



**STATEMENT OF JOHN E. HIDLE, P.E.
IN SUPPORT OF A REQUEST FOR STA
TO PERMIT TEMPORARY OPERATION OF
WTVH - SYRACUSE, NEW YORK
DTV - CH. 18 - 58.8 kW - 392.6 m HAAT**

Prepared for: WTVH LICENSE LLC

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a Licensed Professional Engineer in the Commonwealth of Virginia, No. 7418, and in New York State, No. 63418.

GENERAL

This office has been authorized by WTVH LICENSE LLC, licensee of WTVH, channel 18, facility ID number 74151, licensed to Syracuse, New York, to prepare this statement, FCC Form 2100, its technical sections, and the associated exhibits in support of a request for STA to operate WTVH temporarily using its authorized antenna mounted on the WSTM-TV tower site, ASR # 1233154. The licensee has a pending application for a minor modification of its post-reassignment construction permit, File # 0000094502, which proposes to relocate WTVH's authorized transmission facility to the WSTM-TV tower site which is located 1373 meters from its authorized site, to increase its Height Above Average Terrain (HAAT) from 290.1 meters to 392.6 meters and to decrease its Effective Radiated Power (ERP) from 1000 kW to 109 kW. The proposed temporary ERP is 58.8 kW and the proposed HAAT is 392.6 meters, as proposed in the pending minor-modification application.

**STATEMENT OF JOHN E. HIDLE, P.E.
WTVH - Syracuse, New York
PAGE 2**

NON-DIRECTIONAL ANTENNA

The applicant intends to install WTVH's authorized antenna, a new Dielectric model TFU-32JTH/VP-R O6 elliptically polarized non-directional transmitting antenna with its center of radiation located at a height above ground of 257.6 meters, and a Height Above Average Terrain of 392.6 meters. The antenna manufacturer's vertical plane elevation radiation pattern, illustrating the antenna's radiation characteristics above and below the horizontal plane is shown and tabulated in Exhibit 2.

PREDICTED COVERAGE CONTOURS

The predicted coverage contours were calculated in accordance with the method described in Section 73.625(b) of the Rules, utilizing the appropriate F(50,90) propagation curves (47 CFR Section 73.699, Figure 9), proposed Effective Radiated Power, and antenna height above average terrain as determined for each profile radial. The average terrain on the eight cardinal radials from 3 kilometers to 16 kilometers from the site, was determined using the NED Three Second US Terrain Database as permitted in the FCC Rules. The antenna site elevation and coordinates were determined from FCC antenna registration data. Exhibit 1 shows the proposed predicted STA Noise Limited (39.15 dBu) Contour, and demonstrates that it is wholly encompassed by WTVH's authorized Noise Limited Contour, and encompasses its community of license, Syracuse, New York.

ALLOCATION CONSIDERATIONS

Post-Transition DTV Considerations

A study was performed, using the FCC's software, *tvstudy*, v. 2.2.5, to determine if the instant request for STA is predicted to cause new prohibited interference to post

**STATEMENT OF JOHN E. HIDLE, P.E.
WTVH - Syracuse, New York
PAGE 3**

reassignment DTV stations, construction permits, DTV allotments or Class A DTV stations.

The applicant herein requests that the staff process the instant application using a cell size of 0.5 square kilometers and a terrain profile increment of 0.1 kilometers. The study results, shown in Appendix B, indicate that the instant request for STA predicted to cause no new interference exceeding 0.5% to the populations served by any post reassignment DTV station, construction permit, allotment or Class A DTV stations.

International DTV Considerations

The WTVH site is located 94.0 kilometers from the nearest point on the US/Canadian border. And more than 2600 kilometers from the US/Mexican border. Since all non-US stations are included in the instant study, and no interference is predicted it is believed that no international coordination is necessary. (See Appendix B)

BLANKETING AND INTERMODULATION INTERFERENCE

Other broadcast and non-broadcast facilities will be either co-located with, or located within 10 km of the proposed new WTVH site. The applicant does recognize its responsibility to remedy complaints of interference that might result from this proposal in accordance with applicable Rules.

RADIO FREQUENCY IMPACT, SAFETY & STATEMENT OF COMPLIANCE

The licensee of WTVH is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WTVH antenna and will reduce power or cease operation, when necessary, to ensure protection to personnel.

As shown in Appendix A the WTVH channel 18 request for a temporary STA facility as proposed herein will operate with a maximum ERP of 58.8 kW from an elliptically

**STATEMENT OF JOHN E. HIDLE, P.E.
WTVH - Syracuse, New York
PAGE 4**

polarized non-directional transmitting antenna with a centerline height of 257.6 meters above ground level (AGL). Considering the elevation pattern submitted elsewhere in this application, the vertical plane relative field factor is less than 0.250 at all depression angles greater than 5 degrees. The proposed modified WTVH facility is predicted to produce a worst-case power density at two meters above ground level, at 304.6 meters from the tower base, of 0.589 $\mu\text{W}/\text{cm}^2$, which is 0.18% of the FCC guideline value of 331.33 $\mu\text{W}/\text{cm}^2$ for an "uncontrolled" environment, and 0.036% of the FCC's guideline value for "controlled" environments. Therefore, pursuant to Section 1.1307(b)(3) of the FCC Rules, because the proposed facility would not exceed 5% of the uncontrolled and controlled exposure limits, the proposal's power density contribution is considered insignificant.

Further, the Applicant will continue to cooperate/coordinate with other site users and reduce power and/or cease operation during times of service or maintenance of the transmission systems as necessary to avoid potentially harmful exposure to personnel. In light of the above, the proposed facility should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Commission's Rules.

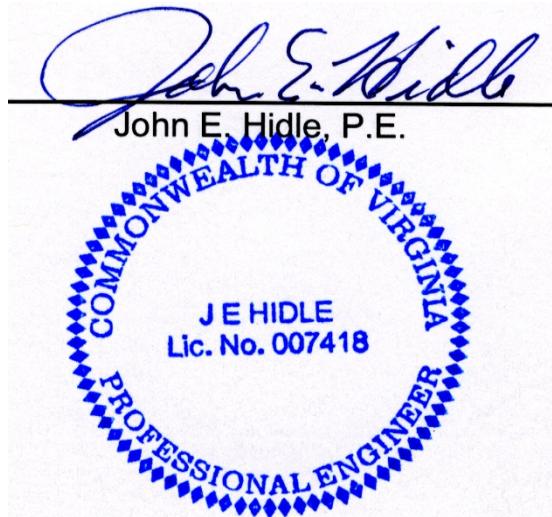
SUMMARY

It is submitted that the instant request for STA to operate WTVH a distance of 1373 meters from its currently authorized site, on a different tower, ASR #1233154, with an HAAT of 392.6 meters and a temporary ERP of 58.8 kW, as described herein, complies with the Rules, Regulations and relevant Policies of the Federal Communications Commission. This statement, FCC Form 2100, its technical sections, and the attached

**STATEMENT OF JOHN E. HIDLE, P.E.
WTVH - Syracuse, New York
PAGE 5**

exhibits were prepared by me or under my direct supervision and are believed to be true and correct to the best of my knowledge and belief.

