

TECHNICAL STATEMENT
IN SUPPORT OF PETITION FOR RULEMAKING

TELEVISION STATION WNYT
ALBANY, NEW YORK
CHANNEL 21 1000 KW(H), 250 KW(V) 414 M HAAT

1. The instant statement was prepared on behalf of WNYT-TV, LLC in support of a Petition for Rulemaking for full-power Digital Television Station WNYT, Albany, NY, which is licensed for operation on Channel 12.* It is proposed to amend the Post-Transition Table of DTV Allotments of Section 73.622(i) of the FCC Rules to substitute Channel 21 for Channel 12 at Albany, NY.

2. WNYT was originally licensed for digital television operation on Channel 12 in 2003, with a nominal non-directional effective radiated power (ERP) of 9.1 kW and an antenna height above average terrain (HAAT) of 436 m.†

3. Upon the completion of the transition from analog broadcasting to digital broadcasting in June 2009, numerous viewers of WNYT, thus relying solely on the Channel 12 digital transition facility, complained about the difficulty of reception of Channel 12 in the market. Due to the significant documented loss of service for WNYT, it filed an *'Emergency Request for Special Temporary Authority'* to implement the maximization of WNYT to 15 kW.‡ The application to increase ERP for WNYT was then granted on December 7, 2009, with a covering Application for License filed on May 5, 2010.§

* See FCC File No. 0000004731, Facility ID No. 73363.

† See FCC File No. BLC DT-20031022ABL.

‡ See FCC File No. BDSTA-20090702ACI.

§ See FCC File Nos. BPCDT-20080620ADA and BLC DT-20100505AHT. An application was later filed to change the antenna and increase ERP to 30 kW (FCC File No. BPDCT-20120123ACG). This was subsequently constructed and licensed under FCC File No. 0000004731.

4. As has been well documented in numerous cases, the FCC has received many reports of poor DTV performance on the VHF television channels. In recognition of the problems with reception for digital VHF television stations, the FCC issued a Notice of Proposed Rulemaking on November 30, 2010** to address the VHF reception issues of DTV stations. The FCC stated therein that:

...the propagation characteristics of [VHF] channels allow undesired signals and noise to be receivable at relatively farther distances, nearby electrical devices tends to emit noise in this band that can cause interference, and reception of VHF signals requires physically larger antennas that are generally not well suited to the mobile applications expected under flexible use, relative to UHF channels. We recognize that television broadcasters have had some difficulty in ensuring consistent reception of VHF signals, and we seek comment through this Notice on technical changes to Commission rules, broadcast transmission equipment, or television receiver technology, that would improve VHF for television broadcasts...

5. The FCC further stated that stations converting their pre-transition analog operation to post-transition digital operation on VHF channels experienced complaints from over-the-air viewers who were able to receive the pre-transition analog signal, but were unable to receive the post-transition digital signal. This was, and remains, a particular concern for indoor antenna viewers. The longer wavelength of VHF signals is a handicap for penetration of buildings and reception with typical indoor antennas geared for smaller wavelength signals such as UHF.†† Digital reception exhibits the cliff effect wherein the reception is either perfect, or non-existent. Example cases of the coverage issues related to VHF include: WPVI-TV, Philadelphia, PA, Ch. 6; WHBF-TV, Rock Island, IL, Ch. 4; KCAU-TV, Sioux City, IA, Ch. 9; and, WRGB,

** See *Innovation in the Broadcast Television Bands: Allocations, Channel Sharing and Improvements to VHF*, Notice of Proposed Rulemaking, ET Docket No. 10-235, 25 FCC Red 16498 (2010) (Notice).

†† For instance, a half-wave dipole antenna has a length of 2.4 feet at a frequency of 207 MHz (Channel 12). Whereas, a half-wave dipole antenna has a length of 11 inches at 515 MHz (Channel 21).

Schenectady, NY, Ch. 6. But there are many others.^{‡‡} The instant proposal to change to a UHF channel is expected to alleviate the reception problems for WNYT in its market.

6. An analysis of the WNYT proposal indicates that it will result in a net gain in service to 300,521 persons within the predicted noise-limited service contour (NLSC). As demonstrated in the Predicted Coverage Comparison Map exhibit, the proposal will result in only a minimal loss population of 180 persons within the WNYT predicted NLSC. An analysis of other over-the-air DTV services in the area indicate that the population within the loss area are currently served by at least five over-the-air television services including: WRGB, WXXA-TV, WNYA, WICZ-TV and WBNG-TV.

