

TECHNICAL EXHIBIT
DTV DISPLACEMENT APPLICATION
FOR CONSTRUCTION PERMIT
STATION W11BJ (FACILITY ID 2650)
SPRINGFIELD, MASSACHUSETTS

NOVEMBER 5, 2002

CH 28(0) 5.6 KW-DA

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Technical Narrative

This technical exhibit supports a digital television (DTV) displacement application for low power television (LPTV) station W11BJ at Hartford, Connecticut. This displacement application is being submitted because an earlier displacement application filed by station W11BJ for channel 16 (BPTVL-19980601QZ, Facility ID 2650) remains pending following the filing of several informal objections by various public safety/land mobile radio operators (ie, land mobile radio service or LMRS).

Station W11BJ is currently licensed to operate on channel 11 with a directional antenna (DA) system (BLTVL-19910219JK, Facility ID 2650). The maximum visual effective radiated power (ERP) is 0.083 kilowatt (kW). The antenna center of radiation is 300 meters above mean sea level (AMSL). The transmitter site coordinates are 41-42-13, 72-49-57.

Proposed Facilities

Station W11BJ is being displaced from its current operation by the co-channel DTV allotment and operation on channel 11 for station WWLP-DT at Springfield, Massachusetts. Station WWLP-DT is located only 43.7 kilometers north of the present W11BJ site.

It is proposed to relocate W11BJ to an existing tower on Mount Tom near Springfield, Massachusetts. The proposed W11BJ site is 61.7 kilometers north of the present W11BJ site. It is proposed to operate on channel 28 with a zero (0) carrier offset. It is proposed to use an Antenna Concepts ACS8A directional antenna system with a “cardioid” shaped pattern (FCC Antenna ID 17788). The major lobe of the antenna pattern will be oriented toward 20 degrees True. The proposed maximum visual ERP will be 5.6 kW. The antenna system will be installed with the center of radiation at 13.7 meters above ground level (AGL) and 379.5 meters AMSL (see Figure 1). The power gain for the proposed antenna system is 16. It is proposed to couple the antenna system to a 0.5 kW transmitter through approximately 30.5 meters (100 feet) of Andrew LDF5-50A 7/8 inch foam dielectric coaxial transmission line. The efficiency of the transmission line on channel 28 is 80.6%. The transmitter power output (TPO) will be approximately 0.434 kW. This combination results in the proposed maximum visual ERP of 5.6 kW. The proposed transmitter site is on Mount Tom and the FCC Tower Registration Number is 1018460. The proposed transmitter site coordinates are 42-14-30, 72-38-57 (NAD-27). Stations WGGB-TV (Ch.40), WGGB-DT (Ch.55), WGBY-TV (Ch.57), WGBY-DT (Ch.58), W67DF (Ch.67), and WHYN-FM (Ch.226B) are located at the proposed site.

NTSC Allocation Considerations

A study has been conducted using the provisions of Sections 74.705, 74.707 and 74.709 of the FCC rules to assure that the proposal will not create prohibited interference with other authorized or pending analog (NTSC) full-power TV, LPTV and Class A TV stations. The proposed W11BJ operation complies with the FCC’s allocation standards with respect to other analog assignments except as listed below.

WUNI(TV), Channel 27, Worcester, MA
W29AT, CP, Channel 28(0), Manchester, NH
WLWC(TV), Channel 28(-), New Bedford, MA
WVER(TV), Channel 28(+), Rutland, VT

With respect to the above assignments, interference calculations have been made using the procedures outlined in the FCC's OET-69 Bulletin and a 1 kilometer grid.

Figure 3 shows the calculated interference caused to station WUNI from pertinent surrounding analog and DTV assignments, and the proposed W11BJ operation on channel 28. Sheet 5 of Figure 3 shows that the proposed W11BJ operation causes new or unique interference to 3,818 people or 0.06% of the population within the WUNI analog service area. This calculated interference (0.06%) complies with the FCC's 0.5% acceptable interference threshold.

Figure 4 shows the calculated interference caused by the proposed W11BJ channel 28 operation to stations W29AT, WLWC and WVER. As shown, the calculated interference complies with the FCC's 0.5% acceptable interference threshold.

Waiver of the FCC's rules is respectfully requested for the proposed W11BJ channel 28 operation with respect to WUNI, W29AT, WLWC and WVER based on use of the interference procedures outlined in the FCC's OET-69 Bulletin.

The proposed W11BJ site is 308 kilometers from the nearest point of the US/Canada border. The proposed W11BJ 19 dBu F(50,10) analog interfering contour, and 31.8 dBu F(10,10) DTV interfering contour do not reach the border. Therefore coordination of the proposed W11BJ operation with Canada should not be a problem.

The closest point of the Mexican border is more than 2600 kilometers to the southwest. The closest FCC monitoring station is at Belfast, Maine, approximately 378 kilometers to the northeast. The closest point of the National Radio Quiet Zone (VA/WV) is more than 500 kilometers to the southwest. The Table Mountain Radio Quiet Zone is more than 2700 kilometers to the west. The closest radio astronomy site using channel 37 is at Hancock, New Hampshire, approximately 94 kilometers to the northeast. These separations are considered sufficient to not be a coordination concern.

DTV Allocation Considerations

Pertinent DTV allotments and assignments on channels 27, 28 and 29 have been examined using the procedures outlined in the FCC's OET-69 Bulletin.¹ Figure 5 shows the calculated interference caused by the proposed W11BJ operation to pertinent DTV allotments and assignments. As shown by Figure 5, the proposed W11BJ operation complies with the FCC's "de minimis" (0.5%) interference policy.

The applicant recognizes the proposal is secondary to authorized full-service analog and DTV operations. The applicant understands that it must correct and/or eliminate prohibited interference that may result from its proposed operation. If necessary, a waiver of the FCC rules is respectfully requested based on use of the procedures outlined in the FCC's OET-69 Bulletin.

Radiofrequency Electromagnetic Field Exposure

The proposed W11BJ facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. A maximum visual ERP of 5.6 kW with 10% aural power was assumed. A relative field value of 0.23 was assumed for the Antenna Concepts 8-bay directional antenna's downward radiation (see Figure 2). The calculated power density at a point 2 meters (6.6 feet) above ground level is 0.0362 mW/cm^2 . This is less than 10% of the FCC's recommended limit of 0.37 mW/cm^2 for channel 28 for an "uncontrolled" environment. It is less than 2% of the FCC's recommended limit for a "controlled" environment.

¹ The duTreil, Lundin & Rackley, Inc. DTV interference analysis program is based on the program and procedures outlined by the FCC in the Sixth Report and Order; subsequent Memorandum Opinion and Order; and FCC OET Bulletin No. 69. A nominal grid size resolution of 1 km was employed. An Alpha based processor computer system was employed. The results have been found to be in very close agreement with the results of the FCC implementation of OET Bulletin No. 69.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down. The proposed W11BJ operation appears to be otherwise categorically excluded from environmental processing as it complies with all the criteria for such an exclusion in Section 1.1306.

