ENGINEERING EXHIBIT

Incentive Auction Channel Reassignment

Application for Modification of Digital Television Station Construction Permit

prepared for

Hearst Properties Inc.
WLKY(DT) Louisville, KY
Facility ID 53939
Ch. 14 710 kW 392 m

Hearst Properties Inc. ("Hearst") is the licensee of digital television station WLKY, Channel 26, Facility ID 53939, Louisville, KY. Reassignment of WLKY from Channel 26 to Channel 14 was specified in the *Incentive Auction Closing and Channel Reassignment Public Notice* (*"CCRPN"*, DA 17-317, released April 13, 2017). *Hearst* herein proposes modification of the WLKY Channel 14 Construction Permit ("CP", file# 0000025154). This application is intended to be filed during the second filing window.[1] The CP authorizes operation at 400 kW effective radiated power ("ERP") with a directional antenna at 392 meters antenna height above average terrain. *Hearst* proposes herein to increase the ERP to 710 kW and adjust the directional antenna pattern.

WLKY currently utilizes a directional antenna which is shared with WAVE(DT) (Fac ID 13989, Louisville KY). The shared antenna must be replaced in order to accommodate the channel reassignments for WLKY and WAVE. The existing tower structure corresponds to FCC Antenna Structure Registration number 1230057. No change to the overall structure height will result.

The proposed antenna is a Dielectric model TUM30-AP-S4-14/56H-R-2-T configured for horizontal polarization for WLKY. The directional antenna's azimuthal pattern is supplied in Figure 1 and the elevation pattern is depicted in Figure 2.

[1]Public Notice *"Incentive Auction Task Force and Media Bureau Announce the Opening of the Second Filing Window for Eligible Full Power and Class A Television Station—October 3 Through November 2, 2017"* DA 17-911, released September 20, 2017.

Figure 3 supplies a map that demonstrates compliance with §73.625(a)(1) regarding coverage of the entire principal community. The proposed facility's predicted population exceeds 95 percent of the *CCRPN* baseline facility's population.

Interference study per FCC OET Bulletin 69[2] shows that the proposal complies with the 0.5 percent limit of new interference caused to pertinent nearby post-auction full service and Class A television stations and reassignments as required by §73.616. **FCC processing of this proposal is requested using a 1 km cell size.** The interference study output report is provided as Table 1.

The nearest FCC monitoring station is 471 km distant at Allegan, MI. This exceeds by a large margin the threshold minimum distance specified in §73.1030(c)(3) that would suggest consideration of the monitoring station. The site is not located within the areas requiring coordination with "quiet" zones specified in §73.1030(a) and (b). The site location is beyond the border areas requiring international coordination. There are no authorized AM stations within 3 kilometers of the site.

Human Exposure to Radiofrequency Electromagnetic Field (Environmental)

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the FCC's OET Bulletin Number 65. Based on OET-65 equation (10), and considering 10 percent antenna relative field in downward elevations (pattern data shows less than 10 percent relative field at angles 10 to 90 degrees below the antenna), the calculated signal density near the tower at two meters above ground level attributable to the proposed facility is 3.0 $\mu W/cm^2$, which is 1.0 percent of the general population/uncontrolled maximum permitted exposure limit. This is below the five percent threshold limit described in §1.1307(b) regarding sites with multiple emitters, categorically excluding the applicant from responsibility

[2]FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 ("OET-69"). This analysis employed the FCC's current "TVStudy" software with the default application processing template settings, **1 km cell size**, and 2 km terrain profile increment. Comparisons of various results of this computer program (run on a Mac processor) to the FCCs implementation of TVStudy show excellent correlation.

for taking any corrective action in the areas where the proposal's contribution is less than five percent.