7. Pursuant to FCC precedent,^{§§} the service gain/loss comparison for the WNYT proposal is with respect to the WNYT pre-digital transition DTV facility, which was originally licensed with an ERP of 9.1 kW.^{***} The WNYT *Emergency Request for Special Temporary Authority* that was filed in July 2009, referenced above, documented the poor reception for WNYT on Channel 12 when it completed its transition to DTV. The subsequent increases in ERP for WNYT on Channel 12 were intended to address the VHF reception issues that became evident after the transition from analog to digital in June 2009.

^{‡‡} A large number of Petitions for Rulemaking have been filed recently with the FCC for VHF stations requesting changes to UHF channels to alleviate VHF reception issues. For example, *see* MB Docket No. 20-334 (KGW, Portland, OR, Ch. 8); MB Docket No. 20-340 (KARE, Minneapolis, MN, Ch. 11); MB Docket No. 20-331 (KPNX, Mesa, AZ, Ch. 12); MB Docket No. 20-428 (KOMU-TV, Columbia, MO, Ch. 8); MB Docket No. 21-60 (KSNB-TV, Superior, NE, Ch. 4); MB Docket No. 21-127 (WRGB, Schenectady, NY, Ch. 6); MB Docket No. 21-50 (KFVS-TV, Cape Girardeau, MO, Ch. 11); MB Docket No. 21-73 (WLMB, Toledo, OH, Ch. 5); MB Docket No. 21-165 (KAIT, Jonesboro, AR, Ch. 8); MB Docket No. 21-70 (WFXL, Albany, GA, Ch. 12); MB Docket No. 21-71 (KHQA-TV, Hannibal, MO, Ch. 7); MB Docket No. 21-177 (KRCR-TV, Redding, CA, Ch. 7); MB Docket No. 21-185 (KTVM-TV, Butte, MT, Ch. 6); MB Docket No. 21-72 (WLUK-TV, Green Bay, WI, Ch. 12); MB Docket No. 21-161 (KVII, Amarillo, TX, Ch. 7); MB Docket No. 21-51 (KCRG, Cedar Rapids, IA, Ch. 9); MB Docket No. 21-10 (KRCG, Jefferson City, MO, Ch. 12); MB Docket No. 21-151 (KVAL, Eugene, OR, Ch. 13); MB Docket No. 21-156 (KBOI-TV, Boise, ID, Ch. 9); MB Docket No. 21-176 (KECI, Missoula, MT, Ch. 13); MB Docket No. 21-49 (WRDW-TV, Augusta, GA, Ch. 12); MB Docket 21-155, KTVL, Medford, OR, Ch. 10); MB Docket No. 21-128 (WCYB-TV, Bristol, VA, Ch. 5); and MB Docket No 21-53 (KMYU, St. George, UT, Ch. 9).

^{§§} *See*, for example, MB Docket No. 21-127 (WRGB, Schenectady, NY, Ch. 6), *Report and Order*, Released: June 16, 2021; MB Docket No. 21-185 (KTVM-TV, Butte, MT, Ch. 6), *Notice of Proposed Rulemaking*, Released: April 26, 2021, and MB Docket No. 21-128 (WCYB-TV, Bristol, VA, Ch. 5), *Report and Order*, Released: June 15, 2021.

^{***} *See* FCC File No. BLCDDT-20031022ABL.

8. An analysis of NBC network gain and loss area was conducted for the instant proposal under the same assumptions as outlined above. The results are depicted in the attached exhibit entitled Predicted Coverage Comparison Map with NBC Gain/Loss Analysis. As indicated therein, the subject proposal will result in an NBC network gain population of 31,492 persons, with an NBC network loss population of only 116 persons.

9. The instant proposal for Channel 21 is fully compliant with the interference protection requirements of Section 73.616 of the FCC Rules. The results of the FCC's *TVStudy* interference analysis are attached hereto as an exhibit. It is noted that use of a higher resolution cell size of 1 km with a higher resolution terrain profile point increment of 0.1 km is requested for the *TVStudy* analysis.