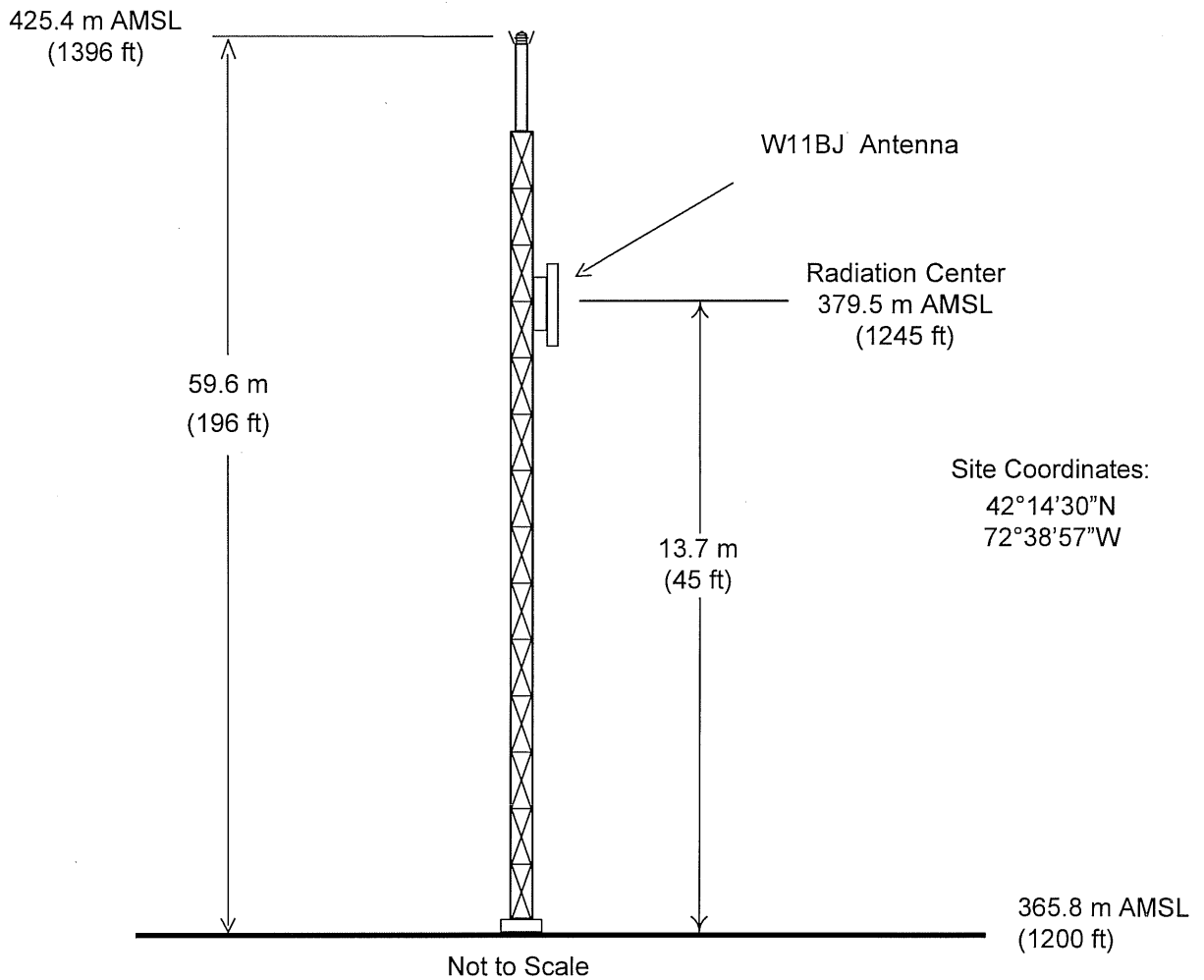
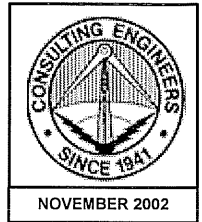
John A. Lundin

du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
(941) 329-6000 voice
(941) 329-6030 fax
john@DLR.com e-mail

November 5, 2002

Figure 1

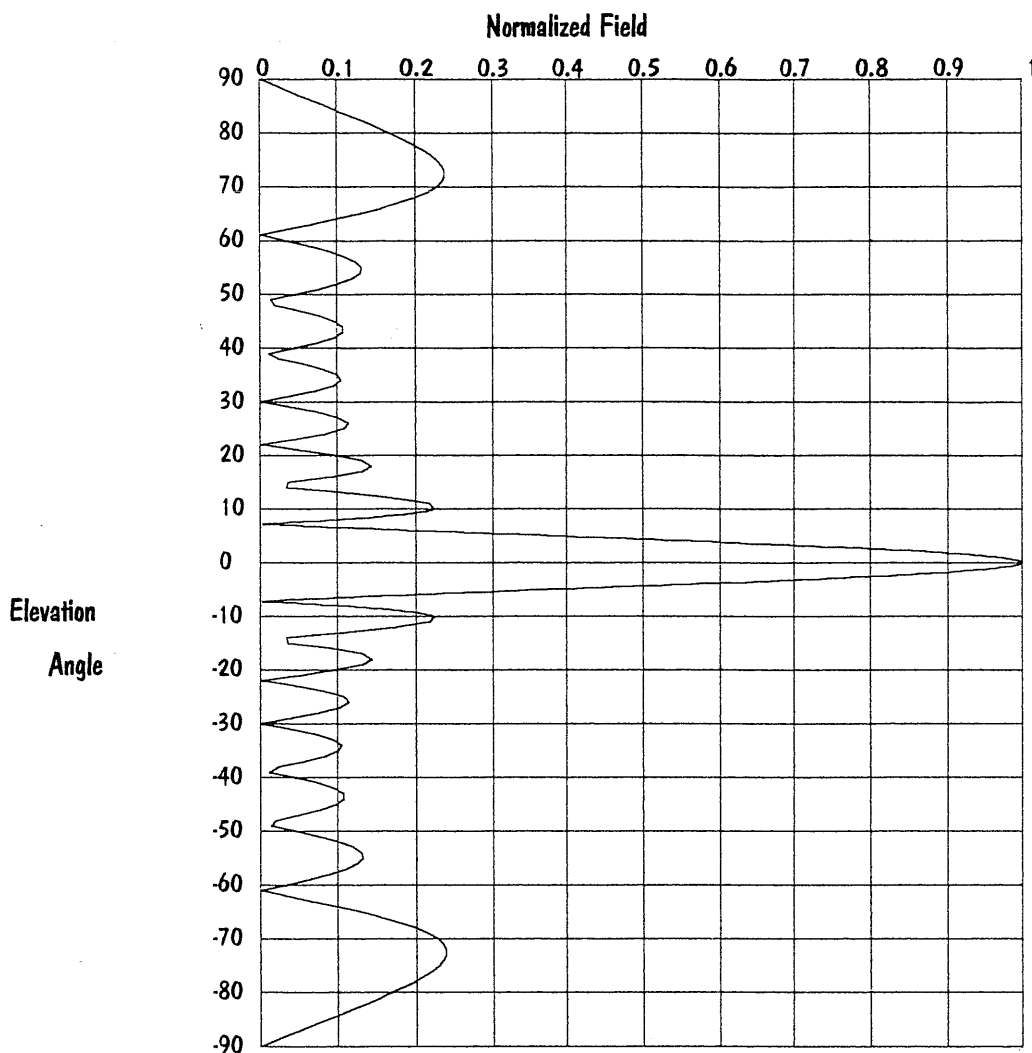
FCC Tower ID: 1018460



PROPOSED ANTENNA AND SUPPORTING STRUCTURE

STATION W11BJ
SPRINGFIELD, MASSACHUSETTS
CH 28(0) 5.6 KW-DA

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



Elevation Pattern

Scale: Linear

Units: Absolute

Antenna Concepts Inc.