DATED: August 13, 2020



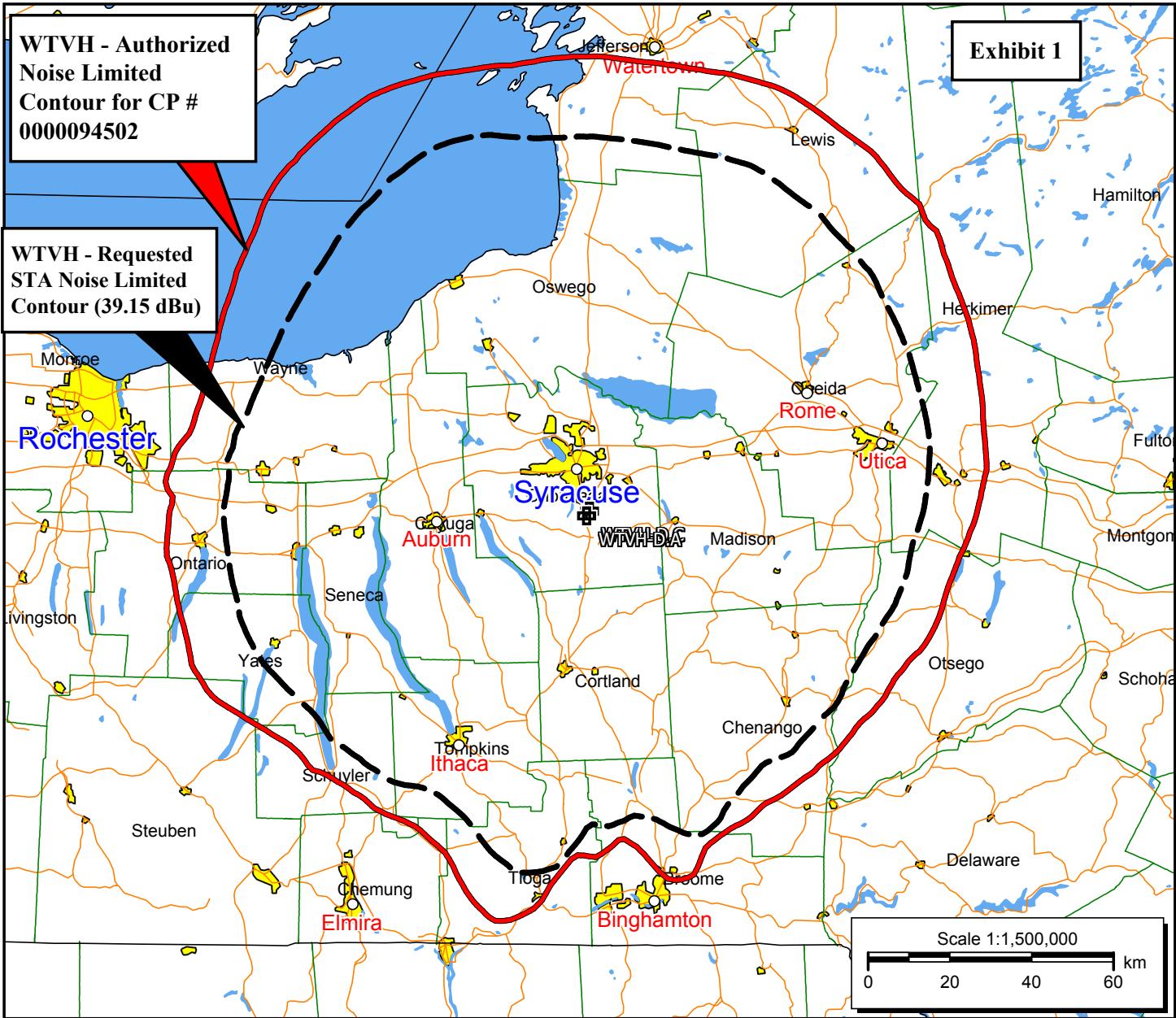
WTVH-D.C
0000094502
Latitude: 42-57-18.76 N
Longitude: 076-06-34.28 W
ERP: 1000.00 kW
Channel: 18
Frequency: 497.0 MHz
AMSL Height: 575.5 m
Elevation: 414.5 m
Horiz. Pattern: Omni
Vert. Pattern: Yes
Elec Tilt: 0.75
Prop Model: None

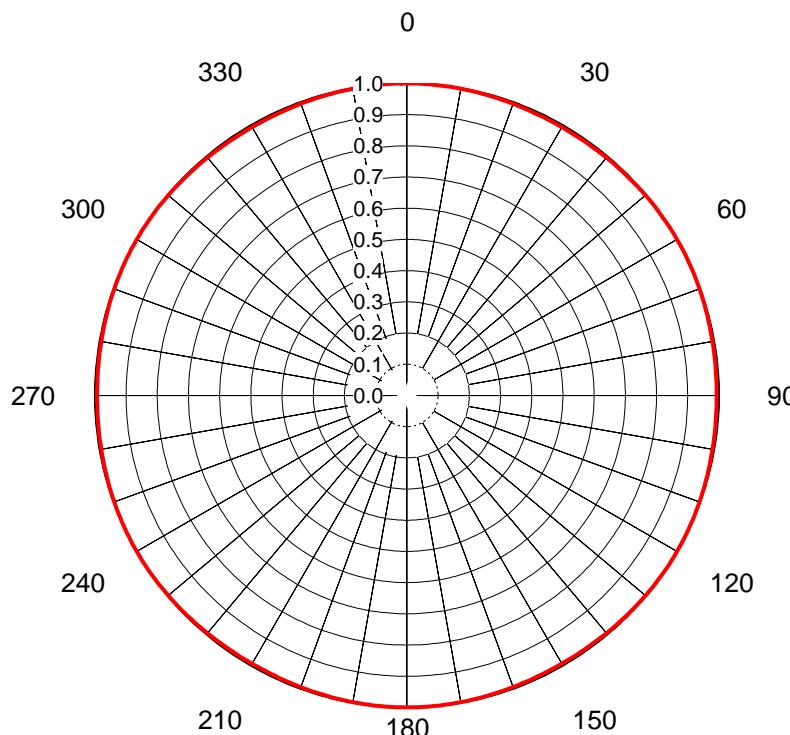
WTVH-D.A
0000119614
Latitude: 42-56-41.80 N
Longitude: 076-07-06.20 W
ERP: 58.80 kW
Channel: 18
Frequency: 497.0 MHz
AMSL Height: 689.5 m
Elevation: 431.9 m
Horiz. Pattern: Omni
Vert. Pattern: Yes
Elec Tilt: 0.75
Prop Model: None