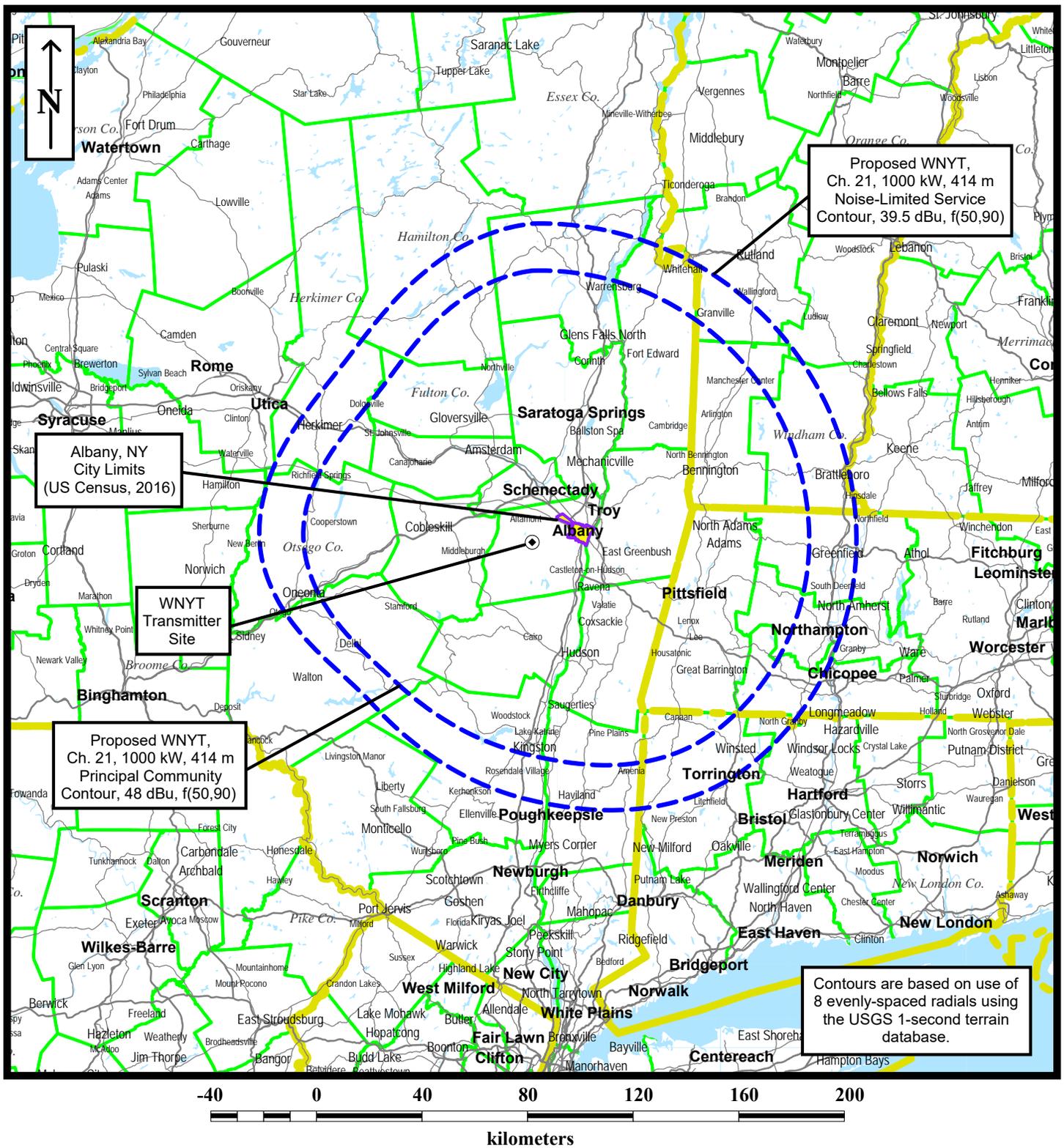
10. The proposed facility is compliant with the predicted coverage requirements of Section 73.625(a) of the FCC Rules with respect to the city of license of Albany, NY. This is demonstrated in the Predicted Coverage Contours exhibit.



Louis R. du Treil, Jr.