CLIENT: *da Treil, Lundin & Rackley, Inc.*

Date: 4/13/1998

ANTENNA TYPE: *ACS8 bay Low Power slot*

FREQUENCY: *UHF*

PATTERN POL.: *Horizontal*

Beam Tilt (Deg.): *0*

Elev. DIRECTIVITY: *8.9688/ 9.5273dBd*

Null Fill (%) : *, ,*

Software Design by: *Micro-Tek Engineering*

Study Date: 20021104

Study Start: 16:01:34

INTERFERENCE RECEIVED BY WUNI(TV) FROM SURROUNDING ASSIGNMENTS & PROPOSED W11BJ

CELL SIZE : 1.0 km

Using offset in determining thresholds

Per 6th Report & Order and FCC OET-69 Bulletin

WUNI 42-20-09 071-42-57 27(Z) 1150.0 kW 614 m AMSL 50.0 % 63.0 dBu

WORCESTER MA 16597 5107 FCC NTSC BL: 6770869 FCC IX POP%: 0.2

LIC BLCT-19991214ABC

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	22496.3 sq km	6770402
not affected by terrain losses	20150.0	6345445

DWGBHT 42-18-37 071-14-14 19(0) 1000.0 kW-DA 361 m AMSL 10.0 % 39.2 dBu

BOSTON MA 29979 6740 DTVSERVICE: 6740000 NTSCSERVICE: 6697000

DTVALT DTV ALLOTMENT

0.99	0.98	0.97	0.96	0.95	0.95	0.96	0.96	0.97	0.97	0.97	0.97
0.97	0.97	0.98	0.98	0.99	0.99	1.00	1.00	1.00	1.00	0.99	0.99
0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -32.00 dB

	Area	Pop
Interference	25.8 sq km	55004

DWCVBT 42-18-37 071-14-14 20(0) 1000.0 kW-DA 345 m AMSL 10.0 % 39.3 dBu

BOSTON MA 29346 6612 DTVSERVICE: 6612000 NTSCSERVICE: 5683000

DTVALT DTV ALLOTMENT

0.98	0.97	0.97	0.96	0.95	0.95	0.95	0.96	0.96	0.97	0.97	0.97
0.97	0.97	0.97	0.98	0.99	0.99	1.00	1.00	1.00	0.99	0.99	0.99
0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -35.00 dB

	Area	Pop
Interference	7.9 sq km	25843

WEDH 41-46-27 072-48-20 24(Z) 813.0 kW 359 m AMSL 10.0 % 62.7 dBu
HARTFORD CT 11674 2651 FCC NTSC BL: 3009464 FCC IX POP%:11.0
LIC BLET-341
Using DEFAULT vertical antenna pattern

D/U Baseline: -33.00 dB

	Area	Pop
Interference	4.0 sq km	531

WFXT 42-18-12 071-13-08 25(+) 1950.0 kW-DA 401 m AMSL 10.0 % 62.8 dBu
BOSTON MA 18684 6013 FCC NTSC BL: 6299876 FCC IX POP%: 0.6
LIC BMLCT-19911001LV
0.94 0.94 0.94 0.89 0.89 0.84 0.84 0.84 0.84 0.84 0.84 0.84
0.84 0.89 0.89 0.89 0.89 0.94 0.94 0.94 0.94 1.00 1.00 1.00
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.94
Ref Az: 0.0
Using DEFAULT vertical antenna pattern

D/U Baseline: -26.00 dB

	Area	Pop
Interference	123.0 sq km	202494

WHPX 41-25-05 072-11-55 26(+) 2820.0 kW-DA 447 m AMSL 10.0 % 62.9 dBu
NEW LONDON CT 15227 1723 FCC NTSC BL: 3413484 FCC IX POP%: 1.6
LIC BLCT-19860924KI
0.46 0.49 0.59 0.72 0.84 0.94 0.99 1.00 0.97 0.89 0.78 0.63
0.46 0.24 0.22 0.27 0.34 0.43 0.44 0.37 0.28 0.22 0.21 0.34
0.58 0.72 0.85 0.93 0.98 1.00 0.96 0.88 0.77 0.65 0.55 0.48
Ref Az: 0.0
Using DEFAULT vertical antenna pattern

D/U Baseline: -3.00 dB

	Area	Pop
Interference	978.2 sq km	113600

WMEA-TV 43-25-00 070-48-09 26(-) 692.0 kW 360 m AMSL 10.0 % 62.9 dBu
BIDDEFORD ME 11449 645 FCC NTSC BL: 724324 FCC IX POP%: 0.1
LIC BLET-379
Using DEFAULT vertical antenna pattern

D/U Baseline: -3.00 dB

	Area	Pop
Interference	231.2 sq km	25106

WTBY-DT 41-29-20 073-56-55 27(N) 800.0 kW-DA 497 m AMSL 10.0 % 40.0 dBu
POUGHKEEPSIE NY 16625 2059 DTVSERVICE: 2059000 NTSCSERVICE: 1742000

CP BPCDT-19990414KG

0.68	0.67	0.66	0.64	0.62	0.61	0.60	0.61	0.63	0.67	0.72	0.77
0.82	0.87	0.92	0.95	0.98	0.99	1.00	0.99	0.98	0.95	0.92	0.87
0.82	0.77	0.72	0.67	0.63	0.61	0.60	0.61	0.62	0.64	0.66	0.67

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 34.00 dB

	Area	Pop
Interference	888.9 sq km	179647

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0 dBu
SPRINGFIELD MA

PROPOSAL

1.00	0.98	0.96	0.93	0.93	0.94	0.97	0.99	0.98	0.95	0.87	0.77
0.63	0.47	0.35	0.23	0.21	0.22	0.23	0.22	0.21	0.23	0.35	0.47
0.63	0.77	0.87	0.95	0.98	0.99	0.97	0.94	0.93	0.93	0.96	0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -13.00 dB

	Area	Pop
Interference	143.9 sq km	36116

WLWC 41-46-39 070-55-41 28(-) 5000.0 kW-DA 256 m AMSL 10.0 % 63.1 dBu
NEW BEDFORD MA 13032 2424 FCC NTSC BL: 4113685 FCC IX POP%: 0.1

LIC BLCT-19970424KE

0.79	0.75	0.68	0.58	0.46	0.35	0.28	0.30	0.37	0.42	0.44	0.40
0.34	0.28	0.30	0.39	0.51	0.62	0.71	0.76	0.80	0.83	0.86	0.89
0.93	0.96	0.98	1.00	1.00	0.99	0.97	0.94	0.91	0.88	0.85	0.82

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -13.00 dB

	Area	Pop
Interference	2068.5 sq km	896016

DWBZTV 42-18-37 071-14-14 30(0) 818.0 kW-DA 404 m AMSL 10.0 % 40.3 dBu
BOSTON MA 28923 6694 DTVSERVICE: 6694000 NTSCSERVICE: 6716000
DTVALT DTV ALLOTMENT

0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
0.98	0.98	0.98	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -34.00 dB

	Area	Pop
Interference	8.9 sq km	19415

WPXB-DT 42-59-02 071-35-20 34(N) 80.0 kW-DA 431 m AMSL 10.0 % 40.7 dBu
MERRIMACK NH 10385 1917 DTVSERVICE: 1917000 NTSCSERVICE: 1876000
CP BPCDT-19990930AAX

0.28	0.36	0.40	0.37	0.30	0.25	0.30	0.43	0.58	0.73	0.84	0.92
0.98	1.00	0.97	0.89	0.77	0.67	0.61	0.57	0.59	0.57	0.60	0.67
0.76	0.88	0.96	1.00	0.98	0.92	0.84	0.73	0.59	0.44	0.31	0.25

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -34.00 dB

	Area	Pop
Interference	2.0 sq km	112

WVTA 43-26-15 072-27-08 41(Z) 1050.0 kW-DA 994 m AMSL 10.0 % 64.2 dBu
WINDSOR VT 16023 370 FCC NTSC BL: 709353 FCC IX POP%: 2.9
CP BPET-19990413KF

1.00	0.93	0.72	0.68	0.86	0.86	0.67	0.69	0.92	1.00	0.93	0.72
0.68	0.86	0.86	0.67	0.69	0.92	1.00	0.93	0.72	0.68	0.86	0.86
0.67	0.69	0.92	1.00	0.93	0.72	0.68	0.86	0.86	0.67	0.69	0.92