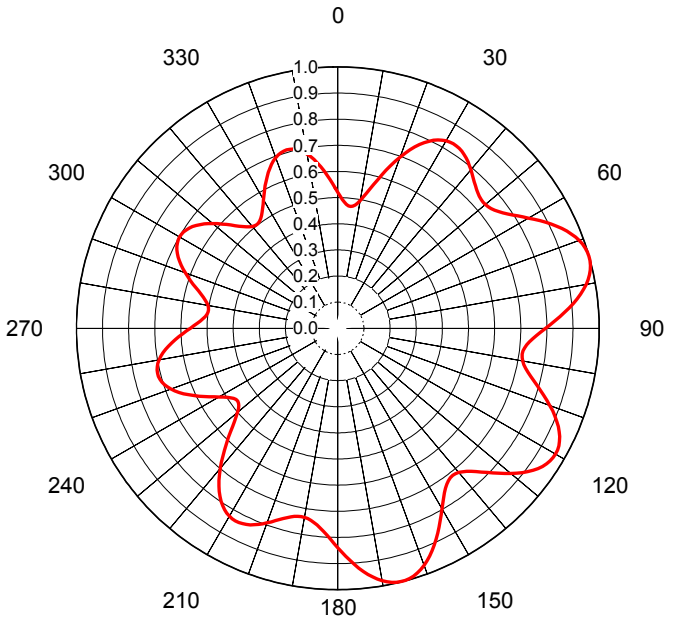
The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from RF electromagnetic field exposure in excess of FCC guidelines. This exhibit is limited to the evaluation of exposure to RF electromagnetic field. No increase in structure height is proposed.

List of Attachments

Figure 1	Antenna Azimuthal Pattern
Figure 2	Antenna Elevation Pattern
Figure 3	Proposed Coverage Contours
Table 1	OET Bulletin 69 Interference Study
Form 2100	Saved Version of Engineering Sections from FCC Form at Time of Upload

Chesapeake RF Consultants, LLC
Joseph M. Davis, P.E. October 16, 2017
207 Old Dominion Road Yorktown, VA 23692 703-650-9600

Dielectric®



AZIMUTH PATTERN
Horizontal Polarization

Proposal No.	**C-70638-3**
Date	**22-May-17**
Call Letters	**WLKY**
Channel	**14**
Frequency	**473 MHz**
Antenna Type	**TUM30-AP-S4-14/56H-R-2-T**
Gain	**1.8 (2.56dB)**
	Calculated