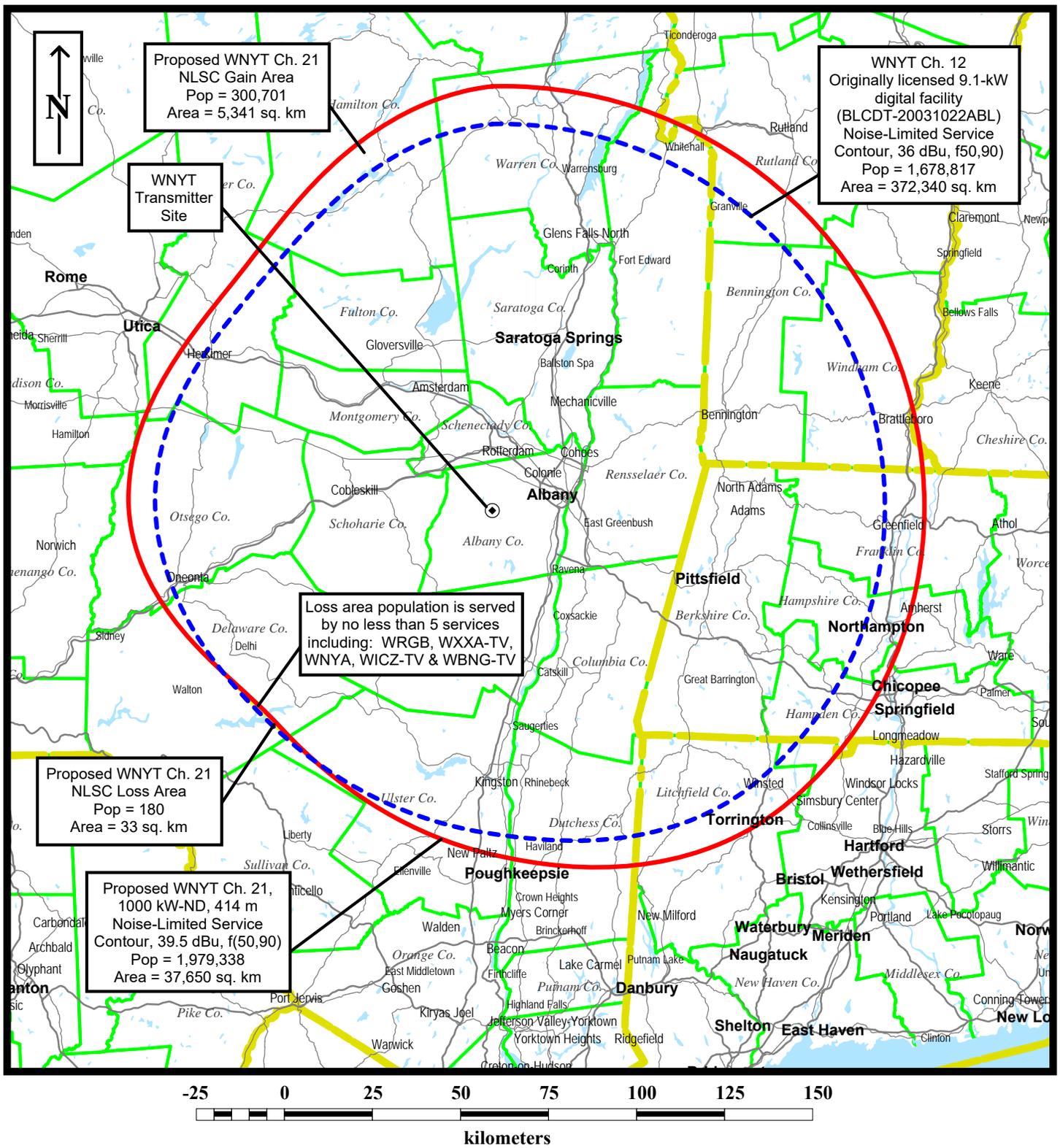
du Treil, Lundin & Rackley, Inc.
5120 Station Way
Sarasota, FL 34233-3221