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -25.00 dB

	Area	Pop
Interference	20.8 sq km	287

WHDH-DT 42-18-41 071-13-00 42(N) 948.0 kW 332 m AMSL 10.0 % 41.3 dBu
BOSTON MA 27652 6651 DTVSERVICE: 6651000 NTSCSERVICE: 6552000
LIC BLCDDT-19990408KF
Using DEFAULT vertical antenna pattern

D/U Baseline: -31.00 dB

	Area	Pop
Interference	38.7 sq km	75394

<u>Call Sign</u>	<u>No. cells</u>	<u>Unique Area</u>	<u>Unique Pop</u>	
WFXT	47	46.6 sq km	92798	
WHPX	601	596.2	60802	
WMEA-TV	228	226.1	24899	
WTBY-DT	421	417.7	109621	
W11BJ-P	30	29.8	3818	(0.06%)
WLWC	1949	1933.5	820247	
WPXB-DT	2	2.0	112	
WVTA	8	7.9	70	
WHDH-DT	2	2.0	4874	

Study end time: 16:03:50

Study Date: 20021104
Study Start: 15:49:52
INTERFERENCE CAUSED TO ANALOG (NTSC) ASSIGNMENTS BY PROPOSED W11BJ
CELL SIZE : 1.0 km
Using offset in determining thresholds
Per 6th Report & Order and FCC OET-69 Bulletin

W29AT 42-43-23 071-27-39 28(Z) 1.04 kW 126.8 m AMSL 50.0 % 74.0 dBu
MANCHESTER NH
CP BPTTL-20011009ACG
Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	140.0 sq km	88369
not affected by terrain losses	140.0	88369

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA
PROPOSAL

1.00	0.98	0.96	0.93	0.93	0.94	0.97	0.99	0.98	0.95	0.87	0.77
0.63	0.47	0.35	0.23	0.21	0.22	0.23	0.22	0.21	0.23	0.35	0.47
0.63	0.77	0.87	0.95	0.98	0.99	0.97	0.94	0.93	0.93	0.96	0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 45.00 dB

	Area	Pop
Interference	0 sq km	0 (0.0%)

WLWC 41-46-39 070-55-41 28(-) 5000.0 kW-DA 256 m AMSL 50.0 % 63.1 dBu
NEW BEDFORD MA 13032 2424 FCC NTSC BL: 4113685 FCC IX POP%: 0.1
LIC BLCT-19970424KE
0.79 0.75 0.68 0.58 0.46 0.35 0.28 0.30 0.37 0.42 0.44 0.40
0.34 0.28 0.30 0.39 0.51 0.62 0.71 0.76 0.80 0.83 0.86 0.89
0.93 0.96 0.98 1.00 1.00 0.99 0.97 0.94 0.91 0.88 0.85 0.82

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	15541.8 sq km	4120092
not affected by terrain losses	15398.1	4050818

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA
PROPODSAL
1.00 0.98 0.96 0.93 0.93 0.94 0.97 0.99 0.98 0.95 0.87 0.77
0.63 0.47 0.35 0.23 0.21 0.22 0.23 0.22 0.21 0.23 0.35 0.47
0.63 0.77 0.87 0.95 0.98 0.99 0.97 0.94 0.93 0.93 0.96 0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 28.00 dB

	Area	Pop
Interference	9.8 sq km	175 (0.004%)

WVER 43-39-32 073-06-25 28(+) 275.0 kW 688 m AMSL 50.0 % 63.1 dBu
RUTLAND VT 10054 243 FCC NTSC BL: 359274 FCC IX POP%: 0.0
LIC BLET-19930715KJ

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	15321.4 sq km	357564
not affected by terrain losses	10019.7	242701

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA
PROPOSAL
1.00 0.98 0.96 0.93 0.93 0.94 0.97 0.99 0.98 0.95 0.87 0.77
0.63 0.47 0.35 0.23 0.21 0.22 0.23 0.22 0.21 0.23 0.35 0.47
0.63 0.77 0.87 0.95 0.98 0.99 0.97 0.94 0.93 0.93 0.96 0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 28.00 dB

	Area	Pop
Interference	2.0 sq km	0 (0.0%)

Study end time: 15:52:04

Study Date: 20021104
Study Start: 16:05:30
INTERFERENCE CAUSED TO DTV ALLOTMENTS & ASSIGNMENTS BY PROPOSED W11BJ
CELL SIZE : 1.0 km
Using offset in determining thresholds
Per 6th Report & Order and FCC OET-69 Bulletin

DWTBY	41-43-09	073-59-47	27(0)	117.5 kW-DA	601 m AMSL	90.0 %	40.0 dBu				
POUGHKEEPSIE	NY	16625	2059	DTVSERVICE:	2059000	NTSCSERVICE:	1742000				
DTVALT DTV ALLOTMENT											
0.14	0.13	0.11	0.11	0.16	0.22	0.29	0.38	0.47	0.58	0.72	0.83
0.92	0.97	1.00	1.00	0.99	0.98	0.98	0.97	0.98	0.97	0.97	0.96
0.93	0.83	0.70	0.56	0.46	0.37	0.31	0.23	0.15	0.11	0.11	0.13
Ref Az: 0.0											
Using DEFAULT vertical antenna pattern											
				Area			Pop				
within Noise Limited Contour				22562.1 sq km			4687910				
not affected by terrain losses				19277.0			3289556				

W11BJ-P	42-14-30	072-38-57	28(Z)	5.6 kW-DA	379.5 m AMSL	10.0 %	74.0				
SPRINGFIELD	MA										
PROPOSAL											
1.00	0.98	0.96	0.93	0.93	0.94	0.97	0.99	0.98	0.95	0.87	0.77
0.63	0.47	0.35	0.23	0.21	0.22	0.23	0.22	0.21	0.23	0.35	0.47
0.63	0.77	0.87	0.95	0.98	0.99	0.97	0.94	0.93	0.93	0.96	0.98
Ref Az: 20.0											
Using DEFAULT vertical antenna pattern											
D/U Baseline: -49.00 dB											
				Area			Pop				
Interference				0 sq km			0 (0.0%)				

WTBY-DT 41-29-20 073-56-53 27(N) 800.0 kW-DA 483.3 m AMSL 90.0 % 40.0 dBu
POUGHKEEPSIE NY 16625 2059 DTVSERVICE: 2059000 NTSCSERVICE: 1742000
APP BMPCDT-20020618AAD
0.68 0.67 0.66 0.64 0.62 0.61 0.60 0.61 0.63 0.67 0.72 0.77
0.82 0.87 0.92 0.95 0.98 0.99 1.00 0.99 0.98 0.95 0.92 0.87
0.82 0.77 0.72 0.67 0.63 0.61 0.60 0.61 0.62 0.64 0.66 0.67

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	29200.4 sq km	15776013
not affected by terrain losses	27402.9	15464095

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA
PROPOSAL

1.00 0.98 0.96 0.93 0.93 0.94 0.97 0.99 0.98 0.95 0.87 0.77
0.63 0.47 0.35 0.23 0.21 0.22 0.23 0.22 0.21 0.23 0.35 0.47
0.63 0.77 0.87 0.95 0.98 0.99 0.97 0.94 0.93 0.93 0.96 0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -49.00

	Area	Pop
Interference	0 sq km	0 (0.0%)

WTBY-DT 41-29-20 073-56-55 27(N) 800.0 kW-DA 497 m AMSL 90.0 % 40.0 dBu
POUGHKEEPSIE NY 16625 2059 DTVSERVICE: 2059000 NTSCSERVICE: 1742000
CP BPCDT-19990414KG

