Gray Television Licensee, LLC
 August, 2009

Proposed WKYT-TV
 DTV Service (41 dBu)
 DTV City Grade (48 dBu)

	Population (2000 Census)	Area (sq. km.)
Proposed Post-Transition Coverage		
Within Standard DTV Service Contour	1,009,327	26,925.0
OET Bulletin 69 method		
Within noise limited contour	1,017,857	27,126.6
Not affected by terrain losses	1,000,138	25,217.4
Lost to all interference	17,078	636.8
Net DTV Service	983,060	25,580.6

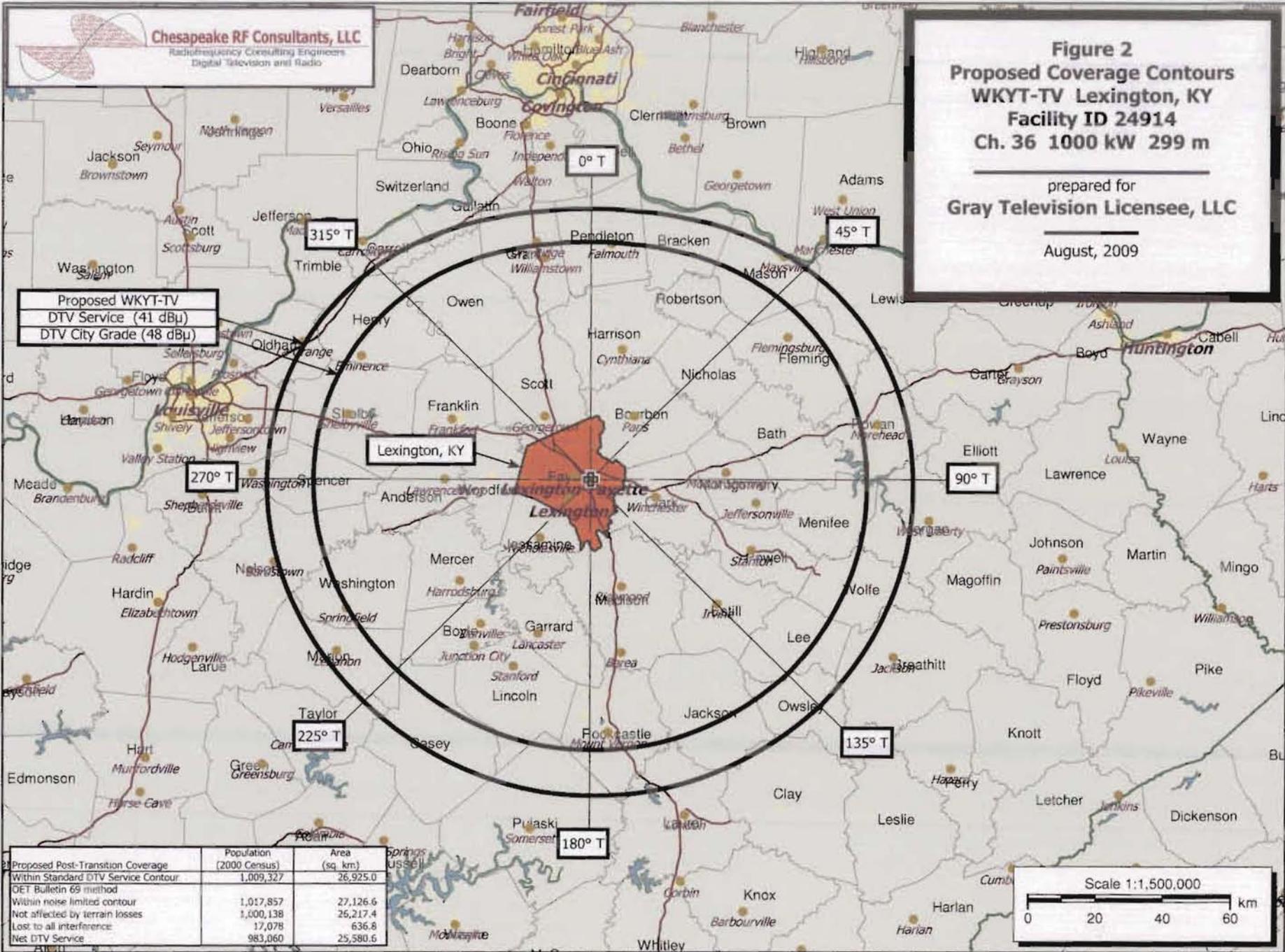
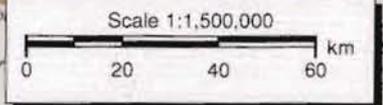
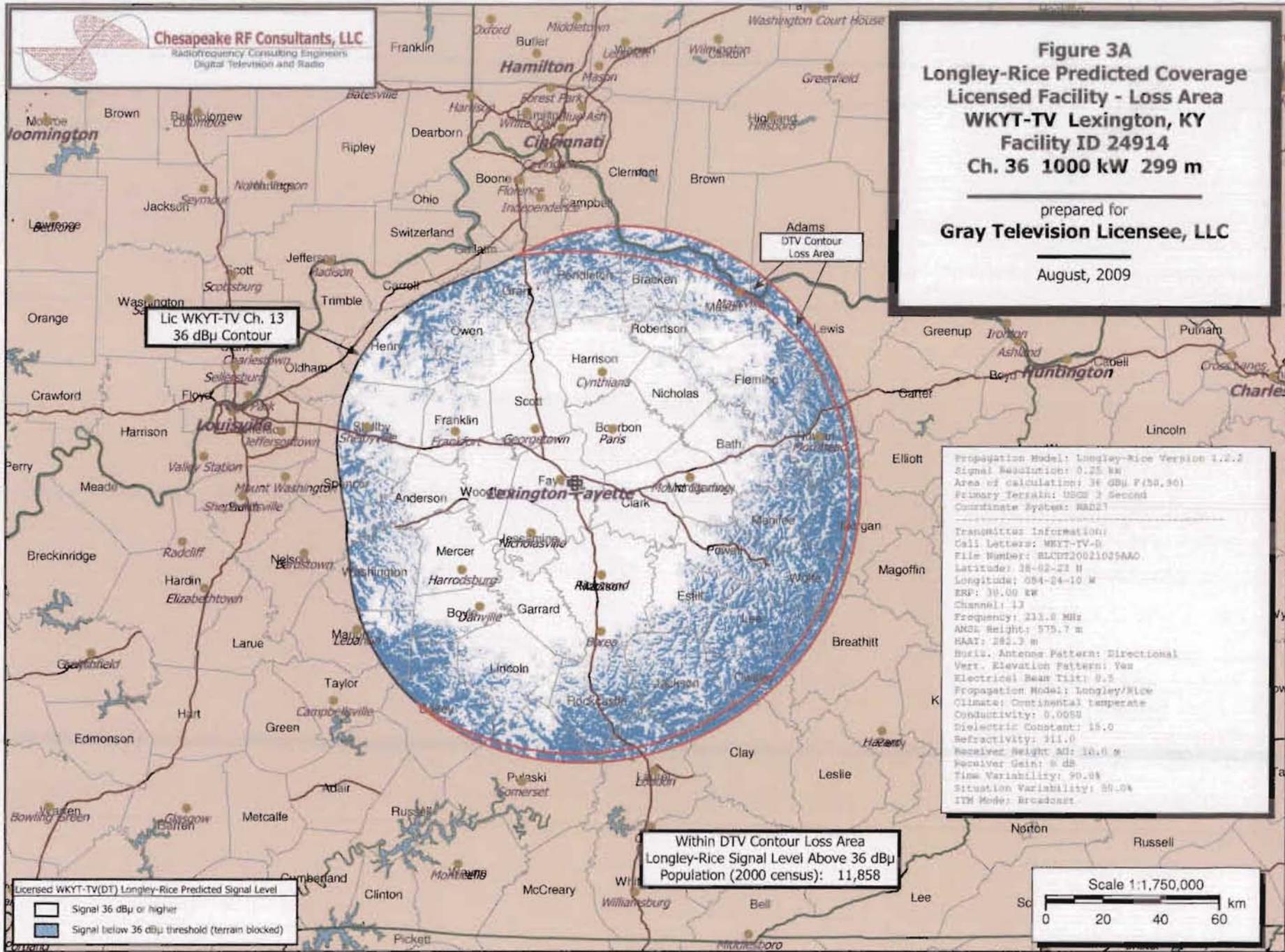