**WTVH - Authorized
Noise Limited
Contour for CP #
0000094502**

**WTVH - Requested
STA Noise Limited
Contour (39.15 dBu)**

Exhibit 1



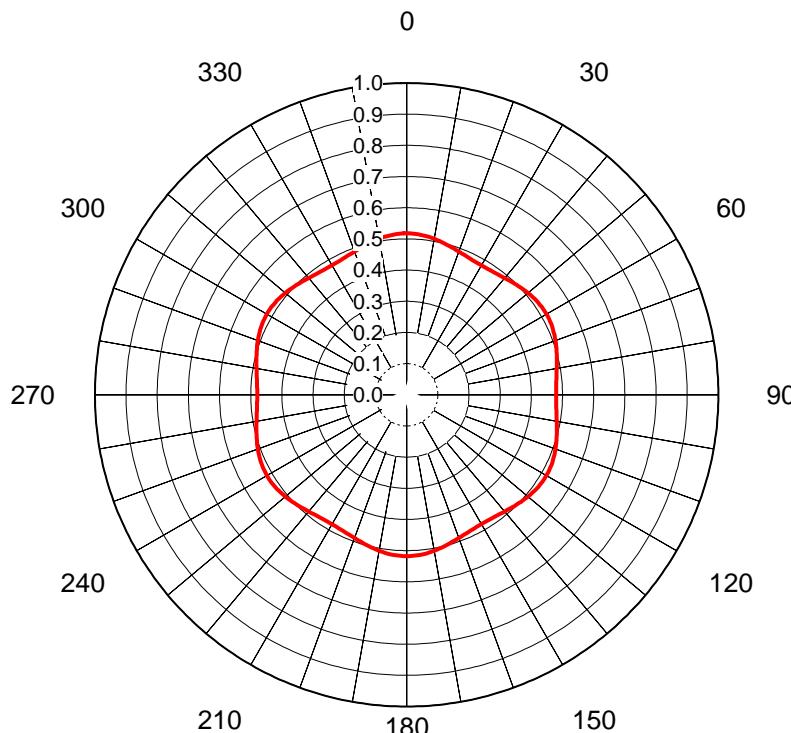


AZIMUTH PATTERN Horizontal Polarization

Proposal No.	C-71140-3
Date	26-May-20
Call Letters	WTVH
Channel	18
Frequency	497 MHz
Antenna Type	TFU-32JTH/VP-R O6
Gain	1.01 (0.03dB)
Calculated	
Circularity	+/- 1.0 dB

Deg	Value																						
0	1.000	36	0.994	72	0.998	108	0.998	144	0.994	180	1.000	216	0.994	252	0.998	288	0.998	324	0.994	360	0.994	396	0.993
1	1.000	37	0.994	73	0.997	109	0.998	145	0.993	181	1.000	217	0.994	253	0.997	289	0.998	325	0.993	361	0.994	397	0.993
2	1.000	38	0.994	74	0.997	110	0.998	146	0.993	182	1.000	218	0.994	254	0.997	290	0.998	326	0.993	362	0.994	398	0.993
3	1.000	39	0.994	75	0.996	111	0.999	147	0.993	183	1.000	219	0.994	255	0.996	291	0.999	327	0.993	363	0.994	399	0.993
4	1.000	40	0.995	76	0.996	112	0.999	148	0.993	184	1.000	220	0.995	256	0.996	292	0.999	328	0.993	364	0.994	400	0.993
5	1.000	41	0.995	77	0.996	113	0.999	149	0.993	185	1.000	221	0.995	257	0.996	293	0.999	329	0.993	365	0.994	401	0.993
6	0.999	42	0.995	78	0.995	114	0.999	150	0.993	186	0.999	222	0.995	258	0.995	294	0.999	330	0.993	366	0.994	402	0.993
7	0.999	43	0.996	79	0.995	115	1.000	151	0.993	187	0.999	223	0.996	259	0.995	295	1.000	331	0.993	367	0.994	403	0.993
8	0.999	44	0.996	80	0.995	116	1.000	152	0.993	188	0.999	224	0.996	260	0.995	296	1.000	332	0.993	368	0.994	404	0.993
9	0.999	45	0.996	81	0.994	117	1.000	153	0.993	189	0.999	225	0.996	261	0.994	297	1.000	333	0.993	369	0.994	405	0.993
10	0.998	46	0.997	82	0.994	118	1.000	154	0.993	190	0.998	226	0.997	262	0.994	298	1.000	334	0.993	370	0.994	406	0.993
11	0.998	47	0.997	83	0.994	119	1.000	155	0.993	191	0.998	227	0.997	263	0.994	299	1.000	335	0.993	371	0.994	407	0.993
12	0.998	48	0.998	84	0.994	120	1.000	156	0.994	192	0.998	228	0.998	264	0.994	300	1.000	336	0.994	372	0.994	408	0.993
13	0.997	49	0.998	85	0.993	121	1.000	157	0.994	193	0.997	229	0.998	265	0.993	301	1.000	337	0.994	373	0.994	409	0.993
14	0.997	50	0.998	86	0.993	122	1.000	158	0.994	194	0.997	230	0.998	266	0.993	302	1.000	338	0.994	374	0.994	410	0.993
15	0.996	51	0.999	87	0.993	123	1.000	159	0.994	195	0.996	231	0.999	267	0.993	303	1.000	339	0.994	375	0.994	411	0.993
16	0.996	52	0.999	88	0.993	124	1.000	160	0.995	196	0.996	232	0.999	268	0.993	304	1.000	340	0.995	376	0.994	412	0.993
17	0.996	53	0.999	89	0.993	125	1.000	161	0.995	197	0.996	233	0.999	269	0.993	305	1.000	341	0.995	377	0.994	413	0.993
18	0.995	54	0.999	90	0.993	126	0.999	162	0.995	198	0.995	234	0.999	270	0.993	306	0.999	342	0.995	378	0.994	414	0.993
19	0.995	55	1.000	91	0.993	127	0.999	163	0.996	199	0.995	235	1.000	271	0.993	307	0.999	343	0.996	379	0.994	415	0.993
20	0.995	56	1.000	92	0.993	128	0.999	164	0.996	200	0.995	236	1.000	272	0.993	308	0.999	344	0.996	380	0.994	416	0.993
21	0.994	57	1.000	93	0.993	129	0.999	165	0.996	201	0.994	237	1.000	273	0.993	309	0.999	345	0.996	381	0.994	417	0.993
22	0.994	58	1.000	94	0.993	130	0.998	166	0.997	202	0.994	238	1.000	274	0.993	310	0.998	346	0.997	382	0.994	418	0.993
23	0.994	59	1.000	95	0.993	131	0.998	167	0.997	203	0.994	239	1.000	275	0.993	311	0.998	347	0.997	383	0.994	419	0.993
24	0.994	60	1.000	96	0.994	132	0.998	168	0.998	204	0.994	240	1.000	276	0.994	312	0.998	348	0.998	384	0.994	420	0.993
25	0.993	61	1.000	97	0.994	133	0.997	169	0.998	205	0.993	241	1.000	277	0.994	313	0.997	349	0.998	385	0.994	421	0.993
26	0.993	62	1.000	98	0.994	134	0.997	170	0.998	206	0.993	242	1.000	278	0.994	314	0.997	350	0.998	386	0.994	422	0.993
27	0.993	63	1.000	99	0.994	135	0.996	171	0.999	207	0.993	243	1.000	279	0.994	315	0.996	351	0.999	387	0.994	423	0.993
28	0.993	64	1.000	100	0.995	136	0.996	172	0.999	208	0.993	244	1.000	280	0.995	316	0.996	352	0.999	388	0.994	424	0.993
29	0.993	65	1.000	101	0.995	137	0.996	173	0.999	209	0.993	245	1.000	281	0.995	317	0.996	353	0.999	389	0.994	425	0.993
30	0.993	66	0.999	102	0.995	138	0.995	174	0.999	210	0.993	246	0.999	282	0.995	318	0.995	354	0.999	390	0.994	426	0.993
31	0.993	67	0.999	103	0.996	139	0.995	175	1.000	211	0.993	247	0.999	283	0.996	319	0.995	355	1.000	391	0.994	427	0.993
32	0.993	68	0.999	104	0.996	140	0.995	176	1.000	212	0.993	248	0.999	284	0.996	320	0.995	356	1.000	392	0.994	428	0.993
33	0.993	69	0.999	105	0.996	141	0.994	177	1.000	213	0.993	249	0.999	285	0.996	321	0.994	357	1.000	393	0.994	429	0.993
34	0.993	70	0.998	106	0.997	142	0.994	178	1.000	214	0.993	250	0.998	286	0.997	322	0.994	358	1.000	394	0.994	430	0.993
35	0.993	71	0.998	107	0.997	143	0.994	179	1.000	215	0.993	251	0.998	287	0.997	323	0.994	359	1.000	395	0.994	431	0.993