0.68 0.67 0.66 0.64 0.62 0.61 0.60 0.61 0.63 0.67 0.72 0.77
0.82 0.87 0.92 0.95 0.98 0.99 1.00 0.99 0.98 0.95 0.92 0.87
0.82 0.77 0.72 0.67 0.63 0.61 0.60 0.61 0.62 0.64 0.66 0.67

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	29979.7 sq km	16060197
not affected by terrain losses	27881.5	15632548

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA
PROPOSAL

1.00 0.98 0.96 0.93 0.93 0.94 0.97 0.99 0.98 0.95 0.87 0.77
0.63 0.47 0.35 0.23 0.21 0.22 0.23 0.22 0.21 0.23 0.35 0.47
0.63 0.77 0.87 0.95 0.98 0.99 0.97 0.94 0.93 0.93 0.96 0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -49.00

	Area	Pop
Interference	0 sq km	0 (0.0%)

WNBC-DT 40-42-43 074-00-49 28(N) 178.0 kW 459 m AMSL 90.0 % 40.1 dBu
NEW YORK NY 27891 18116 DTVSERVICE:18116000 NTSCSERVICE:17182000
CP BPCDT-19981102KI

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	28867.9 sq km	18278379
not affected by terrain losses	27262.1	18013542

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA

PROPOSAL

1.00	0.98	0.96	0.93	0.93	0.94	0.97	0.99	0.98	0.95	0.87	0.77
0.63	0.47	0.35	0.23	0.21	0.22	0.23	0.22	0.21	0.23	0.35	0.47
0.63	0.77	0.87	0.95	0.98	0.99	0.97	0.94	0.93	0.93	0.96	0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00 dB

	Area	Pop
Interference	0 sq km	0 (0.0%)

DWNBC 40-42-43 074-00-49 28(0) 163.5 kW-DA 525 m AMSL 90.0 % 40.1 dBu
NEW YORK NY 27891 18116 DTVSERVICE:18116000 NTSCSERVICE:17182000
DTVALT DTV ALLOTMENT

1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	31645.3 sq km	18664104
not affected by terrain losses	29801.8	18346883

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA

PROPOSAL

1.00	0.98	0.96	0.93	0.93	0.94	0.97	0.99	0.98	0.95	0.87	0.77
0.63	0.47	0.35	0.23	0.21	0.22	0.23	0.22	0.21	0.23	0.35	0.47
0.63	0.77	0.87	0.95	0.98	0.99	0.97	0.94	0.93	0.93	0.96	0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00 dB

	Area	Pop
Interference	1.0 sq km	0 (0.0%)

DWVLA 43-51-06 070-19-40 28(0) 50.0 kW-DA 336 m AMSL 90.0 % 40.1 dBu
LEWISTON ME 9256 480 DTVSERVICE: 480000 NTSCSERVICE: 473000

DTVALT DTV ALLOTMENT

0.95	0.91	0.89	0.87	0.88	0.90	0.93	0.97	1.00	0.98	0.90	0.82
0.72	0.61	0.50	0.41	0.30	0.20	0.14	0.14	0.14	0.17	0.19	0.15
0.13	0.15	0.23	0.33	0.44	0.55	0.64	0.74	0.84	0.93	0.97	0.98

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

USING NTSC GRADE B FOR SERVICE AREA

	Area	Pop
within Noise Limited Contour	9520.4 sq km	483219
not affected by terrain losses	9307.8	479474

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA

PROPOSAL

1.00	0.98	0.96	0.93	0.93	0.94	0.97	0.99	0.98	0.95	0.87	0.77
0.63	0.47	0.35	0.23	0.21	0.22	0.23	0.22	0.21	0.23	0.35	0.47
0.63	0.77	0.87	0.95	0.98	0.99	0.97	0.94	0.93	0.93	0.96	0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00 dB

	Area	Pop
Interference	0 sq km	0 (0.0%)

WPME-DT 43-51-06 070-19-40 28(N) 215.0 kW-DA 328 m AMSL 90.0 % 40.1 dBu
LEWISTON ME 9256 480 DTVSERVICE: 480000 NTSCSERVICE: 473000

APP BPCDT-19980831KE

1.00	0.99	0.98	0.95	0.92	0.87	0.82	0.77	0.71	0.67	0.63	0.61
0.60	0.61	0.62	0.64	0.66	0.67	0.68	0.67	0.66	0.64	0.62	0.61
0.60	0.61	0.63	0.67	0.71	0.77	0.82	0.87	0.92	0.95	0.98	0.99

Ref Az: 180.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	18286.5 sq km	679130
not affected by terrain losses	17464.6	654803

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA

PROPOSAL

1.00	0.98	0.96	0.93	0.93	0.94	0.97	0.99	0.98	0.95	0.87	0.77
0.63	0.47	0.35	0.23	0.21	0.22	0.23	0.22	0.21	0.23	0.35	0.47
0.63	0.77	0.87	0.95	0.98	0.99	0.97	0.94	0.93	0.93	0.96	0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00 dB

	Area	Pop
Interference	0 sq km	0 (0.0%)

DWUHF 43-08-07 077-35-03 28(0) 50.0 kW-DA 298 m AMSL 90.0 % 40.1 dBu
ROCHESTER NY 11335 1021 DTVSERVICE: 1021000 NTSCSERVICE: 998000

DTVALT DTV ALLOTMENT

1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
0.99	0.99	0.98	0.98	0.97	0.96	0.95	0.96	0.96	0.97	0.98	0.98
0.98	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.99	1.00	1.00	1.00

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

USING NTSC GRADE B FOR SERVICE AREA

	Area	Pop
within Noise Limited Contour	11430.5 sq km	1022668
not affected by terrain losses	11301.3	1020477

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA

PROPOSAL

1.00	0.98	0.96	0.93	0.93	0.94	0.97	0.99	0.98	0.95	0.87	0.77
0.63	0.47	0.35	0.23	0.21	0.22	0.23	0.22	0.21	0.23	0.35	0.47
0.63	0.77	0.87	0.95	0.98	0.99	0.97	0.94	0.93	0.93	0.96	0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00 dB

	Area	Pop
Interference	0 sq km	0 (0.0%)

WUHF-DT 43-08-05 077-35-07 28(N) 1000.0 kW-DA 305.7 m AMSL 90.0 % 40.1 dBu
ROCHESTER NY 11335 1021 DTVSERVICE: 1021000 NTSCSERVICE: 998000

APP BPCDT-19991101ACD

0.24	0.34	0.48	0.66	0.83	0.95	1.00	0.96	0.83	0.65	0.44	0.27
0.17	0.15	0.17	0.27	0.44	0.65	0.83	0.96	1.00	0.95	0.83	0.66
0.48	0.34	0.24	0.20	0.20	0.22	0.25	0.27	0.25	0.22	0.20	0.20

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	16119.5 sq km	1102139
not affected by terrain losses	15847.1	1090196

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA

PROPOSAL

1.00	0.98	0.96	0.93	0.93	0.94	0.97	0.99	0.98	0.95	0.87	0.77
0.63	0.47	0.35	0.23	0.21	0.22	0.23	0.22	0.21	0.23	0.35	0.47
0.63	0.77	0.87	0.95	0.98	0.99	0.97	0.94	0.93	0.93	0.96	0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00 dB

	Area	Pop
Interference	0 sq km	0 (0.0%)

WUNI-DT 42-20-07 071-42-54 29(N) 200.0 kW 598 m AMSL 90.0 % 40.2 dBu
WORCESTER MA 18382 5509 DTVSERVICE: 5509000 NTSCSERVICE: 5107000
CP MOD BMPCDT-20000428ABI
Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	29692.4 sq km	7551105
not affected by terrain losses	27757.9	7238105