June 29, 2021



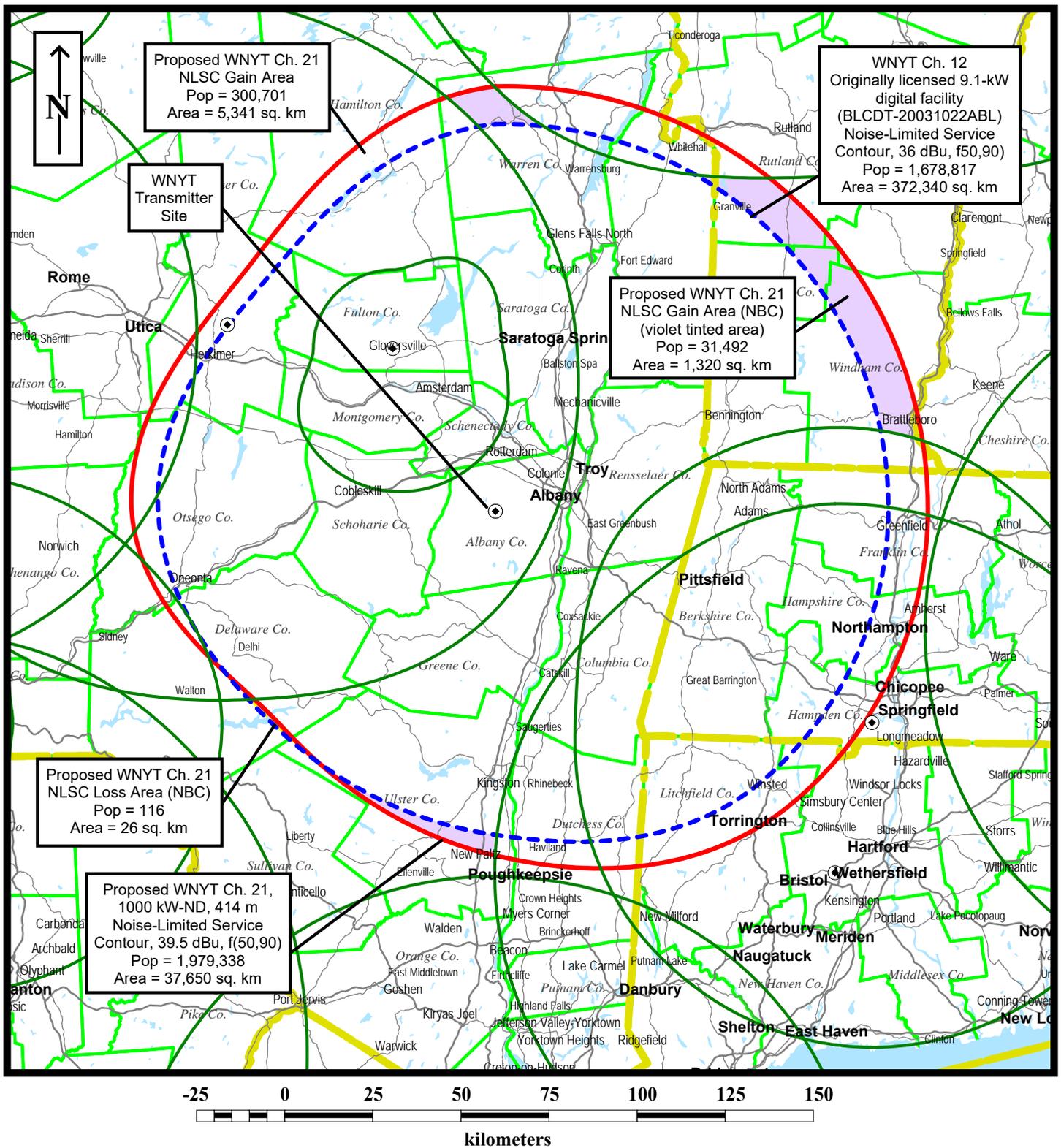
PREDICTED COVERAGE CONTOURS

duTreil, Lundin & Rackley, Inc. Sarasota, Florida



PREDICTED COVERAGE COMPARISON MAP WITH GAIN/LOSS ANALYSIS

duTreil, Lundin & Rackley, Inc. Sarasota, Florida



PREDICTED COVERAGE COMPARISON MAP WITH NBC GAIN/LOSS ANALYSIS

duTreil, Lundin & Rackley, Inc. Sarasota, Florida

INTERFERENCE ANALYSIS FOR WNYT, ALBANY, NY (PROPOSED CHANNEL 21)

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: wnyt21af, Model: Longley-Rice

Study build station data: LMS TV 2021-06-27

Proposal: WNYT21AG D21 DT APP ALBANY, NY
File number: wnyt21ag
Facility ID: 73363
Station data: User record
Record ID: 3906
Country: U.S.
Zone: I