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AZIMUTH PATTERN Vertical Polarization

Proposal No.	C-71140-3
Date	26-May-20
Call Letters	WTVH
Channel	18
Frequency	497 MHz
Antenna Type	TFU-32JTH/VP-R O6
Gain	1.08 (0.33dB)
Calculated	
Circularity	+/- 1.0 dB

Deg	Value																		
0	0.518	36	0.483	72	0.504	108	0.504	144	0.483	180	0.518	216	0.483	252	0.504	288	0.504	324	0.483
1	0.518	37	0.484	73	0.502	109	0.506	145	0.482	181	0.518	217	0.484	253	0.502	289	0.506	325	0.482
2	0.517	38	0.486	74	0.500	110	0.508	146	0.481	182	0.517	218	0.486	254	0.500	290	0.508	326	0.481
3	0.517	39	0.487	75	0.498	111	0.510	147	0.480	183	0.517	219	0.487	255	0.498	291	0.510	327	0.480
4	0.516	40	0.489	76	0.496	112	0.511	148	0.480	184	0.516	220	0.489	256	0.496	292	0.511	328	0.480
5	0.515	41	0.491	77	0.494	113	0.513	149	0.479	185	0.515	221	0.491	257	0.494	293	0.513	329	0.479
6	0.514	42	0.492	78	0.492	114	0.514	150	0.479	186	0.514	222	0.492	258	0.492	294	0.514	330	0.479
7	0.513	43	0.494	79	0.491	115	0.515	151	0.479	187	0.513	223	0.494	259	0.491	295	0.515	331	0.479
8	0.511	44	0.496	80	0.489	116	0.516	152	0.480	188	0.511	224	0.496	260	0.489	296	0.516	332	0.480
9	0.510	45	0.498	81	0.487	117	0.517	153	0.480	189	0.510	225	0.498	261	0.487	297	0.517	333	0.480
10	0.508	46	0.500	82	0.486	118	0.517	154	0.481	190	0.508	226	0.500	262	0.486	298	0.517	334	0.481
11	0.506	47	0.502	83	0.484	119	0.518	155	0.482	191	0.506	227	0.502	263	0.484	299	0.518	335	0.482
12	0.504	48	0.504	84	0.483	120	0.518	156	0.483	192	0.504	228	0.504	264	0.483	300	0.518	336	0.483
13	0.502	49	0.506	85	0.482	121	0.518	157	0.484	193	0.502	229	0.506	265	0.482	301	0.518	337	0.484
14	0.500	50	0.508	86	0.481	122	0.517	158	0.486	194	0.500	230	0.508	266	0.481	302	0.517	338	0.486
15	0.498	51	0.510	87	0.480	123	0.517	159	0.487	195	0.498	231	0.510	267	0.480	303	0.517	339	0.487
16	0.496	52	0.511	88	0.480	124	0.516	160	0.489	196	0.496	232	0.511	268	0.480	304	0.516	340	0.489
17	0.494	53	0.513	89	0.479	125	0.515	161	0.491	197	0.494	233	0.513	269	0.479	305	0.515	341	0.491
18	0.492	54	0.514	90	0.479	126	0.514	162	0.492	198	0.492	234	0.514	270	0.479	306	0.514	342	0.492
19	0.491	55	0.515	91	0.479	127	0.513	163	0.494	199	0.491	235	0.515	271	0.479	307	0.513	343	0.494
20	0.489	56	0.516	92	0.480	128	0.511	164	0.496	200	0.489	236	0.516	272	0.480	308	0.511	344	0.496
21	0.487	57	0.517	93	0.480	129	0.510	165	0.498	201	0.487	237	0.517	273	0.480	309	0.510	345	0.498
22	0.486	58	0.517	94	0.481	130	0.508	166	0.500	202	0.486	238	0.517	274	0.481	310	0.508	346	0.500
23	0.484	59	0.518	95	0.482	131	0.506	167	0.502	203	0.484	239	0.518	275	0.482	311	0.506	347	0.502
24	0.483	60	0.518	96	0.483	132	0.504	168	0.504	204	0.483	240	0.518	276	0.483	312	0.504	348	0.504
25	0.482	61	0.518	97	0.484	133	0.502	169	0.506	205	0.482	241	0.518	277	0.484	313	0.502	349	0.506
26	0.481	62	0.517	98	0.486	134	0.500	170	0.508	206	0.481	242	0.517	278	0.486	314	0.500	350	0.508
27	0.480	63	0.517	99	0.487	135	0.498	171	0.510	207	0.480	243	0.517	279	0.487	315	0.498	351	0.510
28	0.480	64	0.516	100	0.489	136	0.496	172	0.511	208	0.480	244	0.516	280	0.489	316	0.496	352	0.511
29	0.479	65	0.515	101	0.491	137	0.494	173	0.513	209	0.479	245	0.515	281	0.491	317	0.494	353	0.513
30	0.479	66	0.514	102	0.492	138	0.492	174	0.514	210	0.479	246	0.514	282	0.492	318	0.492	354	0.514
31	0.479	67	0.513	103	0.494	139	0.491	175	0.515	211	0.479	247	0.513	283	0.494	319	0.491	355	0.515
32	0.480	68	0.511	104	0.496	140	0.489	176	0.516	212	0.480	248	0.511	284	0.496	320	0.489	356	0.516
33	0.480	69	0.510	105	0.498	141	0.487	177	0.517	213	0.480	249	0.510	285	0.498	321	0.487	357	0.517
34	0.481	70	0.508	106	0.500	142	0.486	178	0.517	214	0.481	250	0.508	286	0.500	322	0.486	358	0.517
35	0.482	71	0.506	107	0.502	143	0.484	179	0.518	215	0.482	251	0.506	287	0.502	323	0.484	359	0.518