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA
PROPOSAL

1.00	0.98	0.96	0.93	0.93	0.94	0.97	0.99	0.98	0.95	0.87	0.77
0.63	0.47	0.35	0.23	0.21	0.22	0.23	0.22	0.21	0.23	0.35	0.47
0.63	0.77	0.87	0.95	0.98	0.99	0.97	0.94	0.93	0.93	0.96	0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -48.00 dB

	Area	Pop
Interference	2.0 sq km	0 (0.0%)

DWUNI 42-20-07 071-42-54 29(0) 50.0 kW-DA 614 m AMSL 90.0 % 40.2 dBu
WORCESTER MA 18382 5509 DTVSERVICE: 5509000 NTSCSERVICE: 5107000
DTVALT DTV ALLOTMENT

0.99	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.00	1.00	1.00	1.00	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97
0.96	0.95	0.95	0.94	0.95	0.95	0.96	0.97	0.98	0.98	0.99	0.99

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

USING NTSC GRADE B FOR SERVICE AREA

	Area	Pop
within Noise Limited Contour	22496.6 sq km	6771953
not affected by terrain losses	20954.9	6502355

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA
PROPOSAL

1.00	0.98	0.96	0.93	0.93	0.94	0.97	0.99	0.98	0.95	0.87	0.77
0.63	0.47	0.35	0.23	0.21	0.22	0.23	0.22	0.21	0.23	0.35	0.47
0.63	0.77	0.87	0.95	0.98	0.99	0.97	0.94	0.93	0.93	0.96	0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -48.00 dB

	Area	Pop
Interference	0 sq km	0 (0.0%)

DWFMET 41-07-14 074-12-03 29(0) 50.0 kW-DA 394 m AMSL 90.0 % 40.2 dBu
WEST MILFORD NJ 4104 3917 DTVSERVICE: 3917000 NTSCSERVICE: 2439000
DTVALT DTV ALLOTMENT

0.96	0.95	0.92	0.89	0.87	0.88	0.93	0.96	0.98	0.99	0.99	1.00
1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
0.99	0.99	0.98	0.98	0.97	0.96	0.94	0.92	0.92	0.93	0.94	0.96
(133.0 1.00) (134.0 1.00) (135.0 1.00) (136.0 1.00) (137.0 1.00)											
(138.0 1.00)											

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

USING NTSC GRADE B FOR SERVICE AREA

	Area	Pop
within Noise Limited Contour	4252.9 sq km	4071693
not affected by terrain losses	4205.4	4066951

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA
PROPOSAL

1.00	0.98	0.96	0.93	0.93	0.94	0.97	0.99	0.98	0.95	0.87	0.77
0.63	0.47	0.35	0.23	0.21	0.22	0.23	0.22	0.21	0.23	0.35	0.47
0.63	0.77	0.87	0.95	0.98	0.99	0.97	0.94	0.93	0.93	0.96	0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -48.00 dB

	Area	Pop
Interference	0 sq km	0 (0.0%)

WFME-DT 40-47-18 074-15-19 29(N) 200.0 kW-DA 232 m AMSL 90.0 % 40.2 dBu
WEST MILFORD NJ 4104 3917 DTVSERVICE: 3917000 NTSCSERVICE: 2439000
CP BPEDT-19990205KF

0.95	0.92	0.97	1.00	0.97	0.92	0.95	0.97	0.94	0.87	0.76	0.61
0.43	0.26	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
0.10	0.10	0.10	0.10	0.10	0.26	0.43	0.61	0.76	0.87	0.94	0.97

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	12179.6 sq km	14862937
not affected by terrain losses	11183.7	14694700

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA
PROPOSAL

1.00	0.98	0.96	0.93	0.93	0.94	0.97	0.99	0.98	0.95	0.87	0.77
0.63	0.47	0.35	0.23	0.21	0.22	0.23	0.22	0.21	0.23	0.35	0.47
0.63	0.77	0.87	0.95	0.98	0.99	0.97	0.94	0.93	0.93	0.96	0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -48.00 dB

	Area	Pop
Interference	0 sq km	0 (0.0%)

WKTV-DT 43-06-09 074-56-27 29(N) 1000.0 kW 692 m AMSL 90.0 % 40.2 dBu
UTICA NY 27212 1189 DTVSERVICE: 1189000 NTSCSERVICE: 666000
APP BMPCDT-20010126ABG
Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	36567.5 sq km	1817316
not affected by terrain losses	31301.9	1586413

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA
PROPOSAL

1.00	0.98	0.96	0.93	0.93	0.94	0.97	0.99	0.98	0.95	0.87	0.77
0.63	0.47	0.35	0.23	0.21	0.22	0.23	0.22	0.21	0.23	0.35	0.47
0.63	0.77	0.87	0.95	0.98	0.99	0.97	0.94	0.93	0.93	0.96	0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -48.00 dB

	Area	Pop
Interference	0 sq km	0 (0.0%)

WKTV-DT 43-06-09 074-56-27 29(N) 708.0 kW 692 m AMSL 90.0 % 40.2 dBu
UTICA NY 27212 1189 DTVSERVICE: 1189000 NTSCSERVICE: 666000
APP BMPCDT-20020404AAF
Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	34276.6 sq km	1661386
not affected by terrain losses	29527.2	1438662

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA
PROPOSAL

1.00	0.98	0.96	0.93	0.93	0.94	0.97	0.99	0.98	0.95	0.87	0.77
0.63	0.47	0.35	0.23	0.21	0.22	0.23	0.22	0.21	0.23	0.35	0.47
0.63	0.77	0.87	0.95	0.98	0.99	0.97	0.94	0.93	0.93	0.96	0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -48.00 dB

	Area	Pop
Interference	0 sq km	0 (0.0%)

WKTV-DT 43-06-09 074-56-27 29(N) 131.0 kW-DA 692 m AMSL 90.0 % 40.2 dBu
UTICA NY 27212 1189 DTVSERVICE: 1189000 NTSCSERVICE: 666000
CP BPCDT-19991029ABQ
0.78 0.78 0.76 0.76 0.80 0.86 0.92 0.97 1.00 0.96 0.88 0.77
0.64 0.51 0.40 0.36 0.38 0.42 0.44 0.43 0.39 0.36 0.39 0.48
0.61 0.74 0.87 0.96 1.00 0.97 0.91 0.85 0.80 0.76 0.76 0.78

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	22204.0 sq km	769074
not affected by terrain losses	19395.8	633879

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA
PROPOSAL

1.00 0.98 0.96 0.93 0.93 0.94 0.97 0.99 0.98 0.95 0.87 0.77
0.63 0.47 0.35 0.23 0.21 0.22 0.23 0.22 0.21 0.23 0.35 0.47
0.63 0.77 0.87 0.95 0.98 0.99 0.97 0.94 0.93 0.93 0.96 0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -48.00 dB

	Area	Pop
Interference	0 sq km	0 (0.0%)

DWKTV 43-06-09 074-56-27 29(0) 546.1 kW-DA 715 m AMSL 90.0 % 40.2 dBu
UTICA NY 27212 1189 DTVSERVICE: 1189000 NTSCSERVICE: 666000
DTVALT DTV ALLOTMENT
0.92 0.94 0.95 0.97 0.99 0.97 0.92 0.88 0.85 0.84 0.84 0.85
0.84 0.84 0.85 0.85 0.84 0.84 0.84 0.84 0.84 0.85 0.85 0.85
0.85 0.84 0.84 0.84 0.84 0.84 0.85 0.85 0.85 0.84 0.84 0.86
(46.0 1.00)

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	32343.7 sq km	1474708
not affected by terrain losses	27892.2	1234973