Figure 3A
Longley-Rice Predicted Coverage
Licensed Facility - Loss Area
WKYT-TV Lexington, KY
Facility ID 24914
Ch. 36 1000 kW 299 m

prepared for
Gray Television Licensee, LLC
 August, 2009



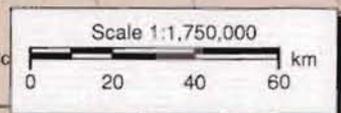
Lic WKYT-TV Ch. 13
 36 dBμ Contour

Adams
 DTV Contour
 Loss Area

Propagation Model: Longley-Rice Version 1.2.2
 Signal Reduction: 0.25 dB
 Area of calculation: 36 dBμ F(50,90)
 Primary Terrain: USGS 3 Second
 Coordinate System: NAD83

Transmitter Information:
 Call Letters: WKYT-TV-D
 File Number: BLCP20021025AAO
 Latitude: 38-02-23 N
 Longitude: 084-24-10 W
 ERP: 10.00 kW
 Channel: 13
 Frequency: 233.0 MHz
 Ant. Height: 579.7 m
 HAAT: 282.3 m
 Horiz. Antenna Pattern: Directional
 Vert. Elevation Pattern: Yes
 Electrical Beam Tilt: 0.5
 Propagation Model: Longley/Rice
 Climate: Continental temperate
 Conductivity: 0.0050
 Dielectric Constant: 15.0
 Refractivity: 111.0
 Receiver Height MSL: 10.0 m
 Receiver Gain: 0 dB
 Time Variability: 90.00
 Situation Variability: 50.00
 ITM Mode: Broadcast

Within DTV Contour Loss Area
 Longley-Rice Signal Level Above 36 dBμ
 Population (2000 census): 11,858



Licensed WKYT-TV(DT) Longley-Rice Predicted Signal Level

- Signal 36 dBμ or higher
- Signal below 36 dBμ threshold (terrain blocked)



Chesapeake RF Consultants, LLC
 Radiofrequency Consulting Engineers
 Digital Television and Radio

Figure 4
Alternative DTV Services in
Gain and Loss Areas
WKYT-TV Lexington, KY
Facility ID 24914
Ch. 36 1000 kW 299 m

prepared for
Gray Television Licensee, LLC

August, 2009

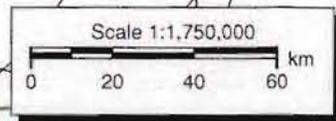
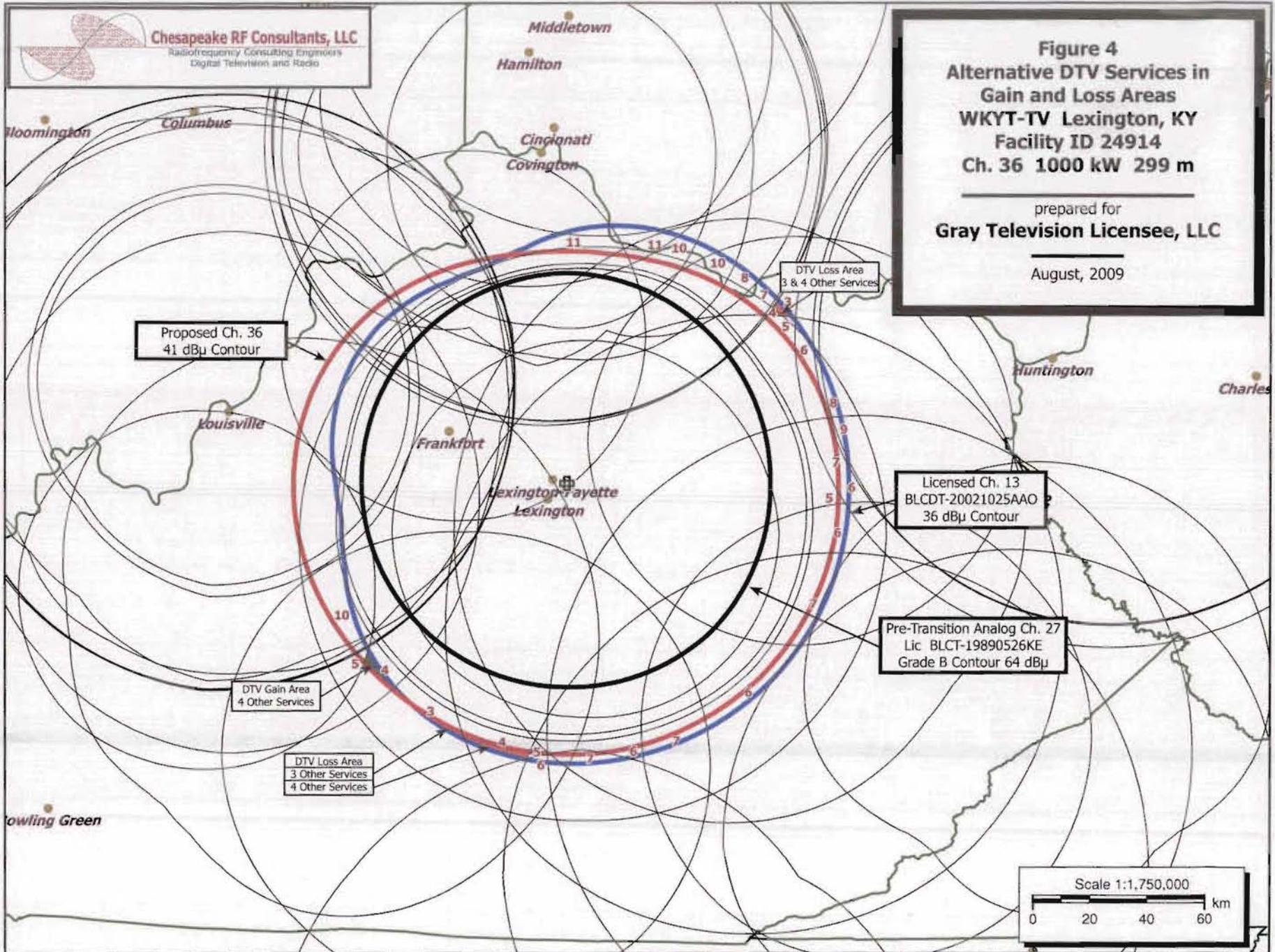


Figure 4A
Longley-Rice Predicted Coverage
Licensed Facility - DTV Loss Area
WKYT-TV Lexington, KY
Facility ID 24914
Ch. 36 1000 kW 299 m

prepared for
Gray Television Licensee, LLC
 August, 2009

Propagation Model: Longley-Rice Version 1.2.2
 Signal Resolution: 0.25 km
 Area of calculation: 36 dBu F(150,90)
 Primary Terrain: USGS 3 Second
 Coordinate System: NAD83