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ELEVATION PATTERN

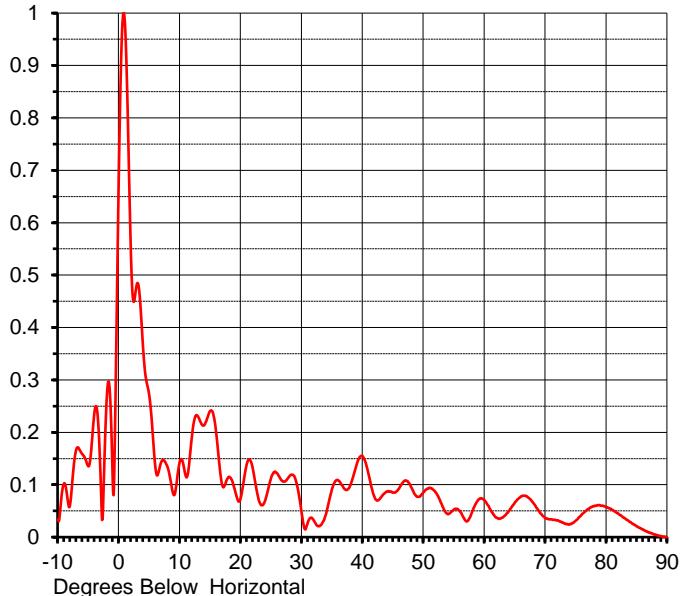
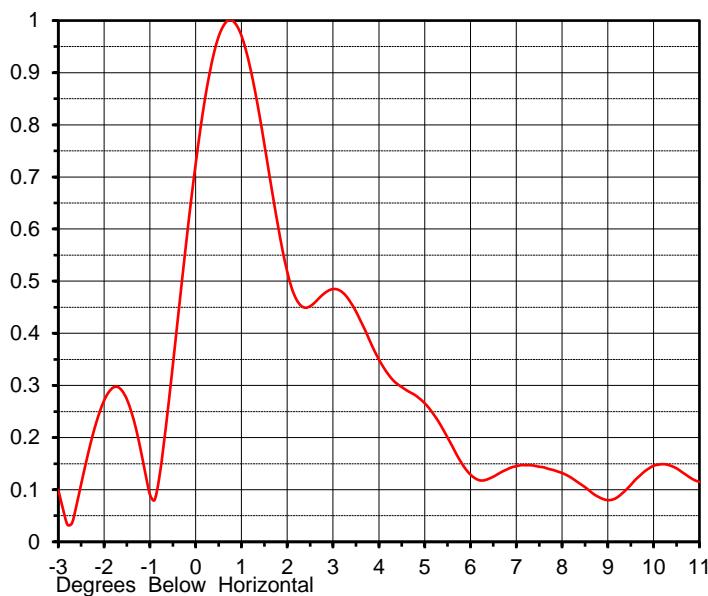
Proposal No. C-71140-3
 Date 26-May-20
 Call Letters WTVH
 Channel 18
 Frequency 497 MHz
 Antenna Type TFU-32JTH/VP-R O6

RMS Directivity at Main Lobe
 RMS Directivity at Horizontal

19.7 (12.93 dB)
10.3 (10.13 dB)

Calculated

Beam Tilt 0.75 deg
 Pattern Number 32J291075FF075



Angle	Field								
-10.0	0.034	10.0	0.146	30.0	0.043	50.0	0.086	70.0	0.036
-9.0	0.103	11.0	0.115	31.0	0.029	51.0	0.094	71.0	0.034
-8.0	0.066	12.0	0.197	32.0	0.031	52.0	0.085	72.0	0.032
-7.0	0.168	13.0	0.229	33.0	0.022	53.0	0.061	73.0	0.027
-6.0	0.158	14.0	0.214	34.0	0.046	54.0	0.044	74.0	0.025
-5.0	0.135	15.0	0.241	35.0	0.094	55.0	0.053	75.0	0.032
-4.0	0.242	16.0	0.192	36.0	0.108	56.0	0.048	76.0	0.044
-3.0	0.100	17.0	0.097	37.0	0.092	57.0	0.030	77.0	0.054
-2.0	0.271	18.0	0.115	38.0	0.100	58.0	0.050	78.0	0.059
-1.0	0.091	19.0	0.090	39.0	0.139	59.0	0.072	79.0	0.060
0.0	0.725	20.0	0.077	40.0	0.154	60.0	0.070	80.0	0.057
1.0	0.971	21.0	0.141	41.0	0.117	61.0	0.051	81.0	0.052
2.0	0.518	22.0	0.127	42.0	0.074	62.0	0.037	82.0	0.044
3.0	0.485	23.0	0.068	43.0	0.076	63.0	0.038	83.0	0.036
4.0	0.350	24.0	0.071	44.0	0.087	64.0	0.050	84.0	0.028
5.0	0.266	25.0	0.115	45.0	0.085	65.0	0.067	85.0	0.020
6.0	0.129	26.0	0.121	46.0	0.094	66.0	0.078	86.0	0.014
7.0	0.145	27.0	0.106	47.0	0.108	67.0	0.077	87.0	0.009
8.0	0.132	28.0	0.117	48.0	0.094	68.0	0.065	88.0	0.005
9.0	0.080	29.0	0.108	49.0	0.077	69.0	0.048	89.0	0.002
								90.0	0.000

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RADIO FREQUENCY IMPACT, SAFETY & STATEMENT OF COMPLIANCE

The licensee of WTVH is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WTVH antenna and will reduce power or cease operation, when necessary, to ensure protection to personnel.

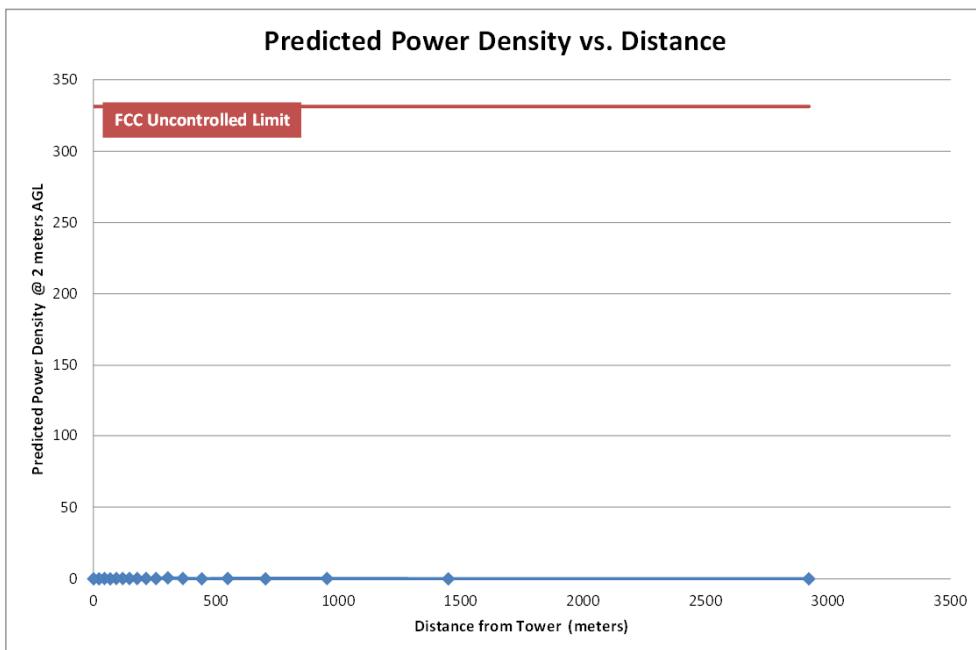
As shown in Appendix A the WTVH channel 18 request for a temporary STA facility as proposed herein will operate with a maximum ERP of 58.8 kW from an elliptically polarized non-directional transmitting antenna with a centerline height of 257.6 meters above ground level (AGL). Considering the elevation pattern submitted elsewhere in this application, the vertical plane relative field factor is less than 0.250 at all depression angles greater than 5 degrees. The proposed modified WTVH facility is predicted to produce a worst-case power density at two meters above ground level, at 304.6 meters from the tower base, of 0.589 $\mu\text{W}/\text{cm}^2$, which is 0.18% of the FCC guideline value of 331.33 $\mu\text{W}/\text{cm}^2$ for an "uncontrolled" environment, and 0.036% of the FCC's guideline value for "controlled" environments. Therefore, pursuant to Section 1.1307(b)(3) of the FCC Rules, because the proposed facility would not exceed 5% of the uncontrolled and controlled exposure limits, the proposal's power density contribution is considered insignificant.