Search options:
Non-U.S. records included
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WBZ-TV	D20	DT	LIC	BOSTON, MA	BLANK0000117666	230.1 km
No	WBZ-TV	D20	DT	CP	BOSTON, MA	BLANK0000127484	230.1
No	WBGH-CD	D20z	DC	LIC	BINGHAMTON, NY	BLANK0000004524	170.7
No	WCNY-TV	D20	DT	LIC	SYRACUSE, NY	BLANK0000105277	175.6
No	WCAX-TV	D20	DT	LIC	BURLINGTON, VT	BLANK0000090403	232.1
Yes	WEDW	D21	DD	CP	STAMFORD, CT	BLANK0000122655	178.7
Yes	WSBK-TV	D21	DT	LIC	BOSTON, MA	BLANK0000117438	230.1
Yes	WFXQ-CD	D21	DC	LIC	SPRINGFIELD, MA	BLANK0000125116	119.5
No	WMPY	D21	DT	LIC	ANNAPOLIS, MD	BLANK0000136496	457.4
Yes	WROC-TV	D21	DT	LIC	ROCHESTER, NY	BLANK0000079899	296.5
Yes	WNEP-TV	D21	DT	LIC	SCRANTON, PA	BLANK0000117109	222.3
No	WUTH-CD	D22	DC	LIC	HARTFORD, CT	BLANK0000080135	162.4
No	WBPX-TV	D22	DT	LIC	BOSTON, MA	BLANK0000075858	208.0
No	WVMA-CD	D22	DC	CP	WINCHENDON, MA	BLANK0000147024	133.1
Yes	WVMA-CD	D22	DC	LIC	WINCHENDON, MA	BLANK0000095385	141.4
No	WVMA-CD	D22	DC	LIC	WINCHENDON, MA	BLANK0000150905	133.1
No	WDVB-CD	D22	DC	LIC	EDISON, NJ	BLANK0000080314	208.6
No	WCWN	D22	DT	LIC	SCHENECTADY, NY	BLANK0000083798	0.0
No	WOLF-TV	D22	DT	LIC	HAZLETON, PA	BLANK0000086376	222.2
No	CICO-DT-92D21	D21	DT	LIC	CLOYNE, ON	BLANKCANADA168	358.1
Yes	CBMT-DT	D21	DT	LIC	MONTRAL, QC	BLANKCANADA276	321.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D21
Latitude: 42 37 31.30 N (NAD83)
Longitude: 74 0 36.70 W
Height AMSL: 668.8 m
HAAT: 414.0 m
Peak ERP: 1000 kW
Antenna: Omnidirectional
Elev Pattn: Generic
Elec Tilt: 1.00

39.5 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	1000 kW	547.4 m	120.9 km
45.0	1000	573.3	122.5
90.0	1000	579.0	122.9
135.0	1000	509.2	118.5
180.0	1000	283.8	98.1
225.0	1000	201.3	86.5
270.0	1000	331.9	103.3
315.0	1000	287.4	98.5

*** The proposal is compliant with the largest station in the market criteria. Specifically, the 41 dBu, f(50,90) contour contains an area of 35,470 sq. km. Stations WRGB (6), WNYA (7), WXXA-TV (8) and WNYT (12) contain noise-limited service contour areas of 49,170 sq. km; 37,442 sq. km; 37,171 sq. km; and 38,022 sq. km, respectively.**

ERP exceeds maximum
ERP: 1000 kW ERP maximum: 804 kW*

**Proposal is within coordination distance of Canadian border
Distance to Canadian border: 247.1 km

Distance to Mexican border: 2785.3 km

Conditions at FCC monitoring station: Canandaigua NY
Bearing: 278.0 degrees Distance: 267.6 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 274.6 degrees Distance: 2602.6 km

INTERFERENCE ANALYSIS FOR WNYT, ALBANY, NY (PROPOSED CHANNEL 21)

No land mobile station failures found

Study cell size: 1.00 km (Higher resolution cell size is requested.)

Profile point spacing: 0.10 km (Higher resolution terrain profile point spacing is requested.)

Maximum new IX to full-service and Class A: 0.50%

Maximum new IX to LPTV: 2.00%

Interference to BLANK0000122655 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WEDW	D21	DD	CP	STAMFORD, CT	BLANK0000122655	
Undesireds:	WNYT21AG	D21	DT	APP	ALBANY, NY	wnyt21ag	178.7 km
	WSBK-TV	D21	DT	LIC	BOSTON, MA	BLANK0000117438	238.4
	WFXQ-CD	D21	DC	LIC	SPRINGFIELD, MA	BLANK0000125116	153.5
	WMPT	D21	DT	LIC	ANNAPOLIS, MD	BLANK0000136496	344.5
	WNEP-TV	D21	DT	LIC	SCRANTON, PA	BLANK0000117109	193.8
	WUTH-CD	D22	DC	LIC	HARTFORD, CT	BLANK0000080135	116.3
	WVMA-CD	D22	DC	CP	WINCHENDON, MA	BLANK0000147024	197.9
	WCWN	D22	DT	LIC	SCHENECTADY, NY	BLANK0000083798	178.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
28606.9	20,542,300	27147.5	19,751,682	3.41