W11BJ-P 42-14-30 072-38-57 28(Z) 5.6 kW-DA 379.5 m AMSL 10.0 % 74.0
SPRINGFIELD MA
PROPOSAL

1.00 0.98 0.96 0.93 0.93 0.94 0.97 0.99 0.98 0.95 0.87 0.77
0.63 0.47 0.35 0.23 0.21 0.22 0.23 0.22 0.21 0.23 0.35 0.47
0.63 0.77 0.87 0.95 0.98 0.99 0.97 0.94 0.93 0.93 0.96 0.98

Ref Az: 20.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -48.00 dB

	Area	Pop
Interference	0 sq km	0 (0.0%)

Study end time: 16:16:57

APPENDIX

TECHNICAL EXHIBIT
DTV DISPLACEMENT APPLICATION
FOR CONSTRUCTION PERMIT
STATION W11BJ (FACILITY ID 2650)
SPRINGFIELD, MASSACHUSETTS
CH 28(0) 5.6 KW-DA

Technical Narrative

This technical exhibit provides supplemental information in support of the digital television (DTV) displacement application for LPTV station W11BJ at Springfield, Massachusetts. This information is submitted in support of the application to justify the transmitter site move proposed (61.7 km). Station W11BJ is currently licensed to operate on channel 11 at Hartford, Connecticut (BLTVL-19910219JK). The station uses a directional antenna (DA) system with a maximum visual effective radiated power (ERP) of 0.083 kilowatt (kW). The antenna center of radiation is 300 meters above mean sea level (AMSL). The transmitter site coordinates are 41-42-13, 72-49-57.

Station W11BJ is being displaced from its current operation by the co-channel DTV allotment and operation on channel 11 for station WWLP-DT at Springfield, Massachusetts. Station WWLP-DT is located only 43.7 kilometers north of the present W11BJ site. Station W11BJ proposes to relocate its site to an existing tower near Springfield, Massachusetts and change frequency to channel 28 with a zero (0) carrier offset. The proposed W11BJ site (42-14-30, 72-38-57) is 61.7 kilometers north of the present W11BJ site. It is proposed to use an Antenna Concepts ACS8A directional antenna system with a cardioid shaped pattern. The antenna pattern major lobe will be oriented toward 20 degrees True. The antenna system will be installed with the center of radiation at 13.7 meters above ground level (AGL) and 379.5 meters AMSL. The proposed maximum visual ERP is 5.6 kW.

The purpose of this Appendix is to provide additional information to support the proposed W11BJ site move. LPTV channel searches of the FCC's TV core band (channels 2 through 51) have been conducted for the present W11BJ site and an additional location between the present and proposed W11BJ sites. Figure A1 is a map showing the location of the present and proposed W11BJ transmitter sites. The map also shows the site used for an alternative LPTV channel search near Granby, Connecticut.

Figure A2 is a summary of the LPTV channel search seeking an alternative channel at the present W11BJ site. The search was based on the FCC's normal allocation standards for comparable transmitting facilities. The primary assignment precluding the use of a channel is listed. The primary assignment precluding use is not necessarily the only problem with use of the channel. The separation between the present W11BJ site and the precluding assignment is provided. The search indicates that none of the channels studied appear possible for W11BJ's use at its current site.

Figure A3 is a summary of the LPTV channel search for a site near Granby, Connecticut, about midway between the present and proposed W11BJ sites. The search was based on the site used by LPTV station W12CL on channel 12 at Granby (41-58-45, 72-46-59). The W12CL site is approximately 30.9 kilometers (19.2 miles) north of the present W11BJ site, and 31.2 kilometers (19.4 miles) south of the proposed W11BJ site. As with Figure A2, none of the channels studied appear possible for W11BJ's use at the W12CL site near Granby, Connecticut.

It is believed that these alternative LPTV channel searches for the present W11BJ site and an intermediary site, justify W11BJ's proposal to relocate to the site proposed in its application.

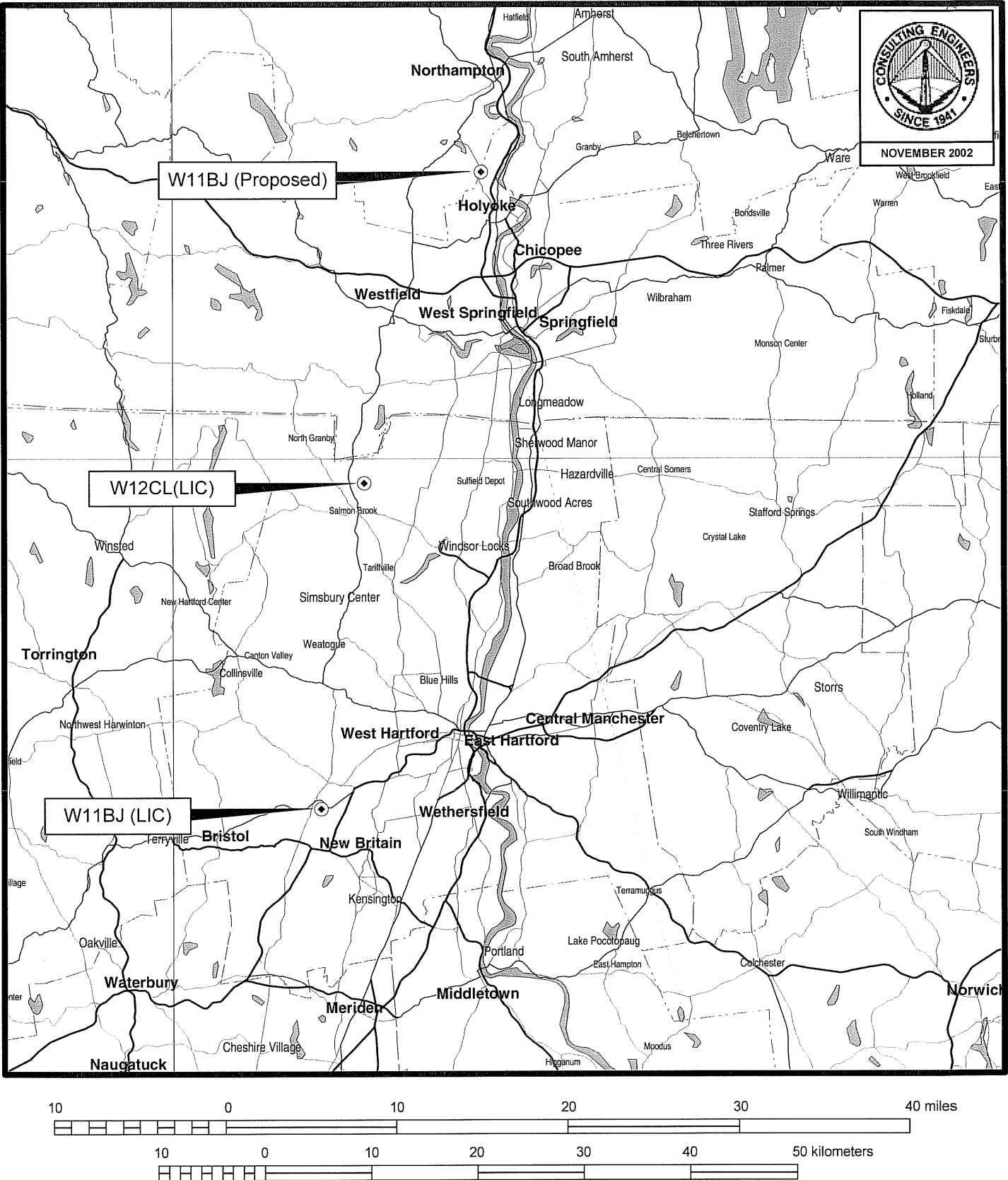
If there are questions concerning this technical statement please communicate with the office of the undersigned.