Further, the Applicant will continue to cooperate/coordinate with other site users and reduce power and/or cease operation during times of service or maintenance of the transmission systems as necessary to avoid potentially harmful exposure to personnel. In light of the above, the proposed facility should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Commission's Rules.

WTVH**Channel 18 - Syracuse, NY****ERP = 58800.00 WATTS****APPENDIX A****Maximum ERP 58.8 kW**

Polarization -----	2	Circular	
Antenna Height Above Ground -	257.6	meters	
FCC Uncontrolled RFR Limit ---	331.33	$\mu\text{W}/\text{cm}^2$	
		845.1	feet
<i>Maximum Computed Power Density</i>		0.589 $\mu\text{W}/\text{cm}^2$	
		0.18% of limit	

Angle Below Horizontal (degrees)	<Point X>		Vertical Pattern (REL. FIELD)	WTVH ERP (kW)	WTVH Calculated Power Density $\mu\text{W}/\text{cm}^2$	Percent Limit	Limit Exceeded?
1			0.971	55.4391			
5	2921.5	2932.7	0.266	4.1605	0.032	0.01%	No
10	1449.6	1471.9	0.146	1.2534	0.039	0.01%	No
15	953.9	987.6	0.241	3.4152	0.234	0.07%	No
20	702.3	747.3	0.077	0.3486	0.042	0.01%	No
25	548.1	604.8	0.115	0.7776	0.142	0.04%	No
30	442.7	511.2	0.043	0.1087	0.028	0.01%	No
35	365.0	445.6	0.094	0.5196	0.175	0.05%	No
40	304.6	397.6	0.154	1.3945	0.589	0.18%	No
45	255.6	361.5	0.085	0.4248	0.217	0.07%	No
50	214.5	333.7	0.086	0.4349	0.261	0.08%	No
55	179.0	312.0	0.053	0.1652	0.113	0.03%	No
60	147.6	295.1	0.070	0.2881	0.221	0.07%	No
65	119.2	282.0	0.067	0.2640	0.222	0.07%	No
70	93.0	272.0	0.036	0.0762	0.069	0.02%	No
75	68.5	264.6	0.032	0.0602	0.057	0.02%	No
80	45.1	259.5	0.057	0.1910	0.189	0.06%	No
85	22.4	256.6	0.020	0.0235	0.024	0.01%	No
90	0.0	255.6	0.000	0.0000	0.000	0.00%	No





WTVH - MODIFICATION OF CONSTRUCTION PERMIT SYRACUSE, NEW YORK

Appendix B - Longley-Rice Interference Analysis Channel 18 - 109.0 kW JULY 2020

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: WTVH 18 AP OMNI 109 KW 393H, Model: Longley-Rice
Start: 2020.06.16 11:57:00

Study created: 2020.07.13 11:57:00

Study build station data: LMS TV 2020-06-16

Proposal: WTVH D18 DT APP SYRACUSE, NY
File number: WTVH 18 AP OMNI 109 KW 393H
Facility ID: 74151
Station data: User record
Record ID: 30
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	WYCI	D17	DT	BL	SARANAC LAKE, NY	DTVBL77515	222.9 km
Yes	WSYR-TV	D17	DT	LIC	SYRACUSE, NY	BLCDT20030812ABK	7.7
Yes	WEKW-TV	D18	DT	LIC	KEENE, NH	BLANK0000111230	305.1
Yes	WMBC-TV	D18	DT	APP	NEWTON, NJ	BLANK0000035693	303.2
Yes	WMBC-TV	D18	DD	LIC	NEWTON, NJ	BLCDT20101130AAX	280.4
Yes	WWNY-CD	D18	DC	LIC	MASSENA, NY	BLDTL20101118ALZ	199.5
No	WVWH-CD	D18	DC	LIC	SOUTHAMPTON, NY	BLANK0000098161	381.3
No	WYPX-TV	D19	DT	LIC	AMSTERDAM, NY	BLANK0000080167	176.1
No	WSTM-TV	D19	DT	LIC	SYRACUSE, NY	BLANK0000090187	0.0
No	CIII-DT-41D17		DT	LIC	TORONTO, ON	BLANKCANADA237	275.6
No	CICO-DT-18D18		DT	LIC	LONDON, ON	BLANKCANADA186	425.9
Yes	CFMT-DT	D18	DT	LIC	TORONTO, ON	BLANKCANADA239	275.6
No	CICA-DT	D19	DT	LIC	TORONTO, ON	BLANKCANADA233	275.6

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D18
Latitude: 42 56 41.80 N (NAD83)
Longitude: 76 7 6.20 W
Height AMSL: 689.5 m
HAAT: 392.6 m
Peak ERP: 109 kW
Antenna: Omnidirectional
Elev Pattn: Generic
Elec Tilt: 0.75

Appendix B - Interference Analysis
WTVH - Modification of Construction Permit
Syracuse, New York
Channel 18 - 109 kW - Page 2

39.1 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	109 kW	503.0 m	98.0 km
45.0	109	490.5	96.9
90.0	109	339.3	86.0
135.0	109	282.1	79.7
180.0	109	290.0	80.6
225.0	109	338.9	86.0
270.0	109	439.1	93.2
315.0	109	455.2	94.2

Database HAAT does not agree with computed HAAT
Database HAAT: 393 m Computed HAAT: 392 m

**Proposal is within coordination distance of Canadian border
Distance to Canadian border: 94.0 km

Distance to Mexican border: 2667.6 km

Conditions at FCC monitoring station: Canandaigua NY
Bearing: 268.2 degrees Distance: 93.5 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 272.6 degrees Distance: 2428.7 km

No land mobile station failures found

Study cell size: 0.50 km

Profile point spacing: 0.10 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