Undesired	Total IX	Unique IX, before	Unique IX, after
WNYT21AG D21 DT APP	1116.2	206,404	907.5
WSBK-TV D21 DT LIC	116.3	99,518	19.1
WFXQ-CD D21 DC LIC	212.5	187,487	95.3
WMPT D21 DT LIC	42.1	12,826	15.0
WNEP-TV D21 DT LIC	284.0	98,573	137.4
WUTH-CD D22 DC LIC	67.1	98,797	3.0
WCWN D22 DT LIC	3.0	45	0.0

Interference to BLANK0000117438 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WSBK-TV	D21	DT	LIC	BOSTON, MA	BLANK0000117438	
Undesireds:	WNYT21AG	D21	DT	APP	ALBANY, NY	wnyt21ag	230.1 km
	WBZ-TV	D20	DT	LIC	BOSTON, MA	BLANK0000117666	0.0
	WEDW	D21	DD	CP	STAMFORD, CT	BLANK0000122655	238.4
	WFXQ-CD	D21	DC	LIC	SPRINGFIELD, MA	BLANK0000125116	116.0
	WBPX-TV	D22	DT	LIC	BOSTON, MA	BLANK0000075858	22.6
	WVMA-CD	D22	DC	CP	WINCHENDON, MA	BLANK0000147024	99.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
27005.5	7,294,983	26227.6	7,183,923	0.27

Undesired	Total IX	Unique IX, before	Unique IX, after
WNYT21AG D21 DT APP	196.8	12,971	68.3
WEDW D21 DD CP	171.6	10,329	69.2
WFXQ-CD D21 DC LIC	301.6	15,492	194.1
WBPX-TV D22 DT LIC	51.3	21,367	51.3
WVMA-CD D22 DC CP	1.0	0	0.0

Interference to BLANK0000125116 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WFXQ-CD	D21	DC	LIC	SPRINGFIELD, MA	BLANK0000125116	
Undesireds:	WNYT21AG	D21	DT	APP	ALBANY, NY	wnyt21ag	119.5 km
	WBZ-TV	D20	DT	LIC	BOSTON, MA	BLANK0000117666	116.0
	WEDW	D21	DD	CP	STAMFORD, CT	BLANK0000122655	153.5
	WSBK-TV	D21	DT	LIC	BOSTON, MA	BLANK0000117438	116.0
	WNEP-TV	D21	DT	LIC	SCRANTON, PA	BLANK0000117109	292.9
	WVMA-CD	D22	DC	CP	WINCHENDON, MA	BLANK0000147024	44.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
6187.5	793,132	5604.6	752,472	1.49

Undesired	Total IX	Unique IX, before	Unique IX, after
WNYT21AG D21 DT APP	146.2	5,697	80.0
WEDW D21 DD CP	117.9	4,594	64.7
WSBK-TV D21 DT LIC	164.5	4,539	98.3
WNEP-TV D21 DT LIC	3.0	0	0.0

Interference to BLANK0000079899 LIC scenario 1

INTERFERENCE ANALYSIS FOR WNYT, ALBANY, NY (PROPOSED CHANNEL 21)

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WROC-TV	D21	DT	LIC	ROCHESTER, NY	BLANK0000079899	
Undesireds: WNYT21AG	D21	DT	APP	ALBANY, NY	wnyt21ag	296.5 km
WCNY-TV	D20	DT	LIC	SYRACUSE, NY	BLANK0000105277	120.9
WSEE-TV	D21	DT	LIC	ERIE, PA	BLANK0000074552	236.7
WNEP-TV	D21	DT	LIC	SCRANTON, PA	BLANK0000117109	259.0
CBLT-DT	D20	DT	LIC	TORONTO, ON	BLANKCANADA234	156.2
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
16070.0 1,204,671	15762.2 1,193,506	15620.5 1,189,216	15579.2 1,187,235	0.26	0.17	
555.2 0	555.2 0	555.2 0	555.2 0	0.00	0.00	(in Canada)