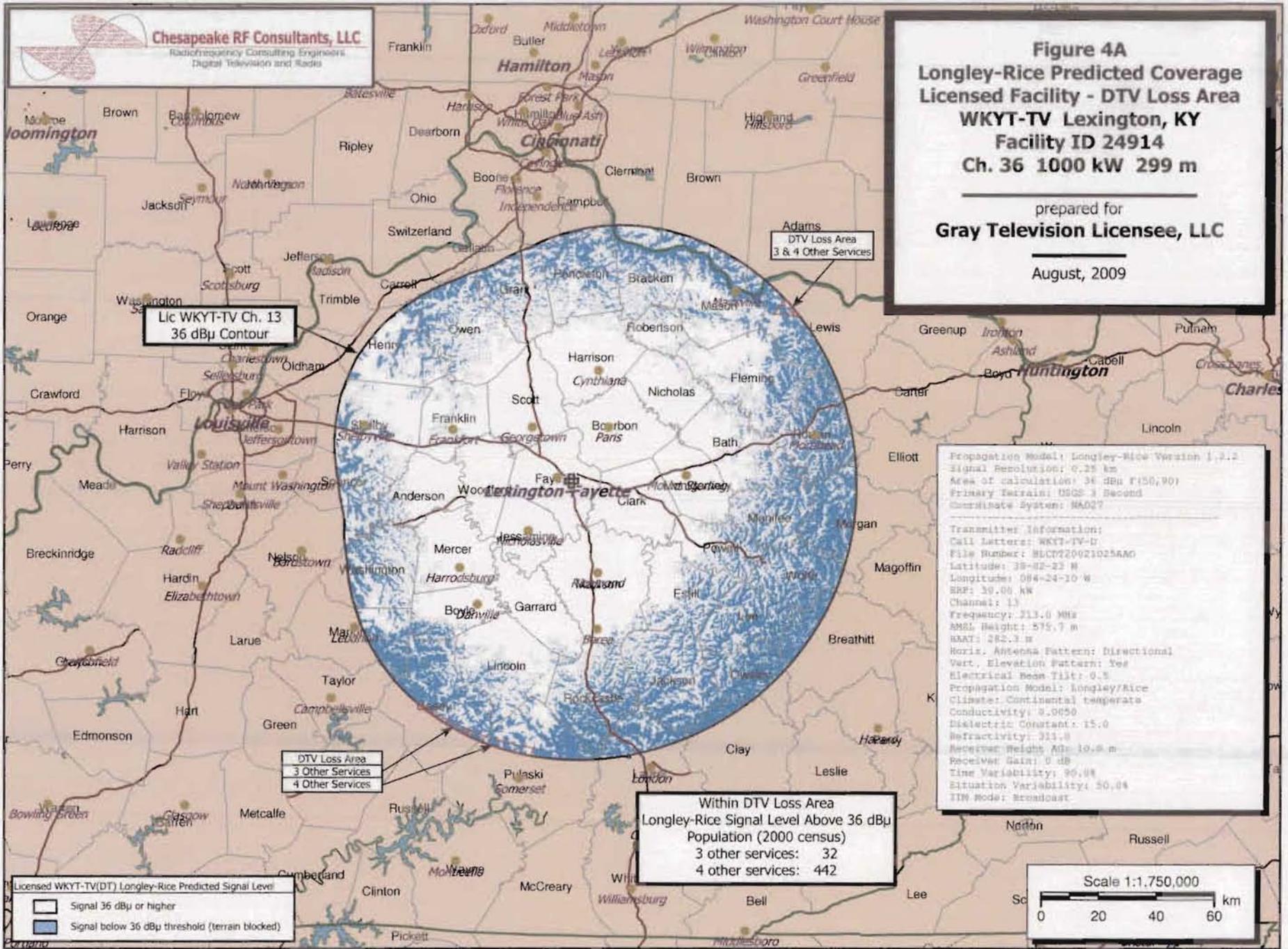
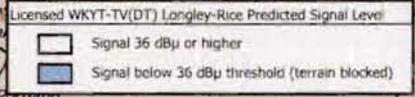
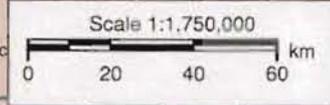
Transmitter Information:
 Call Letters: WKYT-TV-D
 File Number: BLCPT20921025AAG
 Latitude: 38-02-23 N
 Longitude: 084-24-10 W
 ERP: 1000 kW
 Channel: 13
 Frequency: 213.0 MHz
 Ant. Height: 299.7 m
 HAAT: 282.3 m
 Horiz. Antenna Pattern: Directional
 Vert. Elevation Pattern: Yes
 Electrical Beam Tilt: 0.5
 Propagation Model: Longley/Rice
 Climate: Continental temperate
 Conductivity: 0.0050
 Dielectric Constant: 15.0
 Refractivity: 311.0
 Receiver Weight AG: 10.0 m
 Receiver Gain: 0 dB
 Time Variability: 90.04
 Situation Variability: 50.04
 ITN Mode: Broadcast

Lic WKYT-TV Ch. 13
 36 dBu Contour

Adams
 DTV Loss Area
 3 & 4 Other Services

DTV Loss Area
 3 Other Services
 4 Other Services

Within DTV Loss Area
 Longley-Rice Signal Level Above 36 dBu
 Population (2000 census)
 3 other services: 32
 4 other services: 442





Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Figure 5
CBS Network DTV Services in
Gain and Loss Areas
WKYT-TV Lexington, KY
Facility ID 24914
Ch. 36 1000 kW 299 m