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.521	36	0.822	72	0.996	108	0.829	144	0.720	180	0.839	216	0.772	252	0.697	288	0.593	324	0.508
1	0.506	37	0.816	73	0.999	109	0.846	145	0.728	181	0.823	217	0.756	253	0.704	289	0.607	325	0.514
2	0.493	38	0.809	74	1.000	110	0.864	146	0.738	182	0.807	218	0.738	254	0.708	290	0.621	326	0.521
3	0.483	39	0.801	75	0.999	111	0.880	147	0.750	183	0.793	219	0.719	255	0.710	291	0.634	327	0.531
4	0.475	40	0.792	76	0.996	112	0.896	148	0.764	184	0.779	220	0.700	256	0.711	292	0.646	328	0.542
5	0.470	41	0.783	77	0.991	113	0.911	149	0.780	185	0.767	221	0.679	257	0.709	293	0.658	329	0.555
6	0.469	42	0.775	78	0.984	114	0.924	150	0.798	186	0.757	222	0.657	258	0.706	294	0.668	330	0.568
7	0.471	43	0.766	79	0.975	115	0.935	151	0.816	187	0.748	223	0.635	259	0.701	295	0.677	331	0.582
8	0.476	44	0.758	80	0.965	116	0.945	152	0.834	188	0.742	224	0.613	260	0.694	296	0.684	332	0.597
9	0.485	45	0.751	81	0.952	117	0.952	153	0.853	189	0.737	225	0.591	261	0.685	297	0.691	333	0.612
10	0.497	46	0.745	82	0.938	118	0.958	154	0.872	190	0.734	226	0.570	262	0.675	298	0.695	334	0.626
11	0.511	47	0.740	83	0.923	119	0.961	155	0.890	191	0.734	227	0.550	263	0.664	299	0.698	335	0.640
12	0.528	48	0.738	84	0.906	120	0.962	156	0.908	192	0.735	228	0.532	264	0.651	300	0.699	336	0.653
13	0.547	49	0.736	85	0.888	121	0.961	157	0.924	193	0.739	229	0.515	265	0.638	301	0.698	337	0.665
14	0.567	50	0.737	86	0.870	122	0.958	158	0.939	194	0.744	230	0.501	266	0.624	302	0.695	338	0.676
15	0.588	51	0.740	87	0.851	123	0.952	159	0.953	195	0.750	231	0.489	267	0.609	303	0.691	339	0.686
16	0.610	52	0.745	88	0.832	124	0.945	160	0.965	196	0.757	232	0.481	268	0.594	304	0.686	340	0.694
17	0.632	53	0.752	89	0.813	125	0.935	161	0.976	197	0.765	233	0.475	269	0.579	305	0.678	341	0.701
18	0.654	54	0.760	90	0.795	126	0.924	162	0.984	198	0.774	234	0.474	270	0.565	306	0.670	342	0.706
19	0.676	55	0.771	91	0.778	127	0.911	163	0.991	199	0.783	235	0.475	271	0.551	307	0.660	343	0.709
20	0.697	56	0.783	92	0.762	128	0.896	164	0.996	200	0.792	236	0.480	272	0.538	308	0.649	344	0.710
21	0.717	57	0.797	93	0.748	129	0.881	165	0.998	201	0.801	237	0.488	273	0.527	309	0.636	345	0.709
22	0.736	58	0.811	94	0.735	130	0.864	166	0.999	202	0.809	238	0.498	274	0.517	310	0.623	346	0.706
23	0.753	59	0.827	95	0.725	131	0.847	167	0.997	203	0.817	239	0.511	275	0.509	311	0.610	347	0.702
24	0.770	60	0.843	96	0.718	132	0.829	168	0.994	204	0.823	240	0.525	276	0.503	312	0.596	348	0.695
25	0.784	61	0.860	97	0.714	133	0.811	169	0.988	205	0.828	241	0.541	277	0.500	313	0.582	349	0.687
26	0.797	62	0.877	98	0.712	134	0.794	170	0.981	206	0.832	242	0.558	278	0.499	314	0.569	350	0.677
27	0.807	63	0.893	99	0.714	135	0.778	171	0.972	207	0.834	243	0.575	279	0.500	315	0.556	351	0.665
28	0.816	64	0.909	100	0.718	136	0.762	172	0.961	208	0.834	244	0.592	280	0.504	316	0.543	352	0.652
29	0.823	65	0.924	101	0.725	137	0.748	173	0.949	209	0.833	245	0.609	281	0.510	317	0.532	353	0.637
30	0.828	66	0.939	102	0.735	138	0.737	174	0.935	210	0.830	246	0.625	282	0.518	318	0.523	354	0.622
31	0.832	67	0.952	103	0.747	139	0.727	175	0.921	211	0.825	247	0.641	283	0.528	319	0.515	355	0.605
32	0.833	68	0.964	104	0.761	140	0.720	176	0.905	212	0.818	248	0.655	284	0.539	320	0.509	356	0.588
33	0.833	69	0.974	105	0.777	141	0.716	177	0.889	213	0.809	249	0.668	285	0.552	321	0.505	357	0.571
34	0.831	70	0.983	106	0.793	142	0.714	178	0.873	214	0.798	250	0.679	286	0.565	322	0.504	358	0.553
35	0.827	71	0.990	107	0.811	143	0.716	179	0.856	215	0.786	251	0.689	287	0.579	323	0.505	359	0.537

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

Figure 1
Antenna Azimuthal Pattern
WLKY(DT) Louisville, KY
Facility ID 53939
Ch. 14 710 kW 392 m

prepared for
Hearst Properties Inc.