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Figure A1



TRANSMITTER SITE LOCATIONS

STATION W11BJ
SPRINGFIELD, MASSACHUSETTS
CH 28(0) 5.6 KW-DA

**LPTV CHANNEL SEARCH AT PRESENT W11BJ SITE
HARTFORD, CT, 41-42-13, 72-49-57**

<u>Channel</u>	<u>Primary Assignment Precluding Use</u>	<u>Separation</u>
2	WFSB, Ch.3, Hartford, CT	8.3 km
3	WFSB, Ch.3, Hartford, CT	8.3
4	WFSB, Ch.3, Hartford, CT	8.3
5	WTIC-DT, Ch.5, Hartford, CT	0.2
6	WEDY-DT, Ch.6, New Haven, CT	42.2
7	WTNH, Ch.8, New Haven, CT	32.7
8	WTNH, Ch.8, New Haven, CT	32.7
9	WTNH, Ch.8, New Haven, CT	32.7
10	WTNH-DT, Ch.10, New Haven, CT	32.7
11	WWLP-DT, Ch.11, Springfield, MA	43.7
12	WTXX-DT, Ch.12, Waterbury, CT	0.1
13	WRDM-LP, Ch.13, Hartford, CT	15.1
14	LMRS, Ch.14, New York, NY	143.8
15	LMRS, Ch.15, New York, NY	143.8
	WWLP, Ch.22, Springfield, MA	43.7
16	LMRS, Ch.16, New York, NY	143.7
17	WHCT-TV, Ch.18, Hartford, CT	8.4
18	WHCT-TV, Ch.18, Hartford, CT	8.4
19	WHCT-TV, Ch.18, Hartford, CT	8.4
20	WTXX, Ch.20, Waterbury, CT	25.8
21	WTXX, Ch.20, Waterbury, CT	25.8
22	WWLP, Ch.22, Springfield, MA	43.7
23	WWLP, Ch.22, Springfield, MA	43.7
24	WEDH, Ch.24, Hartford, CT	8.2
25	WEDH, Ch.24, Hartford, CT	8.2
26	WHPX, Ch.26, New London, CT	61.7
27	WHPX, Ch.26, New London, CT	61.7
28	WUTH-CA, Ch.28, Hartford, CT	29.8
29	WVIT, Ch.30, New Britain, CT	0.4
30	WVIT, Ch.30, New Britain, CT	0.4
31	WVIT, Ch.30, New Britain, CT	0.4
32	WEDH-DT, Ch.32, Hartford, CT	0.4
33	WFSB-DT, Ch.33, Hartford, CT	8.3
34	WHPX-DT, Ch.34, New London, CT	61.7
35	WVIT-DT, Ch.35, New Britain, CT	0.4
36	WCDC-DT, Ch.36, Adams, MA	107.4
37	Reserved for Radio Astronomy	
38	WHCT-LP, Ch.38, Hartford, CT	10.7
39	WCTX-DT, Ch.39, New Haven, CT	32.8
40	WGGB-TV, Ch.40, Springfield, MA	61.7

FIGURE A2
Sheet 2 of 2

<u>Channel</u>	<u>Primary Assignment Precluding Use</u>	<u>Separation</u>
41	WGGB-TV, Ch.40, Springfield, MA	61.7 km
42	WSAH-DT, Ch.42, Bridgeport, CT	44.6
43	WSAH, Ch.43, Bridgeport, CT	44.6
44	WSAH, Ch.43, Bridgeport, CT	44.6
45	WEDN-DT, Ch.45, Norwich, CT	59.1
46	WUVN-DT, Ch.46, Hartford, CT	8.4
47	W47AD, Ch.47, Hartford, CT	29.8
48	WEDW, Ch.49, Bridgeport, CT	55.7
49	WEDW, Ch.49, Bridgeport, CT	55.7
50	WEDW, Ch.49, Bridgeport, CT	55.7
51	W51BZ, Ch.51, New Haven, CT	33.1

**W11BJ LPTV CHANNEL SEARCH AT W12CL SITE
GRANBY, CT, 41-58-45, 72-46-59**

<u>Channel</u>	<u>Primary Assignment Precluding Use</u>	<u>Separation</u>
2	WFSB, Ch.3, Hartford, CT	22.8 km
3	WFSB, Ch.3, Hartford, CT	22.8
4	WFSB, Ch.3, Hartford, CT	22.8
5	WTIC-DT, Ch.5, Hartford, CT	30.7
6	WEDY-DT, Ch.6, New Haven, CT	73.0
7	WTNH, Ch.8, New Haven, CT	63.4
8	WTNH, Ch.8, New Haven, CT	63.4
9	WTNH, Ch.8, New Haven, CT	63.4
10	WTNH-DT, Ch.10, New Haven, CT	63.4
11	WWLP-DT, Ch.11, Springfield, MA	13.4
12	WTXX-DT, Ch.12, Waterbury, CT	30.9
13	WRDM-LP, Ch.13, Hartford, CT	25.1
14	LMRS, Ch.14, Boston, MA	148.7
15	LMRS, Ch.15, New York, NY	169.9
	WWLP, Ch.22, Springfield, MA	13.4
16	LMRS, Ch.16, Boston, MA	148.7
17	WHCT-TV, Ch.18, Hartford, CT	22.7
18	WHCT-TV, Ch.18, Hartford, CT	22.7
19	WHCT-TV, Ch.18, Hartford, CT	22.7
20	WTXX, Ch.20, Waterbury, CT	54.9
21	WWLP, Ch.22, Springfield, MA	13.4
22	WWLP, Ch.22, Springfield, MA	13.4
23	WWLP, Ch.22, Springfield, MA	13.4
24	WEDH, Ch.24, Hartford, CT	22.9
25	WEDH, Ch.24, Hartford, CT	22.9
26	WHPX, Ch.26, New London, CT	79.1
27	WUNI, Ch.27, Worcester, MA	96.7
28	WUTH-CA, Ch.28, Hartford, CT	39.5
29	WVIT, Ch.30, New Britain, CT	31.2
30	WVIT, Ch.30, New Britain, CT	31.2
31	WVIT, Ch.30, New Britain, CT	31.2
32	WEDH-DT, Ch.32, Hartford, CT	31.2
33	WFSB-DT, Ch.33, Hartford, CT	22.8
34	WHPX-DT, Ch.34, New London, CT	79.1
35	WVIT-DT, Ch.35, New Britain, CT	31.2
36	WCDC-DT, Ch.36, Adams, MA	79.7
37	Reserved for Radio Astronomy	
38	WHCT-LP, Ch.38, Hartford, CT	20.3
39	WCTX-DT, Ch.39, New Haven, CT	63.4
40	WGGB-TV, Ch.40, Springfield, MA	31.2

FIGURE A3
Sheet 2 of 2

<u>Channel</u>	<u>Primary Assignment Precluding Use</u>	<u>Separation</u>
41	WGGB-TV, Ch.40, Springfield, MA	31.2 km
42	WSAH-DT, Ch.42, Bridgeport, CT	73.9
43	WSAH, Ch.43, Bridgeport, CT	73.9
44	WRDM-LP, Ch.44, Hartford, CT	25.1
45	WEDN-DT, Ch.45, Norwich, CT	72.2
46	WUVN-DT, Ch.46, Hartford, CT	22.7
47	W47AD, Ch.47, Hartford, CT	39.5
48	WYDN, Ch.48, Worcester, MA	81.6
49	WEDW, Ch.49, Bridgeport, CT	84.7
50	WGBY-TV, Ch.57, Springfield, MA	31.2
51	New CP, Ch.51, Pittsfield, MA	75.3