Undesired	Total IX	Unique IX, before	Unique IX, after
WNYT21AG D21 DT APP	97.6 2,961		41.3 1,981
WCNY-TV D20 DT LIC	14.0 158	1.0 6	1.0 6
WSEE-TV D21 DT LIC	22.1 437	19.1 387	18.1 358
WNEP-TV D21 DT LIC	111.6 1,799	95.6 1,597	52.3 811
CBLT-DT D20 DT LIC	10.0 2,098	10.0 2,098	10.0 2,098

Interference to BLANK0000117109 LIC scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WNEP-TV	D21	DT	LIC	SCRANTON, PA	BLANK0000117109	
Undesireds: WNYT21AG	D21	DT	APP	ALBANY, NY	wnyt21ag	222.3 km
WBGH-CD	D20z	DC	LIC	BINGHAMTON, NY	BLANK0000004524	97.9
WEDW	D21	DD	CP	STAMFORD, CT	BLANK0000122655	193.8
WMPT	D21	DT	LIC	ANNAPOLIS, MD	BLANK0000136496	249.4
WROC-TV	D21	DT	LIC	ROCHESTER, NY	BLANK0000079899	259.0
WSEE-TV	D21	DT	LIC	ERIE, PA	BLANK0000074552	361.0
WPNT	D21	DT	LIC	PITTSBURGH, PA	BLANK0000112577	355.8
WMPB	D22	DT	LIC	BALTIMORE, MD	BLANK0000107690	207.6
WOLF-TV	D22	DT	LIC	HAZLETON, PA	BLANK0000086376	0.1
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
40156.3 3,434,444	35265.0 2,875,475	34005.6 2,711,398	33823.8 2,699,627	0.53	0.43	

Undesired	Total IX	Unique IX, before	Unique IX, after
WNYT21AG D21 DT APP	409.7 30,221		181.8 11,771
WBGH-CD D20z DC LIC	9.0 1,088	8.0 1,043	7.0 780
WEDW D21 DD CP	615.0 49,085	406.5 30,268	316.3 25,270
WMPT D21 DT LIC	660.5 127,409	481.9 109,274	450.9 101,785
WROC-TV D21 DT LIC	175.5 5,269	142.5 4,601	96.7 2,630
WSEE-TV D21 DT LIC	6.0 71	1.0 0	0.0 0
WPNT D21 DT LIC	9.0 99	6.0 20	6.0 20
WOLF-TV D22 DT LIC	2.0 0	1.0 0	1.0 0

Interference to BLANK0000095385 LIC scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WVMA-CD	D22	DC	LIC	WINCHENDON, MA	BLANK0000095385	
Undesireds: WNYT21AG	D21	DT	APP	ALBANY, NY	wnyt21ag	141.4 km
WUTH-CD	D22	DC	LIC	HARTFORD, CT	BLANK0000080135	147.5
WBPX-TV	D22	DT	LIC	BOSTON, MA	BLANK0000075858	101.5
WCWN	D22	DT	LIC	SCHENECTADY, NY	BLANK0000083798	141.4
WPXG-TV	D23	DT	LIC	CONCORD, NH	BLANK0000078658	86.7
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
10418.0 343,507	7950.1 224,084	7780.1 218,175	7780.1 218,175	0.00	0.00	

Undesired	Total IX	Unique IX, before	Unique IX, after
WNYT21AG D21 DT APP	1.0 0		0.0 0
WUTH-CD D22 DC LIC	6.1 199	6.1 199	6.1 199
WBPX-TV D22 DT LIC	110.8 3,448	86.6 2,892	86.6 2,892
WCWN D22 DT LIC	76.3 2,818	53.2 2,262	52.2 2,262
WPXG-TV D23 DT LIC	2.0 0	0.0 0	0.0 0

Interference to BLANKCANADA276 LIC scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: CBMT-DT	D21	DT	LIC	MONTRAL, QC	BLANKCANADA276	
Undesireds: WNYT21AG	D21	DT	APP	ALBANY, NY	wnyt21ag	321.9 km
WCAX-TV	D20	DT	LIC	BURLINGTON, VT	BLANK0000090403	124.8
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
3822.0 116,163	3593.6 106,395	3367.6 85,435	3362.6 85,293	0.15	0.17	(in U.S.)
22759.5 4,752,674	22347.6 4,738,474	22329.4 4,738,474	22328.4 4,738,474	0.00	0.00	