prepared for
Gray Television Licensee, LLC

August, 2009

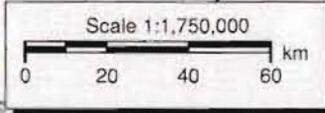
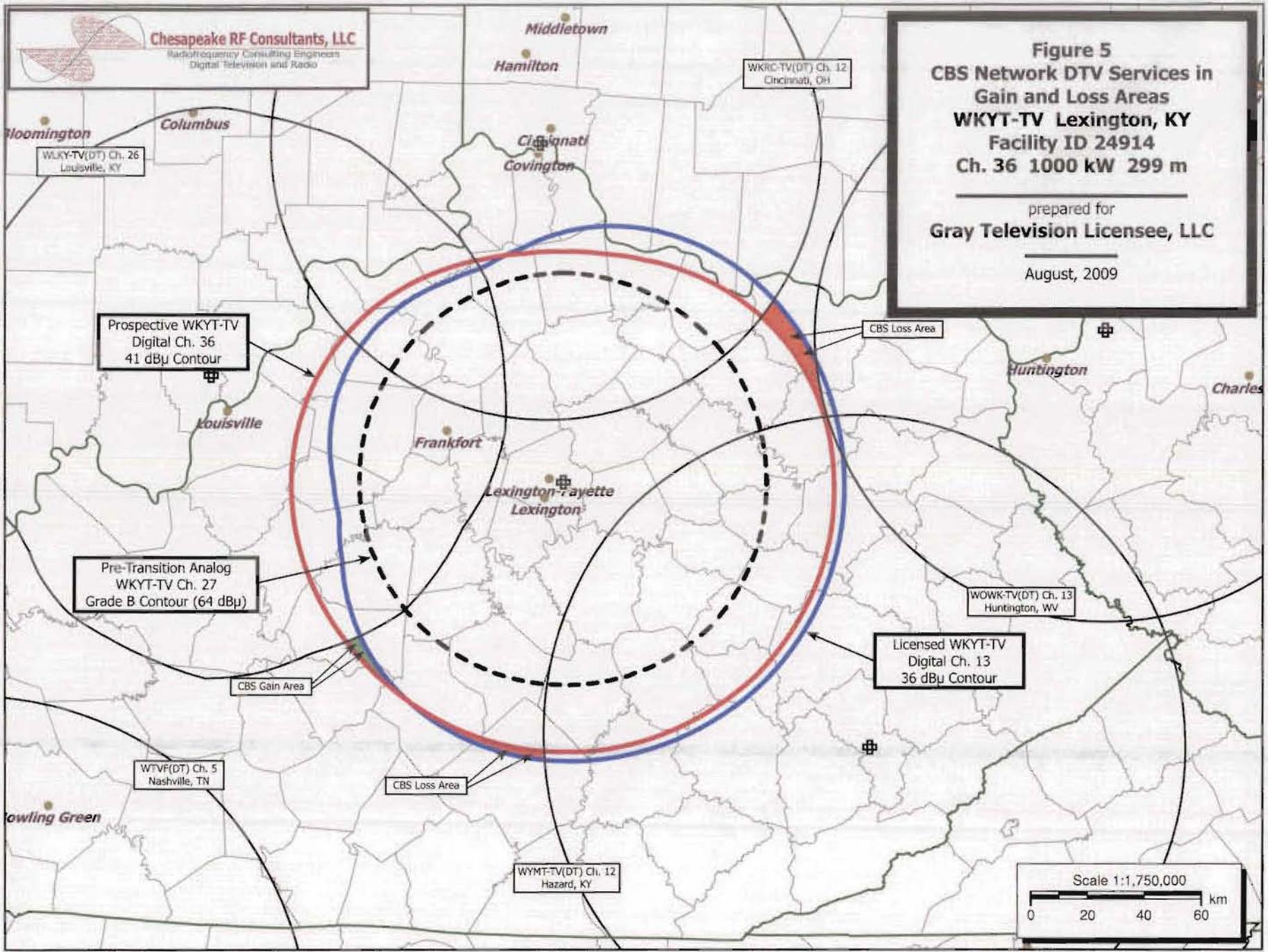
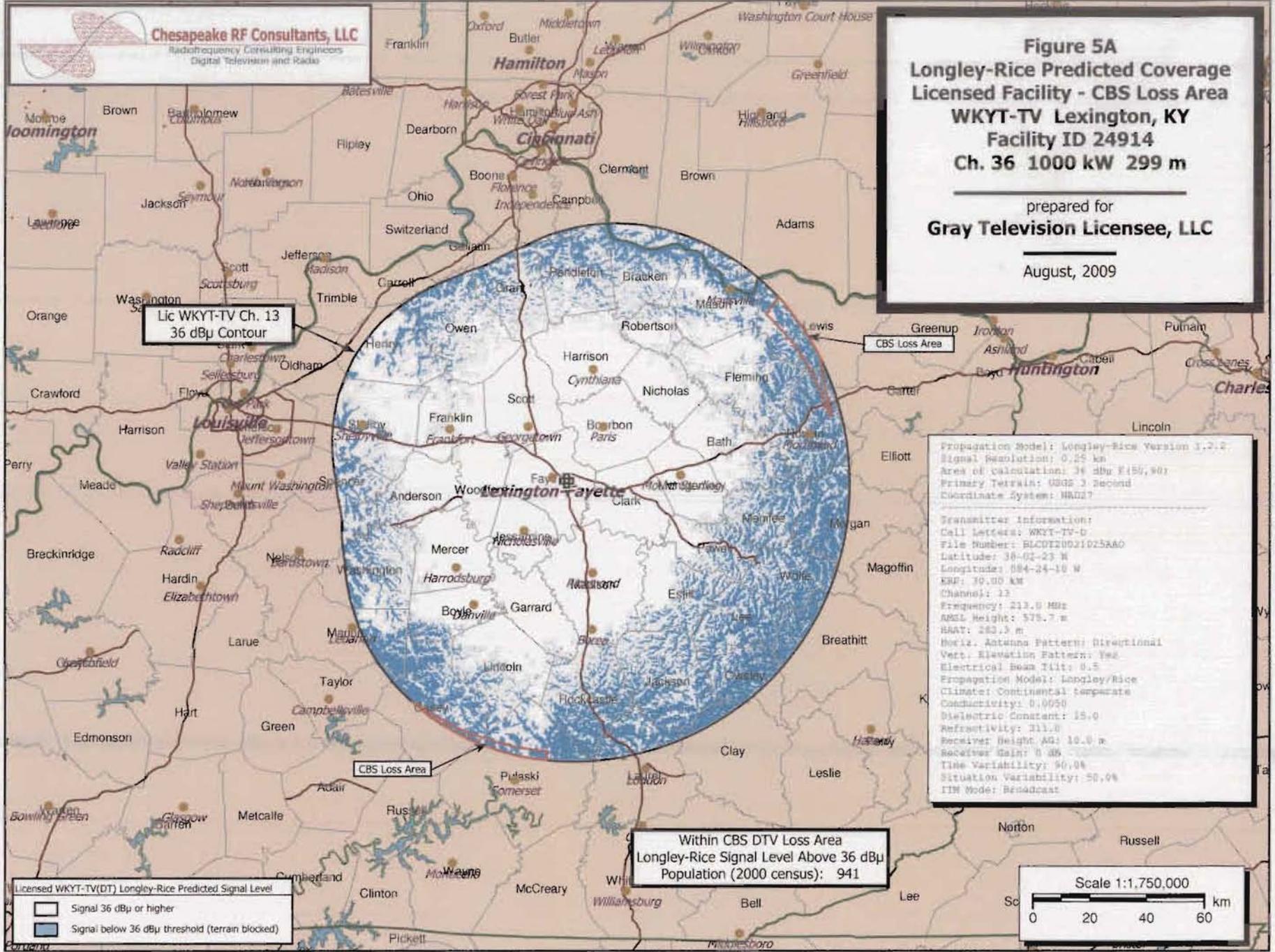




Figure 5A
Longley-Rice Predicted Coverage
Licensed Facility - CBS Loss Area
WKYT-TV Lexington, KY
Facility ID 24914
Ch. 36 1000 kW 299 m

prepared for
Gray Television Licensee, LLC

August, 2009



Lic WKYT-TV Ch. 13
36 dBμ Contour

CBS Loss Area

CBS Loss Area

Within CBS DTV Loss Area
Longley-Rice Signal Level Above 36 dBμ
Population (2000 census): 941

Propagation Model: Longley-Rice Version 3.2.2
Signal Resolution: 0.25 km
Area of calculation: 36 dBμ F150,90
Primary Terrain: USGS 3 Second
Coordinate System: NAD83

Transmitter Information:
Call Letters: WKYT-TV-D
File Number: BLCDT0021025AA0
Latitude: 38-02-23 N
Longitude: 084-24-10 W
ERP: 1000 kW
Channel: 13
Frequency: 213.0 MHz
ARL Height: 578.7 m
HAT: 299.0 m
Horiz. Antenna Pattern: Directional
Vert. Elevation Pattern: Yes
Electrical Beam Tilt: 0.5
Propagation Model: Longley/Rice
Climate: Continental temperate
Conductivity: 0.0050
Dielectric Constant: 15.0
Refractivity: 311.0
Receiver Height AG: 10.0 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Situation Variability: 50.0%
ITM Mode: Broadcast

Licensed WKYT-TV(DT) Longley-Rice Predicted Signal Level

- Signal 36 dBμ or higher
- Signal below 36 dBμ threshold (terrain blocked)