Interference to BLCDT20030812ABK LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WSYR-TV	D17	DT	LIC	SYRACUSE, NY	BLCDT20030812ABK	
Undesireds:	WTVH	D18	DT	BL	SYRACUSE, NY	DTVBL74151	7.0 km
	WTVH	D18	DT	APP	SYRACUSE, NY	WTVH 18 AP OMNI 109 KW	7.7
	WFNY-CD	D16	DC	LIC	GLOVERSVILLE, NY	BLANK0000068459	135.5
	WNYS-CD	D16	DC	LIC	ITHACA, NY	BLANK000001083	69.1
	WPHL-TV	D17	DT	LIC	PHILADELPHIA, PA	BLANK0000040408	329.2
	CJOH-TV-6	D16	DT	LIC	DESERONTO, ON	BLANKCANADA170	157.7
	CITY-DT-3	D17	DT	LIC	OTTAWA, ON	BLANKCANADA199	255.2
	CIII-DT-41	D17	DT	LIC	TORONTO, ON	BLANKCANADA237	282.9
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
23442.4	1,329,340	22372.2	1,260,395	22201.4	1,248,786	21999.1	1,242,598
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTVH D18 DT BL		63.8	1,863		63.6	1,863	
WTVH D18 DT APP		265.9	8,051		265.9	8,051	
WFNY-CD D16 DC LIC		2.2	83		2.2	83	
WNYS-CD D16 DC LIC		30.0	8,384		26.5	8,172	
WPHL-TV D17 DT LIC		22.3	541		21.8	541	
CJOH-TV-6 D16 DT LIC		4.1	77		2.2	75	
CITY-DT-3 D17 DT LIC		9.7	17		9.7	17	
CIII-DT-41 D17 DT LIC		44.6	858		39.2	644	

Interference to BLANK0000111230 LIC scenario 1

Appendix B - Interference Analysis
WTVH - Modification of Construction Permit
Syracuse, New York
Channel 18 - 109 kW - Page 3

Desired:	Call WEKW-TV	Chan D18	Svc DT	Status LIC	City, State KEENE, NH	File Number BLANK0000111230	Distance
Undesireds:	WTVH	D18	DT	BL	SYRACUSE, NY	DTVBL74151	304.3 km
	WTVH	D18	DT	APP	SYRACUSE, NY	WTvh 18 AP OMNI 109 KW	305.1
	WMBC-TV	D18	DT	APP	NEWTON, NJ	BLANK000035693	291.7
	WUTF-TV	D19	DT	CP	WORCESTER, MA	BLANK000034871	122.5
	WYPX-TV	D19	DT	LIC	AMSTERDAM, NY	BLANK000080167	140.2
Service area		Terrain-limited			IX-free, before	IX-free, after	Percent New IX
22100.1	1,261,209	18230.1	795,821	17984.5	755,478	17988.9	755,478
Undesired		Total IX			Unique IX, before	Unique IX, after	
WTvh D18 DT BL	19.6	84		11.5	66		
WTvh D18 DT APP	12.7	84			7.1	66	
WMBC-TV D18 DT APP	8.9	402		7.7	81	7.7	81
WUTF-TV D19 DT CP	209.0	40,178		208.8	39,875	208.8	39,875
WYPX-TV D19 DT LIC	16.7	0		9.3	0	11.8	0

Desired:	Call WEKW-TV	Chan D18	Svc DT	Status LIC	City, State KEENE, NH	File Number BLANK0000111230	Distance
Undesireds:	WTvh	D18	DT	BL	SYRACUSE, NY	DTVBL74151	304.3 km
	WTvh	D18	DT	APP	SYRACUSE, NY	WTvh 18 AP OMNI 109 KW	305.1
	WMBC-TV	D18	DD	LIC	NEWTON, NJ	BLCDT20101130AAX	284.7
	WUTF-TV	D19	DT	CP	WORCESTER, MA	BLANK000034871	122.5
	WYPX-TV	D19	DT	LIC	AMSTERDAM, NY	BLANK000080167	140.2
Service area		Terrain-limited			IX-free, before	IX-free, after	Percent New IX
22100.1	1,261,209	18230.1	795,821	17985.5	755,475	17989.9	755,475
Undesired		Total IX			Unique IX, before	Unique IX, after	
WTvh D18 DT BL	19.6	84		11.2	66		
WTvh D18 DT APP	12.7	84			6.8	66	
WMBC-TV D18 DD LIC	8.9	405		6.7	84	6.7	84
WUTF-TV D19 DT CP	209.0	40,178		208.8	39,875	208.8	39,875
WYPX-TV D19 DT LIC	16.7	0		8.9	0	11.6	0

Desired:	Call WMBC-TV	Chan D18	Svc DT	Status APP	City, State NEWTON, NJ	File Number BLANK000035693	Distance
Undesireds:	WTvh	D18	DT	BL	SYRACUSE, NY	DTVBL74151	303.7 km
	WTvh	D18	DT	APP	SYRACUSE, NY	WTvh 18 AP OMNI 109 KW	303.2
	WPHL-TV	D17	DT	LIC	PHILADELPHIA, PA	BLANK000040408	127.8
	WEKW-TV	D18	DT	LIC	KEENE, NH	BLANK0000111230	291.7
	WVHV-CD	D18	DC	LIC	SOUTHAMPTON, NY	BLANK000098161	143.0
Service area		Terrain-limited			IX-free, before	IX-free, after	Percent New IX
29966.4	20,576,764	27042.4	19,970,786	26121.1	19,687,191	26131.1	19,688,709
Undesired		Total IX			Unique IX, before	Unique IX, after	
WTvh D18 DT BL	38.4	5,031		30.8	3,846		
WTvh D18 DT APP	24.4	2,597			20.8	2,328	
WPHL-TV D17 DT LIC	833.5	241,764		833.0	241,764	833.5	241,764
WEKW-TV D18 DT LIC	39.3	12,379		30.8	8,550	34.1	9,466
WVHV-CD D18 DC LIC	19.4	28,250		17.6	25,606	17.6	25,606

Desired:	Call WEKW-TV	Chan D18	Svc DT	Status LIC	City, State KEENE, NH	File Number BLANK0000111230	Distance
Undesireds:	WTvh	D18	DT	BL	SYRACUSE, NY	DTVBL74151	304.3 km
	WTvh	D18	DT	APP	SYRACUSE, NY	WTvh 18 AP OMNI 109 KW	305.1
	WMBC-TV	D18	DD	LIC	NEWTON, NJ	BLANK000035693	291.7
	WUTF-TV	D19	DT	CP	WORCESTER, MA	BLANK000034871	122.5
	WYPX-TV	D19	DT	LIC	AMSTERDAM, NY	BLANK000080167	140.2
Service area		Terrain-limited			IX-free, before	IX-free, after	Percent New IX
22100.1	1,261,209	18230.1	795,821	17985.5	755,475	17989.9	755,475
Undesired		Total IX			Unique IX, before	Unique IX, after	
WTvh D18 DT BL	19.6	84		11.2	66		
WTvh D18 DT APP	12.7	84			6.8	66	
WMBC-TV D18 DD LIC	8.9	405		6.7	84	6.7	84
WUTF-TV D19 DT CP	209.0	40,178		208.8	39,875	208.8	39,875
WYPX-TV D19 DT LIC	16.7	0		8.9	0	11.6	0

