

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
Amendment of Section 73.622(b) of)
the Commission's Rules,)
DTV Table of Allotments)
(Burlington, Vermont))

MM Docket No.
RM No.

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

To: The Chief, Mass Media Bureau

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FCC MAIL ROOM

PETITION FOR RULEMAKING

C-22 FCC Licensee Subsidiary, LLC ("C-22"), by its attorneys and pursuant to Section 73.623 of the Commission's rules, hereby requests that the Commission institute a rulemaking proceeding for the purpose of amending the Table of Allotments for the digital television service ("DTV Table") to change the initial DTV channel allotment for station WVNY-DT, Burlington, Vermont, from Channel 16 to Channel 13.

WVNY(TV), Burlington, Vermont, currently operates on NTSC Channel 22 and has been allotted DTV Channel 16 for its digital operations. Due to the presence of Canadian television allotments and assignments, C-22 is severely constrained in its ability to increase WVNY-DT's service. As demonstrated in the attached Technical Exhibit by du Treil, Lundin & Rackley, Inc., Channel 13 can be used from the present WVNY-DT site with the facilities specified herein and will permit the station to serve an additional 29,000 persons over its present DTV allotment on Channel 16 (and an additional 72,000 persons over WVNY(TV)'s NTSC facility on Channel 22). The allotment of Channel 13 at the WVNY-DT reference coordinates with the facilities specified herein meets all technical protection requirements with respect to pertinent domestic

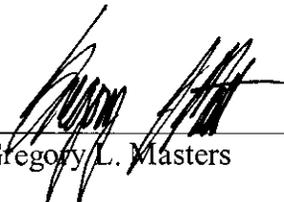
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and Canadian television stations. In sum, the change to DTV Channel 13 will further the public interest in that it will permit WVNY-DT to serve a larger population (514,000 people versus 485,000 people on Channel 16) while not creating prohibited interference to domestic or Canadian stations.

Accordingly, in light of the foregoing, C-22 respectfully requests that the Commission expeditiously commence a rulemaking proceeding to amend the DTV Table of Allotments to allot and assign DTV Channel 13 (in lieu of Channel 16) to Burlington, Vermont, for use by WVNY-DT.

Respectfully submitted,

C-22 FCC LICENSEE SUBSIDIARY, LLC

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February 5, 2002

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TECHNICAL EXHIBIT
IN SUPPORT OF PETITION FOR RULE MAKING
TELEVISION STATION WVNY(TV)
BURLINGTON, VERMONT

February 4, 2002

TECHNICAL EXHIBIT
IN SUPPORT OF PETITION FOR RULE MAKING
TELEVISION STATION WVNY(TV)
BURLINGTON, VERMONT

Table of Contents

	Technical Statement
Figure 1	Technical Specifications
Figure 2	Predicted Coverage Contour
Figure 3	Summary of Domestic Allocation Analysis
Figure 4	Canadian Allocation Analysis Map

TECHNICAL STATEMENT
IN SUPPORT OF PETITION FOR RULE MAKING
TELEVISION STATION WVNY(TV)
BURLINGTON, VERMONT

This Technical Statement was prepared on behalf of television broadcast station WVNY(TV), Burlington, Vermont, in support of a petition for rule making to amend Section 73.622(b) of the FCC Rules to change the WVNY transitional digital television channel.

WVNY was allotted DTV Channel 16 with a maximum effective radiated power (ERP) of 50 kW using a directional antenna and an antenna height above average terrain (HAAT) of 835 m.* This petition proposes Channel 13 in lieu of Channel 16 for WVNY's DTV transitional channel using the same allotment reference location. The petitioner proposes that Channel 13 be allotted with a maximum directional ERP of 4.5 kW and antenna HAAT of 835 m. A directional antenna is specified to ensure compliance with the U.S.-Canada Letter of Understanding (LOU) concerning digital television.† Compliance with the LOU is demonstrated herein. The technical specifications for the proposed allotment are included herein at Figure 1.