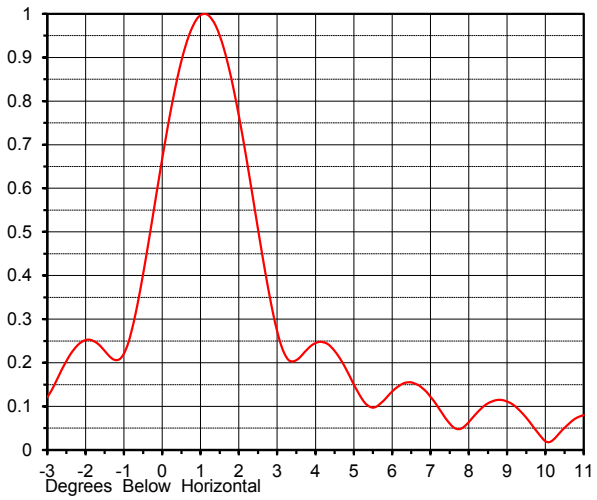
October, 2017

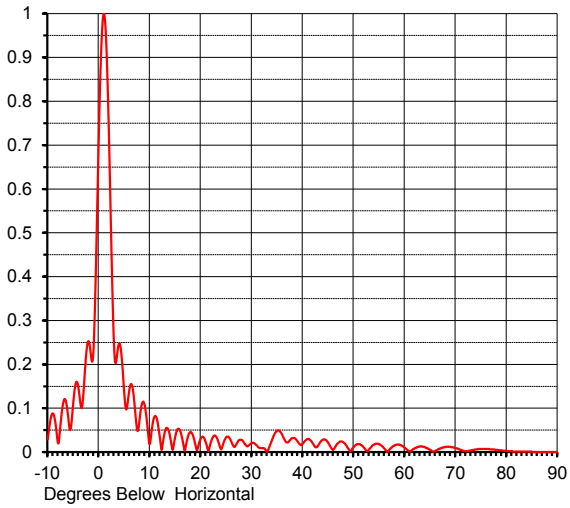
Dielectric®

ELEVATION PATTERN

Proposal No.	**C-70638-3**
Date	**22-May-17**
Call Letters	**WLKY**
Channel	**14**
Frequency	**473 MHz**
Antenna Type	**TUM30-AP-S4-14/56H-R-2**

RMS Directivity at Main Lobe	**25.5 (14.07 dB)**	Beam Tilt	**1.00 deg**
RMS Directivity at Horizontal	**13.2 (11.21 dB)**	Pattern Number	**14U255100**
	Calculated		