Scale 1:1,750,000

Table 1

**Alternate DTV Services in Gain and Loss Areas
Authorized Post-Transition Facilities**

prepared for

Gray Television Licensee, LLC

WKYT-TV Lexington, KY



Chesapeake RF Consultants, LLC

Radiofrequency Consulting Engineers
Digital Television and Radio

Callsign	Status	Ch.	Location	File Number
WAGV	LI	51	Harlan, KY	BLCDT-20061012AAS
WAVE	LI	47	Louisville, KY	BLCDT-20030306ABQ
WBKI-TV	LI	19	Campbellsville, KY	BLCDT-20080811ABA
WBNA	LI	8	Louisville, KY	BLCDT-20021024AAB
WBXX-TV	CP	20	Crossville, TN	BPCDT-20080619AKH
WCET	LI	34	Cincinnati, OH	BLEDT-20061031AAR
WCPO-TV	CPM	10	Cincinnati, OH	BMPCDT-20080618ABE
WCVN-TV	LI	24	Covington, KY	BLEDT-20020201ABJ
WDKY-TV	CP	31	Danville, KY	BPCDT-20090323AEA
WDRB	CPM	49	Louisville, KY	BMPCDT-20080620AJS
WHAS-TV	CPM	11	Louisville, KY	BMPCDT-20080617AEK
WHIO-TV	CP	41	Dayton, OH	BPCDT-20080619ACK
WKHA	LI	16	Hazard, KY	BLEDT-20020205AAW
WKLE	LI	42	Lexington, KY	BLEDT-20060926AJQ
WKMJ-TV	LI	38	Louisville, KY	BLEDT-20030410AAK
WKMR	LI	15	Morehead, KY	BLEDT-20020201ABI
WKOI-TV	CP	39	Richmond, IN	BPCDT-20080618ATM
WKON	LI	44	Owenton, KY	BLEDT-20011121ABI
WKPC-TV	LI	17	Louisville, KY	BLEDT-19990826KE
WKPI-TV	LI	24	Pikeville, KY	BLEDT-20020313ABL
WKRC-TV	CP	12	Cincinnati, OH	BPCDT-20080304ABV
WKSO-TV	LI	14	Somerset, KY	BLEDT-20020304ALK
WKZT-TV	LI	43	Elizabethtown, KY	BLEDT-20011221ABK
WLEX-TV	CPM	39	Lexington, KY	BMPCDT-20050728AOF
WLJC-TV	CP	7	Beattyville, KY	BPCDT-20080618ABC
WLKY-TV	LI	26	Louisville, KY	BLCDT-20030129AFL
WLWT	LI	35	Cincinnati, OH	BLCDT-20050502ABC
WMYO	CPM	51	Salem, IN	BMPCDT-20080620AJK
WOWK-TV	CP	13	Huntington, WV	BMPCDT-20080620AJA
WQCW	CP	17	Portsmouth, OH	BPCDT-20080618ADI
WSAZ-TV	CPM	23	Huntington, WV	BMPCDT-20090416AWI
WSBN-TV	LI	32	Norton, VA	BLEDT-20030428ABR
WTVQ-DT	CP	40	Lexington, KY	BPCDT-20081216BJH
WUPX-TV	LI	21	Morehead, KY	BLCDT-20040901ACJ
WXIX-TV	LI	29	Newport, KY	BLCDT-20000908ABI
WYMT-TV	LI	12	Hazard, KY	BLCDT-20040109ACY

36 stations total

Table 2 WKYT-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 1 of 22)

TW Census data selected 2000
Post Transition Data Base Selected /space/software/cdbs/pt_tvdb.scf

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 07-17-2009 Time: 14:48:06

Record Selected for Analysis

WKYT-DT USERRECORD-01 LEXINGTON JD KY US
Channel 36 ERP 1000. kW HAAT 298. m RCAMSL 00592 m
Latitude 038-02-23 Longitude 0084-24-10
Status APP Zone 2 Border
Dir Antenna Make usr Model WKYT-036_04 Beam tilt N Ref Azimuth 0.
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

Azimuth (Deg)	ERP (kW)	HAAT (m)	41.0 dBu F(50,90) (km)
0.0	124.609	313.9	81.2
45.0	451.584	301.3	89.7
90.0	980.100	290.8	95.5
135.0	915.849	304.0	96.5
180.0	975.144	288.6	95.2
225.0	915.849	290.5	94.8
270.0	980.100	294.0	95.9
315.0	451.584	304.2	90.0

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Table 2 WKYT-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 2 of 22)

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Call	City/State	ARN
36	WKYT-DT	LEXINGTON JD KY	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist (km)	Status	Application	Ref. No.
28	WBKI-CA	LOUISVILLE KY	131.3	LIC	BLTTL	-20010507AAD
35	WLWT	CINCINNATI OH	121.0	LIC	BLCDT	-20050502ABC
35	WLWT	CINCINNATI OH	121.0	PLN	DTVPLN	-DTVP1303
36	WFFT-TV	FORT WAYNE IN	347.9	CP MOD	BMPCDT	-20070125ACY
36	WFFT-TV	FORT WAYNE IN	347.9	PLN	DTVPLN	-DTVP1325
36	WTWO	TERRE HAUTE IN	291.9	CP MOD	BMPCDT	-20070125ADB
36	WTWO	TERRE HAUTE IN	291.9	PLN	DTVPLN	-DTVP1327
36	WKMU	MURRAY KY	394.6	LIC	BLEDT	-20020304ALG
36	WKMU	MURRAY KY	394.6	PLN	DTVPLN	-DTVP1328
36	WTTE	COLUMBUS OH	242.3	CP	BPCDT	-19991029AGZ
36	WTTE	COLUMBUS OH	242.3	PLN	DTVPLN	-DTVP1341
36	WYFF	GREENVILLE SC	362.7	CP	BPCDT	-20080317ABT
36	WYFF	GREENVILLE SC	362.9	PLN	DTVPLN	-DTVP1346
36	WNPX-TV	COCKEVILLE TN	289.3	LIC	BLCDT	-20040401ANA
36	WNPX	COCKEVILLE TN	289.3	PLN	DTVPLN	-DTVP1348
36	WAPK-CA	KINGSPOUR TN	288.6	LIC	BLTTL	-20030618AAX
36	WFXR-TV	ROANOKE VA	385.4	LIC	BLCDT	-20020510AAB
36	WFXR	ROANOKE VA	385.4	PLN	DTVPLN	-DTVP1352
36	WBQC-CA	CINCINNATI OH	120.9	LIC	BLTTL	-20041221ABW

Analysis of Interference to Affected Station 1

Channel	Call	City/State	Application	Ref. No.
28	WBKI-CA	LOUISVILLE KY	BLTTL	-20010507AAD

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist (km)	Status	Application	Ref. No.
21	WBNA	LOUISVILLE KY	37.1	LIC	BLCT	-19890201KS
24	WCVN-TV	COVINGTON KY	138.5	LIC	BLEDT	-20020201ABJ
24	WCVN-TV	COVINGTON KY	138.5	PLN	DTVPLN	-DTVP0878
26	WLKY-TV	LOUISVILLE KY	2.1	LIC	BLCDT	-20030129AFL
26	WLKY-TV	LOUISVILLE KY	2.1	PLN	DTVPLN	-DTVP0949
27	WIPX-TV	BLOOMINGTON IN	119.0	LIC	BLCDT	-20040406AAH
27	WIPX	BLOOMINGTON IN	119.0	PLN	DTVPLN	-DTVP0993
28	WYZZ-TV	BLOOMINGTON IL	382.2	CP MOD	BMPCDT	-20030805AHV
28	WYZZ-TV	BLOOMINGTON IL	382.2	PLN	DTVPLN	-DTVP1030
28	WSJV	ELKHART IN	363.3	CP MOD	BMPCDT	-20080619ADY
28	WSJV	ELKHART IN	363.3	PLN	DTVPLN	-DTVP1031
28	WTVW	EVANSVILLE IN	137.2	CP	BPCDT	-19991101ACY
28	WTVW	EVANSVILLE IN	137.2	PLN	DTVPLN	-DTVP1032
28	WPTO	OXFORD OH	141.3	LIC	BLEDT	-20040714AAQ
28	WPTO	OXFORD OH	141.3	PLN	DTVPLN	-DTVP1046
30	WKOH	OWENSBORO KY	141.0	LIC	BLEDT	-20020304ALJ

Table 2 WKYT-TV OET Bulletin 69 Interference Study

(worst-case scenarios shown page 3 of 22)