* See Appendix B of *Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders*, FCC-98-315, Released: December 18, 1998.

† See Letter Of Understanding Between The Federal Communications Commission Of The United States Of America And Industry Canada Related To The Use Of The 54-72 MHz, 76-88 MHz, 174-216 MHz And 470-806 MHz Bands For The Digital Television Broadcasting Service Along The Common Border, September 22, 2000.

The proposed transmitting antenna will be located with a center of radiation at an elevation of 1264 m above mean sea level and 835 m HAAT. Given a maximum ERP of 4.5 kW, the proposed facility complies with Section 73.622(f)(7)(ii) concerning the maximum permissible ERP for Channel 7-13 DTV stations located in Zone II.

As indicated in Figure 2, the proposed WVNY-DT allotment on Channel 13 will provide 43 dBu, f(50,90) contour coverage over the entire community of Burlington, Vermont in compliance with Section 73.625 of the FCC Rules.

The proposed Channel 13 facility meets the requirements of Section 73.623 of the FCC Rules concerning predicted interference to other existing U.S. NTSC facilities and U.S. DTV allotments and assignments. Longley-Rice interference analyses were conducted pursuant to the requirements of the FCC Rules; OET Bulletin No. 69; and published FCC guidelines for preparation of such interference analyses. The Longley-Rice interference analyses were conducted using the software developed by du Treil, Lundin & Rackley, Inc. based on the FCC published software routines.[‡] Stations selected for analysis were determined pursuant to the distance requirements outlined in the FCC DTV Processing Guidelines Public Notice. Accordingly, co-channel DTV and NTSC stations within 429 km and 420 km, respectively, were examined for potential interference; and first-adjacent DTV and NTSC stations within 229 km and 220 km, respectively, were examined for potential interference. The results of the interference analyses for the proposed facility are summarized herein at Figure 3. As indicated therein, the proposed facility will meet the 2%/10% criterion outlined in the FCC Rules and published guidelines with respect to all considered stations.[§]

[‡] The duTreil, Lundin & Rackley, Inc. DTV interference analysis program is a precise implementation of the 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 2 km was employed.

[§] Interference analysis results reflect the net change in interference to a given station considering the interference predicted to occur from all other stations (i.e. "masking").

With respect to Class A TV station protection, the proposal has been evaluated according to the requirements of Section 73.623(c)(5) of the FCC Rules. The analysis reveals no potentially affected Class A TV stations.

The proposed reference site is located 55 km from the closest point on the border with Canada and is located within the Canadian border area governed by the U.S.-Canada LOU. According to the LOU, the proposed WVNY-DT facility would be classified as a “Class VL” allotment for study purposes. An allocation study was conducted in accordance with the principles of the LOU for the WVNY-DT facility. First, a spacing analysis was conducted according to the spacing requirements of Appendix 2 of LOU with WVNY-DT assumed to be Class VL. The following table summarizes the spacing analysis for the pertinent Canadian allotments identified:

Channel	Type	Location	Class	Required Spacing (km)	Actual Spacing (km)	Result
12	TV	Montreal-QC	VU	106.0	124.7	18.7 km clear
13	TV	Trois-Rivieres-QC	VU	283.0	218.6	64.4 km short
13	TV	Ottawa-ON	VU	283.0	262.6	20.4 km short

The Trois-Rivieres and Ottawa allotments do not meet the separation requirements of the LOU. Accordingly, a contour analysis was conducted pursuant to the principles outlined in Appendix 2 of the LOU. The 22.2 dBu, f(50,10), interfering contour was predicted to determine the interference potential of WVNY-DT to the Trois-Rivieres and Ottawa TV allotments. These contours are shown on Figure 4 herein. As indicated, there would be predicted WVNY-DT interfering contour overlap with the protected service areas of the Trois-Rivieres and Ottawa allotments.