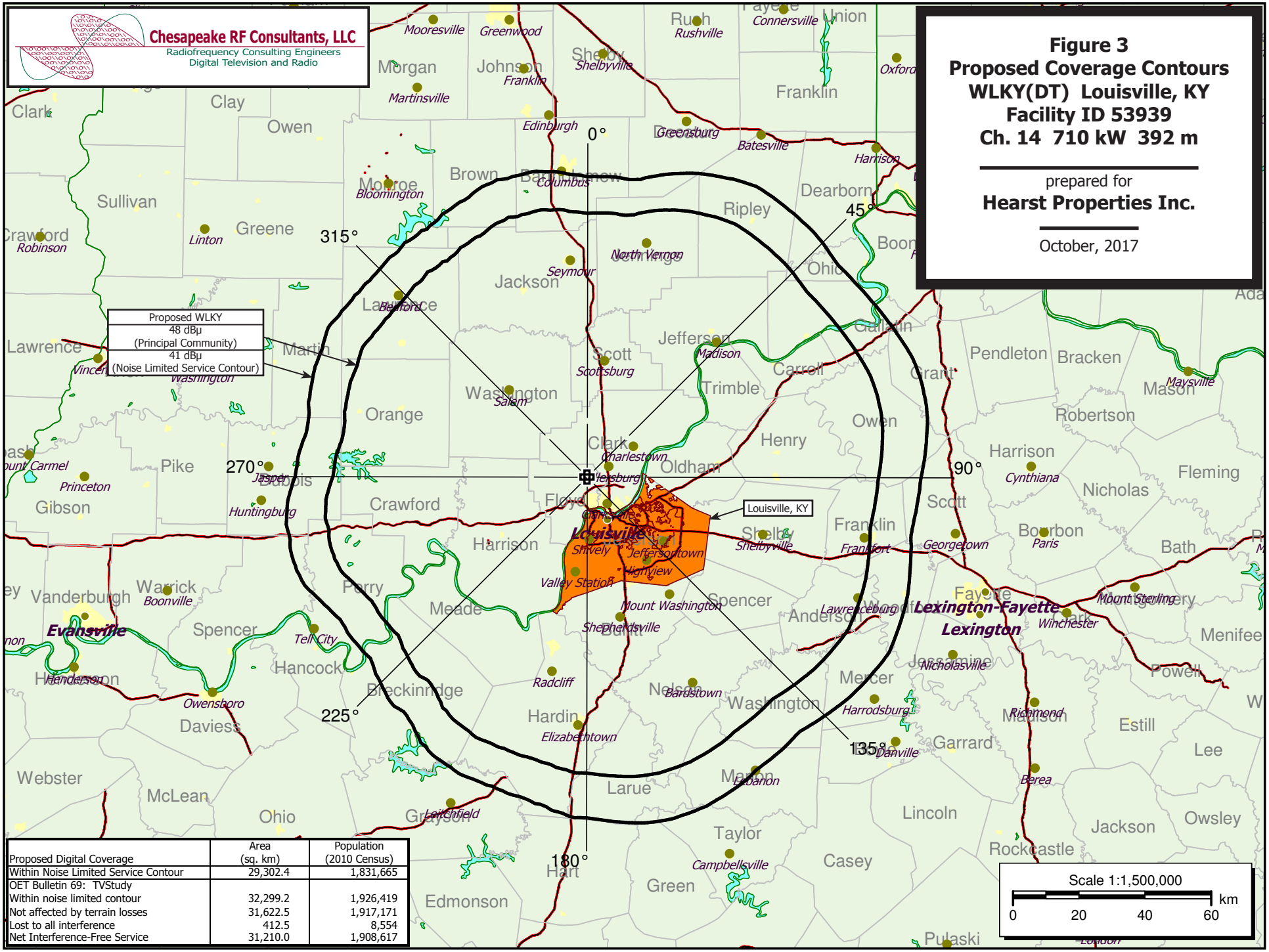
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.029	10.0	0.018	30.0	0.020	50.0	0.011	70.0	0.009
-9.0	0.088	11.0	0.082	31.0	0.015	51.0	0.018	71.0	0.005
-8.0	0.020	12.0	0.031	32.0	0.009	52.0	0.010	72.0	0.002
-7.0	0.111	13.0	0.048	33.0	0.000	53.0	0.006	73.0	0.004
-6.0	0.080	14.0	0.034	34.0	0.028	54.0	0.017	74.0	0.006
-5.0	0.113	15.0	0.035	35.0	0.049	55.0	0.018	75.0	0.007
-4.0	0.147	16.0	0.047	36.0	0.039	56.0	0.008	76.0	0.007
-3.0	0.135	17.0	0.009	37.0	0.022	57.0	0.005	77.0	0.006
-2.0	0.253	18.0	0.046	38.0	0.032	58.0	0.015	78.0	0.005
-1.0	0.242	19.0	0.014	39.0	0.024	59.0	0.017	79.0	0.004
0.0	0.719	20.0	0.031	40.0	0.019	60.0	0.010	80.0	0.003
1.0	1.000	21.0	0.022	41.0	0.030	61.0	0.001	81.0	0.002
2.0	0.718	22.0	0.023	42.0	0.019	62.0	0.009	82.0	0.001
3.0	0.241	23.0	0.035	43.0	0.014	63.0	0.013	83.0	0.001
4.0	0.248	24.0	0.006	44.0	0.028	64.0	0.011	84.0	0.001
5.0	0.134	25.0	0.034	45.0	0.021	65.0	0.005	85.0	0.000
6.0	0.142	26.0	0.024	46.0	0.005	66.0	0.002	86.0	0.000
7.0	0.111	27.0	0.018	47.0	0.021	67.0	0.008	87.0	0.000
8.0	0.074	28.0	0.028	48.0	0.022	68.0	0.012	88.0	0.000
9.0	0.107	29.0	0.014	49.0	0.007	69.0	0.012	89.0	0.000
								90.0	0.000

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

Figure 2
Antenna Elevation Pattern
WLKY(DT) Louisville, KY
Facility ID 53939
Ch. 14 710 kW 392 m

prepared for
Hearst Properties Inc.

October, 2017



Proposed Digital Coverage	Area (sq. km)	Population (2010 Census)
Within Noise Limited Service Contour	29,302.4	1,831,665
OET Bulletin 69: TVStudy		
Within noise limited contour	32,299.2	1,926,419
Not affected by terrain losses	31,622.5	1,917,171
Lost to all interference	412.5	8,554
Net Interference-Free Service	31,210.0	1,908,617

```
tvstudy v2.2.3 (6K70F1)
Database: localhost,  Study: WLKY 710KW TUM 20171003 1km,  Model: Longley-Rice
Start: 2017.10.16 09:41:31

Study created: 2017.10.16 09:40:19

Study build station data: LMS TV 2017-10-07 LMSTV

    Proposal: WLKY D14 DT APP LOUISVILLE, KY
 File number: WLKY 710KW TUM 20171003
 Facility ID: 53939
Station data: User record
   Record ID: 1365
     Country: U.S.
        Zone: I
```