30	WROH	OWENSBORO KY	141.0	PLN	DTVPLN	-DTVP1103
31	WDKY-TV	DANVILLE KY	143.9	CP	BPCDT	-20090323AEA
31	WDKY-TV	DANVILLE KY	143.9	PLN	DTVPLN	-DTVP1140
31	WDKY-DR	DANVILLE KY	143.9	APP	BPRM	-20080620AOU
35	WLWT	CINCINNATI OH	143.2	LIC	BLCDT	-20050502ABC
35	WLWT	CINCINNATI OH	143.2	PLN	DTVPLN	-DTVP1303
42	WCLJ-TV	BLOOMINGTON IN	119.0	CP	BPCDT	-20080618ATP
42	WCLJ-TV	BLOOMINGTON IN	119.0	PLN	DTVPLN	-DTVP1502
42	WKLE	LEXINGTON KY	143.5	LIC	BLEDT	-20060926AJQ
42	WKLE	LEXINGTON KY	143.5	PLN	DTVPLN	-DTVP1504
43	WKZT-TV	ELIZABETHTOWN KY	75.2	LIC	BLEDT	-20011221ABK
43	WKZT-TV	ELIZABETHTOWN KY	75.2	PLN	DTVPLN	-DTVP1538
36	WKYT-DT	LEXINGTON JD KY	131.3	APP	USERRECORD-01	

Proposed station is beyond the site to nearest cell evaluation distance

Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
35	WLWT	CINCINNATI OH	BLCDT	-20050502ABC

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
34	WCET	CINCINNATI OH	0.0	LIC	BLEDT	-20061031AAR
34	WCET	CINCINNATI OH	0.0	PLN	DTVPLN	-DTVP1266
34	WPBY-TV	HUNTINGTON WV	212.8	LIC	BLEDT	-20040211AAL
34	WPBY-TV	HUNTINGTON WV	212.8	PLN	DTVPLN	-DTVP1279
34	WPBY-TV	HUNTINGTON WV	212.8	CP	BPEDT	-20080619ACN
35	WNIT	SOUTH BEND IN	310.6	LIC	BLEDT	-20040106ABJ
35	WNIT	SOUTH BEND IN	310.6	PLN	DTVPLN	-DTVP1291
35	WNIT	SOUTH BEND IN	310.6	APP	BPEDT	-20081103ACU
35	WOUC-TV	CAMBRIDGE OH	297.0	LIC	BLEDT	-20050427AAB
35	WOUC-TV	CAMBRIDGE OH	297.0	PLN	DTVPLN	-DTVP1302
36	WFFT-TV	FORT WAYNE IN	227.9	CP MOD	BMPCDT	-20070125ACY
36	WFFT-TV	FORT WAYNE IN	227.9	PLN	DTVPLN	-DTVP1325
36	WTTE	COLUMBUS OH	157.2	CP	BPCDT	-19991029AGZ
36	WTTE	COLUMBUS OH	157.2	PLN	DTVPLN	-DTVP1341
36	WKYT-DT	LEXINGTON JD KY	121.0	APP	USERRECORD-01	

Total scenarios = 12

Result key: 1

Scenario 1 Affected station 2

Before Analysis

Results for: 35A OH CINCINNATI	BLCDT	20050502ABC	LIC
HAAT 311.0 m, ATV ERP 1000.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	3191533	30329.0	
not affected by terrain losses	3178413	29914.0	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	1985	123.7	
lost to ATV IX only	1985	123.7	
lost to all IX	1985	123.7	

Table 2 WKYT-TV OET Bulletin 69 Interference Study

(worst-case scenarios shown page 4 of 22)

Potential Interfering Stations Included in above Scenario 1

35A IN SOUTH BEND	BLEDT	20040106ABJ	LIC
35A OH CAMBRIDGE	BLEDT	20050427AAB	LIC
36A OH COLUMBUS	BPCDT	19991029AGZ	CP

After Analysis

Results for: 35A OH CINCINNATI	BLCDT	20050502ABC	LIC
HAAT 311.0 m, ATV ERP 1000.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	3191533	30329.0	
not affected by terrain losses	3178413	29914.0	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	14255	678.4	
lost to ATV IX only	14255	678.4	
lost to all IX	14255	678.4	

Potential Interfering Stations Included in above Scenario 1

35A IN SOUTH BEND	BLEDT	20040106ABJ	LIC
35A OH CAMBRIDGE	BLEDT	20050427AAB	LIC
36A OH COLUMBUS	BPCDT	19991029AGZ	CP
36A KY LEXINGTON JD	USERRECORD01		APP

Percent new IX = 0.3863%

Worst case new IX 0.3863% Scenario 1

Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
35	WLWT	CINCINNATI OH	DTVPLN	-DTVP1303

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
34	WCET	CINCINNATI OH	0.0	LIC	BLEDT	-20061031AAR
34	WCET	CINCINNATI OH	0.0	PLN	DTVPLN	-DTVP1266
34	WPBY-TV	HUNTINGTON WV	212.8	LIC	BLEDT	-20040211AAL
34	WPBY-TV	HUNTINGTON WV	212.8	PLN	DTVPLN	-DTVP1279
34	WPBY-TV	HUNTINGTON WV	212.8	CP	BPEDT	-20080619ACN
35	WNIT	SOUTH BEND IN	310.6	LIC	BLEDT	-20040106ABJ
35	WNIT	SOUTH BEND IN	310.6	PLN	DTVPLN	-DTVP1291
35	WNIT	SOUTH BEND IN	310.6	APP	BPEDT	-20081103ACU
35	WOUC-TV	CAMBRIDGE OH	297.0	LIC	BLEDT	-20050427AAB
35	WOUC-TV	CAMBRIDGE OH	297.0	PLN	DTVPLN	-DTVP1302
36	WFFT-TV	FORT WAYNE IN	227.9	CP MOD	BMPCDT	-20070125ACY
36	WFFT-TV	FORT WAYNE IN	227.9	PLN	DTVPLN	-DTVP1325
36	WTTE	COLUMBUS OH	157.2	CP	BPCDT	-19991029AGZ
36	WTTE	COLUMBUS OH	157.2	PLN	DTVPLN	-DTVP1341
36	WKYT-DT	LEXINGTON JD KY	121.0	APP	USERRECORD-01	

Total scenarios = 12

Table 2 WKYT-TV OET Bulletin 69 Interference Study

(worst-case scenarios shown page 5 of 22)

Result key: 13
 Scenario 1 Affected station 3
 Before Analysis

Results for: 35A OH CINCINNATI DTVPLN DTVP1303 PLN
 HAAT 311.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
Within Noise Limited Contour	3191533	30329.0
not affected by terrain losses	3178413	29914.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1985	123.7
lost to ATV IX only	1985	123.7
lost to all IX	1985	123.7

Potential Interfering Stations Included in above Scenario 1

35A IN SOUTH BEND	BLEDT	20040106ABJ	LIC
35A OH CAMBRIDGE	BLEDT	20050427AAB	LIC
36A OH COLUMBUS	BPCDT	19991029AGZ	CP

After Analysis

Results for: 35A OH CINCINNATI DTVPLN DTVP1303 PLN
 HAAT 311.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
Within Noise Limited Contour	3191533	30329.0
not affected by terrain losses	3178413	29914.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	14255	678.4
lost to ATV IX only	14255	678.4
lost to all IX	14255	678.4

Potential Interfering Stations Included in above Scenario 1

35A IN SOUTH BEND	BLEDT	20040106ABJ	LIC
35A OH CAMBRIDGE	BLEDT	20050427AAB	LIC
36A OH COLUMBUS	BPCDT	19991029AGZ	CP
36A KY LEXINGTON JD	USERRECORD01		APP

Percent new IX = 0.3863%
 Worst case new IX 0.3863% Scenario 1

Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application Ref. No.
36	WFFT-TV	FORT WAYNE IN	BMPEDT -20070125ACY