Given the existence of WVNY-DT interfering contour overlap with the Trois-Rivieres and Ottawa allotment service areas, an additional analysis was conducted using the Longley-Rice propagation model in accordance with the principles of the LOU. The Longley-Rice interference analyses were conducted using the software developed by du Treil, Lundin & Rackley, Inc. based on the principles of the LOU.** The results of the analysis are summarized in the table below:

** The Canadian Interference Analysis Program was developed according to the principles outlined in the Letter Of Understanding Between The Federal Communications Commission Of The United States Of America And Industry Canada Related To The Use Of The 54-72 MHz, 76-88 MHz, 174-216 MHz And 470-806 MHz Bands For The Digital Television Broadcasting Service Along The Common Border ("LOU"), which specifies the permissible use of the Longley-Rice propagation model. The Canadian Digital Elevation Data (CDED) terrain database 1998 was employed for Canada and the United States Geological Survey 3 Arc Second Terrain Elevation Data was employed for the United States. Population calculations were based on the Statistics Canada, Census Population data, 1996, for Canada. The program defines a uniform grid approximately 2.0 km on a side within the entire protected coverage area of the station of interest. The Canadian population within each grid area is determined. Longley-Rice calculations are conducted at the center of each grid point for both the desired and undesired stations. The appropriate location and time variability statistical parameters are employed as follows: For Canadian DTV allotments operating on Channels 2-59, location variability of 90% and time variability of 90%, f(90,90); For Canadian DTV allotments operating on Channels 60-69, f(50,90); for Canadian NTSC allotments, f(50,50); for US DTV stations that would interfere with Canadian DTV allotments on Channels 2-59, f(10,10); for US DTV stations that would interfere with Canadian DTV allotments on Channels 60-69, f(50,10); for US DTV stations that would interfere with Canadian NTSC allotments, f(50,10). For Canadian DTV allotments, the maximum permissible parameters outlined in Table 4.3.2 of the LOU were employed for the analysis according to the class of station involved. For Canadian NTSC stations, the maximum permissible parameters outlined in the Table 4.3.3 were employed for the analysis according to the class of station involved. The minimum required field strength outlined in Section 1 of Appendix 2 of the LOU was employed in determining if desired service is predicted in a grid area. The DTV/NTSC protection ratios outlined in Section 2 of Appendix 2 of the LOU were employed in determining the presence or absence of interference within a grid area. The receiving antenna front-to-back ratios outlined in Section 1 of Appendix 2 were employed using the receiving antenna pattern outlined in ITU Recommendation 419-3. Reasonable approximations of transmitting antenna vertical patterns were employed based on the frequency band of interest. The sum of the Canadian population within the service area for the class of station involved is considered to be the population "baseline" against which the additional predicted interference population is compared. The sum of the area over Canadian land is considered to be the area baseline against which additional predicted interference area is compared.

Channel	Type	Location	Class	Predicted Interference Population	Service Population	Percent Interference
13	TV	Trois-Rivieres-QC	VU	11,767	639,883	1.84%
13	TV	Ottawa-ON	VU	616	1,198,378	0.05%

As indicated, the proposed WVNY-DT facility will cause 1.84% predicted interference population to the Trois-Rivieres allotment based on the Longley-Rice analysis; and will cause 0.05% interference population with respect to the Ottawa allotment based on the Longley-Rice analysis. Figure 4 is a map illustrating the predicted interference to the Ottawa and Trois-Rivieres allotment service areas based on the Longley-Rice analysis. Based on the foregoing we find that the WVNY-DT proposed facility meets the 2% interference criteria outlined in Section 5 of the LOU.

A summary of the revised service area and population numbers as they would appear in the Appendix B of the FCC's *Sixth Report and Order* and subsequent *Second Memorandum Opinion and Order* are summarized below:

State and City	NTSC Channel	DTV Chan	DTV Power (kW)	Antenna HAAT (m)	DTV Service During Transition	
					Area (sq. km)	People (Thous)
VT BURLINGTON	22	13	4.5	835.0	38044	514

As indicated above, the proposed Channel 13 DTV allotment for WVNY-DT would provide service to an estimated population of 514,000. This represents an increase in

service population of 29,000 with respect to the WVNY Channel 16 DTV allotment and 70,000 with respect to the present WVNY Channel 22 analog facility. It is evident from the above that the proposed Channel 13 allotment proposal would result in a preferential arrangement of FCC allotments.