Carl T. Jones Corporation

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Appendix B - Interference Analysis
WTVH - Modification of Construction Permit
Syracuse, New York
Channel 18 - 109 kW - Page 4

Desired:	WMBC-TV	D18	DD	LIC	NEWTON, NJ	BLCDT20101130AAX
Undesireds:	WTVH	D18	DT	BL	SYRACUSE, NY	DTVBL74151 280.9 km
	WTVH	D18	DT	APP	SYRACUSE, NY	WTvh 18 AP OMNI 109 KW 280.4
	WPHL-TV	D17	DT	LIC	PHILADELPHIA, PA	BLANK0000040408 126.8
	WEKW-TV	D18	DT	LIC	KEENE, NH	BLANK0000111230 284.7
	WVWH-CD	D18	DC	LIC	SOUTHAMPTON, NY	BLANK0000098161 156.2
Service area		Terrain-limited		IX-free, before		IX-free, after
23250.7	18,704,742	22204.8	18,478,970	22022.8	18,455,925	22033.1 18,456,121
Percent New IX	-0.05	-0.00				
Undesired		Total IX		Unique IX, before		Unique IX, after
WTvh D18 DT BL	26.9	1,016		23.9	436	
WTvh D18 DT APP	14.9	361			13.6	240
WPHL-TV D17 DT LIC	133.4	16,406	133.4	16,406	133.4	16,406
WEKW-TV D18 DT LIC	23.8	5,297	20.8	4,717	22.5	5,176
WVWH-CD D18 DC LIC	1.0	906	1.0	906	1.0	906

Interference to BLDTL20101118ALZ LIC scenario 1						
Desired:	Call	Chan	Svc	Status	City, State	File Number
	WWNY-CD	D18	DC	LIC	MASSENA, NY	BLDTL20101118ALZ
Undesireds:	WTvh	D18	DT	BL	SYRACUSE, NY	DTVBL74151 198.1 km
	WTvh	D18	DT	APP	SYRACUSE, NY	WTvh 18 AP OMNI 109 KW 199.5
Service area		Terrain-limited		IX-free, before		IX-free, after
7150.7	92,614	6756.8	86,552	6740.0	86,514	6751.6 86,525
18.2	891	18.2	891	18.2	891	18.2 891
Canada)						(in
Undesired		Total IX		Unique IX, before		Unique IX, after
WTvh D18 DT BL	16.8	38	16.8	38	5.2	27
WTvh D18 DT APP	5.2	27				

Interference to BLANKCANADA239 LIC scenario 1						
Desired:	Call	Chan	Svc	Status	City, State	File Number
	CFMT-DT	D18	DT	LIC	TORONTO, ON	BLANKCANADA239
Undesireds:	WTvh	D18	DT	BL	SYRACUSE, NY	DTVBL74151 275.9 km
	WTvh	D18	DT	APP	SYRACUSE, NY	WTvh 18 AP OMNI 109 KW 275.6
	WEYI-TV	D18	DT	LIC	SAGINAW, MI	BLANK000075003 353.0
	CICO-DT-18D18	DT	LIC		LONDON, ON	BLANKCANADA186 176.6
Service area		Terrain-limited		IX-free, before		IX-free, after
3035.6	249,819	3035.6	249,819	3035.6	249,819	3035.6 249,819
U.S.)	17743.6	7,390,258	17665.0	7,379,603	17616.4	7,371,832
					17630.2	7,373,110
Undesired		Total IX		Unique IX, before		Unique IX, after
WTvh D18 DT BL	19.7	2,052	19.7	2,052	5.9	774
WTvh D18 DT APP	5.9	774			1.7	2,481
WEYI-TV D18 DT LIC	6.3	3,678	1.7	2,481	22.6	2,041
CICO-DT-18 D18 DT LIC	27.2	3,238	22.6	2,041	22.6	2,041

Interference to proposal scenario 1						
Desired:	Call	Chan	Svc	Status	City, State	File Number
	WTvh	D18	DT	APP	SYRACUSE, NY	WTvh 18 AP OMNI 109 KW
Undesireds:	WSYR-TV	D17	DT	LIC	SYRACUSE, NY	BLCDT20030812ABK 7.7 km
	WEKW-TV	D18	DT	LIC	KEENE, NH	BLANK0000111230 305.1
	WMBC-TV	D18	DT	APP	NEWTON, NJ	BLANK0000035693 303.2

Appendix B - Interference Analysis
WTVH - Modification of Construction Permit
Syracuse, New York
Channel 18 - 109 kW - Page 5

WWNY-CD	D18	DC	LIC	MASSENA, NY	BLDTL20101118ALZ	199.5
WSTM-TV	D19	DT	LIC	SYRACUSE, NY	BLANK0000090187	0.0
CFMT-DT	D18	DT	LIC	TORONTO, ON	BLANKCANADA239	275.6
Service area						
25229.6	1,391,294	24212.2	1,329,029	24072.2	IX-free	Percent IX
1.7	0	1.7	0	1.7	0	0.00 0.00 (in Canada)
Undesired						
WSYR-TV D17 DT LIC		Total IX		Unique IX	Prcnt Unique IX	
WEKW-TV D18 DT LIC	60.9	4,970	56.5	4,969	0.23	0.37
WMBC-TV D18 DT APP	1.5	22	1.2	16	0.01	0.00
WWNY-CD D18 DC LIC	8.9	305	8.9	305	0.04	0.02
WSTM-TV D19 DT LIC	60.2	318	59.2	312	0.24	0.02
CFMT-DT D18 DT LIC	13.1	159	9.0	158	0.04	0.01
	0.2	0	0.2	0	0.00	0.00

Interference to proposal scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTVH	D18	DT	APP	SYRACUSE, NY	WTvh 18 AP OMNI 109 KW	
Undesireds:	WSYR-TV	D17	DT	LIC	SYRACUSE, NY	BLCDT20030812ABK	7.7 km
	WEKW-TV	D18	DT	LIC	KEENE, NH	BLANK0000111230	305.1
	WMBC-TV	D18	DD	LIC	NEWTON, NJ	BLCDT20101130AAX	280.4
	WWNY-CD	D18	DC	LIC	MASSENA, NY	BLDTL20101118ALZ	199.5
	WSTM-TV	D19	DT	LIC	SYRACUSE, NY	BLANK0000090187	0.0
	CFMT-DT	D18	DT	LIC	TORONTO, ON	BLANKCANADA239	275.6
Service area							
25229.6	1,391,294	24212.2	1,329,029	24046.7	IX-free	Percent IX	
1.7	0	1.7	0	1.7	0	0.00 0.00 (in Canada)	
Undesired							
WSYR-TV D17 DT LIC		Total IX		Unique IX	Prcnt Unique IX		
WEKW-TV D18 DT LIC	60.9	4,970	56.5	4,969	0.23	0.37	
WMBC-TV D18 DD LIC	1.5	22	1.2	16	0.01	0.00	
WWNY-CD D18 DC LIC	34.4	822	34.4	822	0.14	0.06	
WSTM-TV D19 DT LIC	60.2	318	59.2	312	0.24	0.02	
CFMT-DT D18 DT LIC	13.1	159	9.0	158	0.04	0.01	
	0.2	0	0.2	0	0.00	0.00	