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
35	WNIT	SOUTH BEND IN	100.1	LIC	BLEDT -20040106ABJ
35	WNIT	SOUTH BEND IN	100.1	PLN	DTVPLN -DTVP1291
35	WNIT	SOUTH BEND IN	100.1	APP	BPEDT -20081103ACU
35	WLWT	CINCINNATI OH	227.9	LIC	BLCDT -20050502ABC
35	WLWT	CINCINNATI OH	227.9	PLN	DTVPLN -DTVP1303
36	WJYS	HAMMOND IN	220.5	CP	BPCDT -20080619AIZ

Table 2 WKYT-TV OET Bulletin 69 Interference Study

(worst-case scenarios shown page 6 of 22)

36	WJYS	HAMMOND IN	220.5	PLN	DTVPLN	-DTVP1326
36	WJYS	HAMMOND IN	220.5	LIC	BLCDT	-20020801ABI
36	WTWO	TERRE HAUTE IN	279.0	CP MOD	BMPEDT	-20070125ADB
36	WTWO	TERRE HAUTE IN	279.0	PLN	DTVPLN	-DTVP1327
36	WLNS-TV	LANSING MI	188.2	CP MOD	BMPEDT	-20080618AEA
36	WLNS-TV	LANSING MI	188.2	PLN	DTVPLN	-DTVP1333
36	WTE	COLUMBUS OH	225.2	CP	BPCDT	-19991029AGZ
36	WTE	COLUMBUS OH	225.2	PLN	DTVPLN	-DTVP1341
36	WYTV	YOUNGSTOWN OH	382.0	LIC	BLCDT	-20060711AAV
36	WYTV	YOUNGSTOWN OH	382.0	PLN	DTVPLN	-DTVP1342
36	WYTV	YOUNGSTOWN OH	382.0	CP	BPCDT	-20080620ALJ
36	WKYT-DT	LEXINGTON JD KY	347.9	APP	USERRECORD-01	

Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application Ref. No.
36	WFFT-TV	FORT WAYNE IN	DTVPLN -DTVP1325

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
35	WNIT	SOUTH BEND IN	100.1	LIC	BLEDT -20040106ABJ
35	WNIT	SOUTH BEND IN	100.1	PLN	DTVPLN -DTVP1291
35	WNIT	SOUTH BEND IN	100.1	APP	BPEDT -20081103ACU
35	WLWT	CINCINNATI OH	227.9	LIC	BLCDT -20050502ABC
35	WLWT	CINCINNATI OH	227.9	PLN	DTVPLN -DTVP1303
36	WJYS	HAMMOND IN	220.5	CP	BPCDT -20080619AIZ
36	WJYS	HAMMOND IN	220.5	PLN	DTVPLN -DTVP1326
36	WJYS	HAMMOND IN	220.5	LIC	BLCDT -20020801ABI
36	WTWO	TERRE HAUTE IN	279.0	CP MOD	BMPEDT -20070125ADB
36	WTWO	TERRE HAUTE IN	279.0	PLN	DTVPLN -DTVP1327
36	WLNS-TV	LANSING MI	188.2	CP MOD	BMPEDT -20080618AEA
36	WLNS-TV	LANSING MI	188.2	PLN	DTVPLN -DTVP1333
36	WTE	COLUMBUS OH	225.2	CP	BPCDT -19991029AGZ
36	WTE	COLUMBUS OH	225.2	PLN	DTVPLN -DTVP1341
36	WYTV	YOUNGSTOWN OH	382.0	LIC	BLCDT -20060711AAV
36	WYTV	YOUNGSTOWN OH	382.0	PLN	DTVPLN -DTVP1342
36	WYTV	YOUNGSTOWN OH	382.0	CP	BPCDT -20080620ALJ
36	WKYT-DT	LEXINGTON JD KY	347.9	APP	USERRECORD-01

Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application Ref. No.
36	WTWO	TERRE HAUTE IN	BMPEDT -20070125ADB

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
36	KWQC-TV	DAVENPORT IA	342.2	CP	BPCDT -20080313AAV
36	KWQC-TV	DAVENPORT IA	342.2	PLN	DTVPLN -DTVP1323

Table 2 WKYT-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 7 of 22)

36	WEFT-TV	FORT WAYNE IN	279.0	CP	MOD	BMP	CDT	-20070125ACY
36	WEFT-TV	FORT WAYNE IN	279.0	PLN		DTV	PLN	-DTV1325
36	WJYS	HAMMOND IN	293.8	CP		BPC	DT	-20080619AIZ
36	WJYS	HAMMOND IN	293.8	PLN		DTV	PLN	-DTV1326
36	WJYS	HAMMOND IN	293.8	LIC		BLC	DT	-20020801AB1
36	WKMU	MURRAY KY	300.6	LIC		BLED		-20020304ALG
36	WKMU	MURRAY KY	300.6	PLN		DTV	PLN	-DTV1328
36	WTTE	COLUMBUS OH	382.2	CP		BPC	DT	-19991029AGZ
36	WTTE	COLUMBUS OH	382.2	PLN		DTV	PLN	-DTV1341
36	WNPX-TV	COOKEVILLE TN	334.8	LIC		BLC	DT	-20040401ANA
36	WNPX	COOKEVILLE TN	334.8	PLN		DTV	PLN	-DTV1348
36	WKYT-DT	LEXINGTON JD KY	291.9	APP		USER	RECORD-01	

Total scenarios = 8

Result key: 25
Scenario 1 Affected station 6
Before Analysis

Results for: 36A IN TERRE HAUTE BMP

HAAT 248.0 m, ATV ERP 1000.0 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	714762	24983.2
not affected by terrain losses	708975	24777.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	2348	44.3
lost to ATV IX only	2348	44.3
lost to all IX	2348	44.3

Potential Interfering Stations Included in above Scenario 1

36A IA DAVENPORT	BPCDT	20080313AAV	CP
36A IN FORT WAYNE	BMP	20070125ACY	CP
36A IN HAMMOND	BPCDT	20080619AIZ	CP
36A TN COOKEVILLE	BLC	20040401ANA	LIC

After Analysis

Results for: 36A IN TERRE HAUTE BMP

HAAT 248.0 m, ATV ERP 1000.0 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	714762	24983.2
not affected by terrain losses	708975	24777.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5831	141.1
lost to ATV IX only	5831	141.1
lost to all IX	5831	141.1

Potential Interfering Stations Included in above Scenario 1

36A IA DAVENPORT	BPCDT	20080313AAV	CP
36A IN FORT WAYNE	BMP	20070125ACY	CP
36A IN HAMMOND	BPCDT	20080619AIZ	CP
36A TN COOKEVILLE	BLC	20040401ANA	LIC
36A KY LEXINGTON JD	USER	RECORD01	APP

Percent new IX = 0.4929%

Worst case new IX 0.4929% Scenario 1

#####

Table 2 WKYT-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 8 of 22)

Analysis of Interference to Affected Station 7

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
36	WTWO	TERRE HAUTE IN	DTVPLN	-DTV1327

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
36	KWQC-TV	DAVENPORT IA	342.2	CP	BPCDT	-20080313AAV
36	KWQC-TV	DAVENPORT IA	342.2	PLN	DTVPLN	-DTV1323
36	WEFT-TV	FORT WAYNE IN	279.0	CP MOD	BMP	20070125ACY
36	WEFT-TV	FORT WAYNE IN	279.0	PLN	DTVPLN	-DTV1325
36	WJYS	HAMMOND IN	293.8	CP	BPCDT	-20080619AIZ
36	WJYS	HAMMOND IN	293.8	PLN	DTVPLN	-DTV1326
36	WJYS	HAMMOND IN	293.8	LIC	BLC	-20020801AB1
36	WKMU	MURRAY KY	300.6	LIC	BLED	-20020304ALG
36	WKMU	MURRAY KY	300.6	PLN	DTVPLN	-DTV1328
36	WTTE	COLUMBUS OH	382.2	CP	BPCDT	-19991029AGZ
36	WTTE	COLUMBUS OH	382.2	PLN	DTVPLN	-DTV1341
36	WNPX-TV	COOKEVILLE TN	334.8	LIC	BLC	-20040401ANA
36	WNPX	COOKEVILLE TN	334.8	PLN	DTVPLN	-DTV1348
36	WKYT-DT	LEXINGTON JD KY	291.9	APP	USER	RECORD-01