Louis Robert du Treil, Jr.

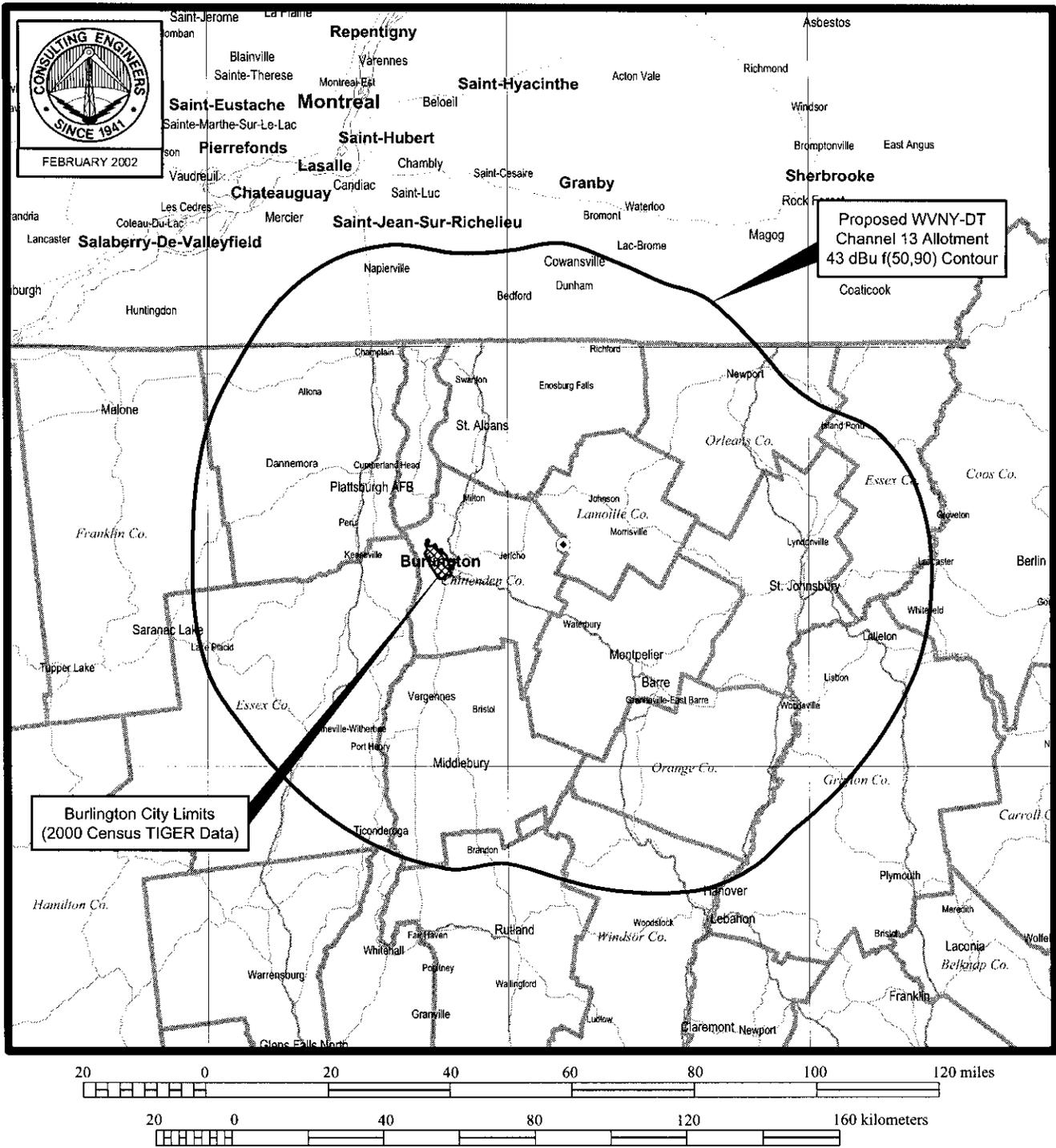
February 5, 2002

TECHNICAL EXHIBIT
 IN SUPPORT OF PETITION FOR RULE MAKING
 TELEVISION STATION WVNY(TV)
 BURLINGTON, VERMONT

Technical Specifications

Channel / Frequency Band	13 / 210-216 MHz
Zone	II
Reference Coordinates (NAD 27):	
Latitude	44°31'40" North
Longitude	72°48'58" West
Height of Radiation Center Above Mean Sea Level	1264 m
Height of Radiation Center Above Ground Level	87 m
Height of Radiation Center Above Average Terrain	835 m
Maximum Effective Radiated Power	4.5 kW

Directional Antenna Relative Field Values					
Degrees	Value	Degrees	Value	Degrees	Value
0	0.29	120	0.91	240	0.86
10	0.27	130	0.86	250	1.00
20	0.25	140	0.90	260	0.90
30	0.27	150	1.00	270	0.86
40	0.29	160	0.96	280	0.91
50	0.28	170	0.82	290	0.96
60	0.31	180	0.79	300	0.96
70	0.57	190	0.87	310	0.92
80	0.82	200	0.93	320	0.82
90	0.92	210	0.87	330	0.57
100	0.96	220	0.79	340	0.31
110	0.96	230	0.82	350	0.28



PREDICTED COVERAGE CONTOUR

**TELEVISION STATION WVNY(TV)
BURLINGTON, VERMONT**

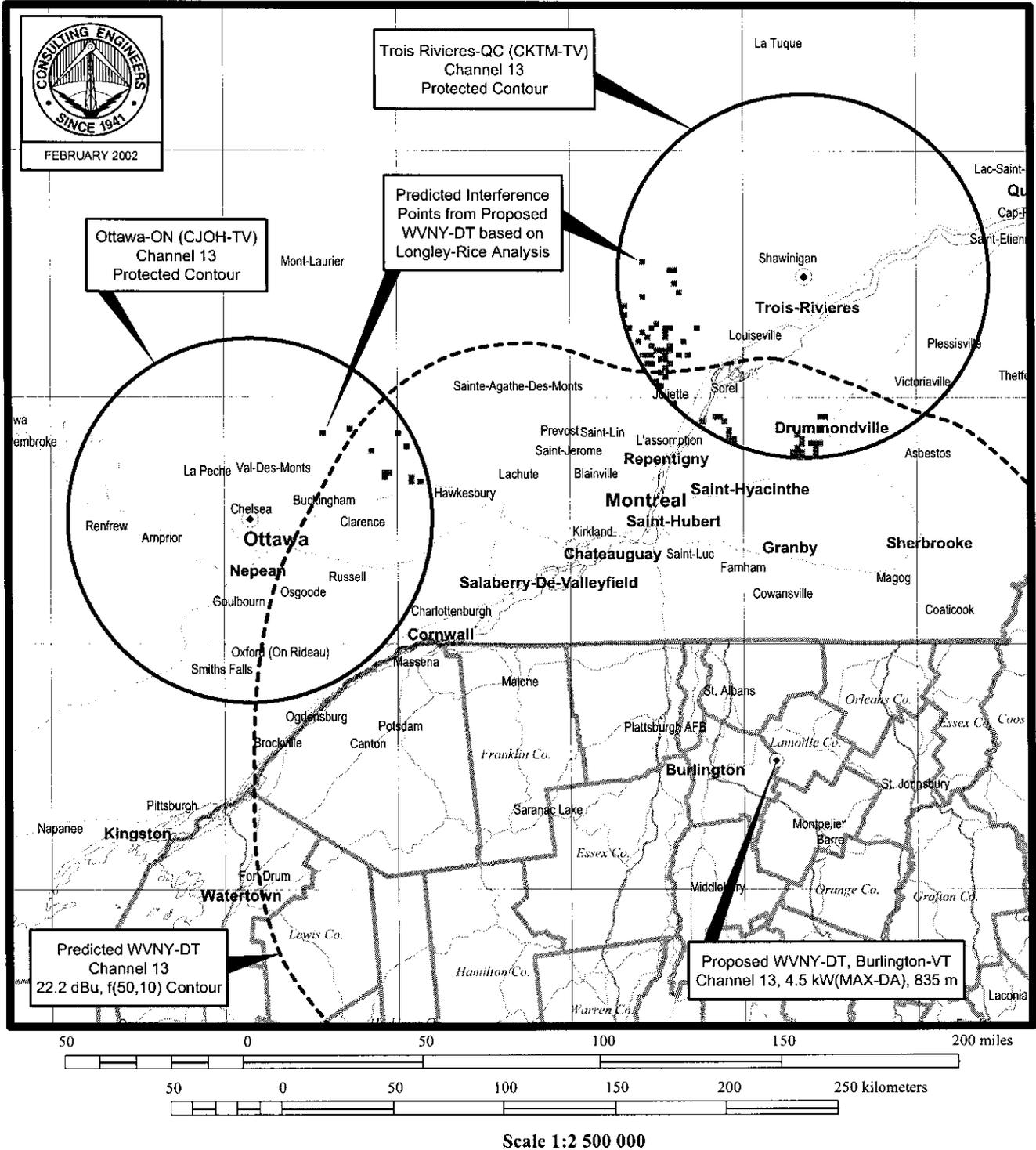
du Treil, Lundin & Rackley, Inc. Sarasota, Florida