Total scenarios = 8

Result key: 33
Scenario 1 Affected station 7
Before Analysis

Results for: 36A IN TERRE HAUTE DT

HAAT 248.0 m, ATV ERP 1000.0 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	714762	24983.2
not affected by terrain losses	708975	24777.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	2348	44.3
lost to ATV IX only	2348	44.3
lost to all IX	2348	44.3

Potential Interfering Stations Included in above Scenario 1

36A IA DAVENPORT	BPCDT	20080313AAV	CP
36A IN FORT WAYNE	BMP	20070125ACY	CP
36A IN HAMMOND	BPCDT	20080619AIZ	CP
36A TN COOKEVILLE	BLC	20040401ANA	LIC

After Analysis

Results for: 36A IN TERRE HAUTE DT

HAAT 248.0 m, ATV ERP 1000.0 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	714762	24983.2
not affected by terrain losses	708975	24777.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5831	141.1
lost to ATV IX only	5831	141.1
lost to all IX	5831	141.1

Table 2 WKYT-TV OET Bulletin 69 Interference Study

(worst-case scenarios shown page 9 of 22)

Potential Interfering Stations Included in above Scenario 1

36A TA DAVENPORT	BPCDT	20080313AAV	CP
36A IN FORT WAYNE	BMPCDT	20070125ACY	CP
36A IN HAMMOND	BPCDI	20080619AIZ	CP
36A TN COOKEVILLE	BLCDT	20040401ANA	LIC
36A KY LEXINGTON JD	USERRECORD01		APP

Percent new IX = 0.4929%

Worst case new IX 0.4929% Scenario 1

Analysis of Interference to Affected Station 8

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
36	WKMU	MURRAY KY	BLEDT	-20020304ALG

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist (km)	Status	Application	Ref. No.
36	WABM	BIRMINGHAM AL	389.7	LIC	BLCDT	-20060406AAJ
36	WABM	BIRMINGHAM AL	389.7	PLN	DTVPLN	-DTVPI312
36	KKAP	LITTLE ROCK AR	414.5	CP	BPEDT	-20080618AUA
36	KKAP	LITTLE ROCK AR	414.5	PLN	DTVPLN	-DTVPI314
36	WTWO	TERRE HAUTE IN	300.6	CP MOD	BMPCDT	-20070125ADB
36	WTWO	TERRE HAUTE IN	300.6	PLN	DTVPLN	-DTVPI327
36	WMAV-TV	OXFORD MS	287.2	CP MOD	BMPELT	-20081024ABM
36	WMAV-TV	OXFORD MS	287.2	PLN	DTVPLN	-DTVPI335
36	WNPX-TV	COOKEVILLE TN	162.6	LIC	BLCDT	-20040401ANA
36	WNPX	COOKEVILLE TN	162.6	PLN	DTVPLN	-DTVPI348
36	WKYT-DT	LEXINGTON JD KY	394.6	APP	USERRECORD-01	

Proposed station is beyond the site to nearest cell evaluation distance

Analysis of Interference to Affected Station 9

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
36	WKMU	MURRAY KY	DTVPLN	-DTVPI328

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist (km)	Status	Application	Ref. No.
36	WABM	BIRMINGHAM AL	389.7	LIC	BLCDT	-20060406AAJ
36	WABM	BIRMINGHAM AL	389.7	PLN	DTVPLN	-DTVPI312
36	KKAP	LITTLE ROCK AR	414.5	CP	BPEDT	-20080618AUA
36	KKAP	LITTLE ROCK AR	414.5	PLN	DTVPLN	-DTVPI314
36	WTWO	TERRE HAUTE IN	300.6	CP MOD	BMPCDT	-20070125ADB
36	WTWO	TERRE HAUTE IN	300.6	PLN	DTVPLN	-DTVPI327
36	WMAV-TV	OXFORD MS	287.2	CP MOD	BMPELT	-20081024ABM
36	WMAV-TV	OXFORD MS	287.2	PLN	DTVPLN	-DTVPI335

Table 2 WKYT-TV OET Bulletin 69 Interference Study

(worst-case scenarios shown page 10 of 22)

36	WNPX-TV	COOKEVILLE TN	162.6	LIC	BLCDT	-20040401ANA
36	WNPX	COOKEVILLE TN	162.6	PLN	DTVPLN	-DTVPI348
36	WKYT-DT	LEXINGTON JD KY	394.6	APP	USERRECORD-01	

Proposed station is beyond the site to nearest cell evaluation distance

Analysis of Interference to Affected Station 10

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
36	WTTE	COLUMBUS OH	BPCDT	-19991029AGZ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist (km)	Status	Application	Ref. No.
35	WOUC-TV	CAMBRIDGE OH	148.5	LIC	BLEDT	-20050427AAB
35	WOUC-TV	CAMBRIDGE OH	148.5	PLN	DTVPLN	-DTVPI302
35	WLWT	CINCINNATI OH	157.2	LIC	BLCDT	-20050502ABC
35	WLWT	CINCINNATI OH	157.2	PLN	DTVPLN	-DTVPI303
36	WEFT-TV	FORT WAYNE IN	225.2	CP MOD	BMPCDT	-20070125ACY
36	WEFT-TV	FORT WAYNE IN	225.2	PLN	DTVPLN	-DTVPI325
36	WTWO	TERRE HAUTE IN	382.2	CP MOD	BMPCDT	-20070125ADB
36	WTWO	TERRE HAUTE IN	382.2	PLN	DTVPLN	-DTVPI327
36	WGPT	OAKLAND MD	324.3	CP	BPEDT	-20080318AAB
36	WGPT	OAKLAND MD	324.3	PLN	DTVPLN	-DTVPI332
36	WGPT	OAKLAND MD	324.3	APP	BMPELT	-20080620ABK
36	WLNS-TV	LANSING MI	326.1	CP MOD	BMPCDT	-20080618AEA
36	WLNS-TV	LANSING MI	326.1	PLN	DTVPLN	-DTVPI333
36	WYTV	YOUNGSTOWN OH	237.2	LIC	BLCDT	-20060711AAV
36	WYTV	YOUNGSTOWN OH	237.2	PLN	DTVPLN	-DTVPI342
36	WYTV	YOUNGSTOWN OH	237.2	CP	BPEDT	-20080620ALJ
36	WPXR-TV	ROANOKE VA	393.6	LIC	BLCDT	-20020510AAB
36	WPXR	ROANOKE VA	393.6	PLN	DTVPLN	-DTVPI352
36	WKYT-DT	LEXINGTON JD KY	242.3	APP	USERRECORD-01	

Total scenarios = 576

Result key: 425

Scenario 385 Affected station 10 Before Analysis

Results for: 36A OH COLUMBUS BPCDT 19991029AGZ CP
HAAT 271.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2405556	27206.6
not affected by terrain losses	2349604	26348.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	38740	475.0
lost to ATV IX only	38740	475.0
lost to all IX	38740	475.0

Potential Interfering Stations Included in above Scenario 385

35A OH CAMBRIDGE	BLEDT	20050427AAB	LIC
35A OH CINCINNATI	BLCDT	20050502ABC	LIC
36A IN FORT WAYNE	BMPCDT	20070125ACY	CP
36A IN TERRE HAUTE	BMPCDT	20070125ADB	CP