TECHNICAL EXHIBIT
 IN SUPPORT OF PETITION FOR RULE MAKING
 TELEVISION STATION WVNY(TV)
 BURLINGTON, VERMONT

Summary of Domestic Allocation Analysis

Stations Potentially Affected by Proposed Station							
Facility Number	Channel	Call	City State	Distance (km)	Status	Application Prefix	Application Reference Number
1	12	CFCFTV	MONTREAL QU	124.6	LIC	CANADA	625
2	13	WGME-TV	PORTLAND ME	196.9	LIC	BLCT	19990429KF
3	13	WNYT	ALBANY NY	204.4	LIC	BLCT	19800314KF
4	13	WOKR	ROCHESTER NY	412.4	LIC	BLCT	1955
5	13	WOKR	ROCHESTER NY	412.4	CP	BPCT	19990409KE
6	13	WPRI-DT	PROVIDENCE RI	319.8	CP	BPCDT	19991012ABH
7	13	WPRI-DT	PROVIDENCE RI	319.8	PLN	DTVPLN	DTPV0110
8	13	CJOHTV	OTTAWA ON	261.9	LIC	CANADA	684
9	13	CBVT5	ST-FABIEN-DE-PANET QU	314.7	LIC	CANADA	693
10	13	CKTMTV	TROIS-RIVIERES QU	218.6	LIC	CANADA	694

Summary of Interference Analysis for Worst-Case Scenarios							
Facility Number	Interference Population Before Analysis	Interference Population After Analysis	Baseline Population	Net Change in Interference	Percent of Baseline	Permissible Percent of Baseline	Result
1	--	--	--	--	0.00	--	pass
2	123746	124025	1170970	279	0.024	0.6	pass
3	14847	27880	1362371	13033	0.957	--	pass
4	--	--	--	--	0.00	--	pass
5	--	--	--	--	0.00	--	pass
6	217603	217603	5943960	0	0.00	2.0	pass
7	227930	227930	5943960	0	0.00	2.0	pass
8	--	--	--	--	0.00	--	pass
9	--	--	--	--	0.00	--	pass
10	--	--	--	--	0.00	--	pass



CANADIAN ALLOCATION ANALYSIS MAP

TELEVISION STATION WVNY(TV) BURLINGTON, VERMONT

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