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	KNLC	D14	DT	LIC	ST. LOUIS, MO	BLCDT20061228AAC	411.2 km
Yes	WCMH-TV	D14	DT	LIC	COLUMBUS, OH	BLCDT20050823AAD	300.0
Yes	WDSI-TV	D14	DT	CP	CHATTANOOGA, TN	BLANK0000027938	354.5
No	WLJT-DT	D14	DT	CP	LEXINGTON, TN	BLANK0000027017	385.1
Yes	WLFG	D14	DT	CP	GRUNDY, VA	BLANK0000026306	371.9
No	WYYW-CD	D15	DC	LIC	EVANSVILLE, IN	BLDTA20130109AGB	132.8
Yes	WTTK	D15	DT	CP	KOKOMO, IN	BLANK0000024884	172.0
No	WLCU-CD	D15	DC	CP	CAMPBELLSVILLE, KY	BLANK0000028622	121.2
Yes	WXIX-TV	D15	DT	CP	NEWPORT, KY	BLANK0000025169	139.1
No	WPBM-CD	D15	DC	CP	SCOTTSVILLE, KY	BLANK0000026401	172.1

```
No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D14
   Latitude:  38 22  8.40 N (NAD83)
  Longitude:  85 49 47.60 W
Height AMSL: 582.6 m
       HAAT: 391.6 m
   Peak ERP: 710 kW
    Antenna: TUM30-S4 20171003 0.0 deg
Elev Pattrn: Generic
  Elec Tilt: 1.00

38.7 dBu contour:
Azimuth      ERP       HAAT   Distance
  0.0 deg    193 kW   382.4 m   94.9 km
 45.0        415      432.7     105.5
 90.0        449      429.0     105.9
135.0        445      441.1     106.9
180.0        500      442.4     108.2
225.0        256      326.6      92.3
270.0        227      336.7      92.4
315.0        227      341.8      92.9

**Proposal service area extends beyond baseline plus 1.0%
Proposal service area population is more than 95.0% of baseline

Distance to Canadian border: 453.7 km

Distance to Mexican border: 1710.6 km

Conditions at FCC monitoring station: Allegan MI
Bearing: 358.7 degrees   Distance: 471.0 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 282.7 degrees   Distance: 1677.5 km

No land mobile station failures found
```

Study cell size: 1.00 km
Profile point spacing: 1.00 km

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

Interference to BLCDT20050823AAD LIC, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WCMH-TV	D14	DT	LIC	COLUMBUS, OH	BLCDT20050823AAD	
Undesireds:	WLKY	D14	DT	BL	LOUISVILLE, KY	DTVBL53939	300.0 km
	WLKY	D14	DT	APP	LOUISVILLE, KY	WLKY 710KW TUM 2017100	300.0
	WLAJ	D14	DT	CP	LANSING, MI	BLANK0000028168	299.6
	WLFG	D14	DT	CP	GRUNDY, VA	BLANK0000026306	358.8
	WOHL-CD	D15	DC	APP	LIMA, OH	BLANK0000029918	128.7
	WQCW	D15	DT	CP	PORTSMOUTH, OH	BLANK0000025192	176.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
28671.4	2,754,421	27841.5	2,709,308	27212.3	2,678,247	27001.4	2,665,729	0.77	0.47

Undesired		Total IX	Unique IX, before		Unique IX, after	
WLKY D14 DT BL	195.9	14,473	142.0	11,756		
WLKY D14 DT APP	458.6	28,719			352.8	24,274
WLAJ D14 DT CP	176.8	10,019	10.9	2,405	8.9	2,261
WLFG D14 DT CP	128.0	3,240	89.3	2,379	72.4	1,853
WOHL-CD D15 DC APP	304.3	11,604	161.6	5,611	161.6	5,611
WQCW D15 DT CP	40.7	638	19.9	435	18.9	429

Interference to BLCDT20050823AAD LIC, scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WCMH-TV	D14	DT	LIC	COLUMBUS, OH	BLCDT20050823AAD	
Undesireds:	WLKY	D14	DT	BL	LOUISVILLE, KY	DTVBL53939	300.0 km
	WLKY	D14	DT	APP	LOUISVILLE, KY	WLKY 710KW TUM 2017100	300.0
	WLAJ	D14	DT	CP	LANSING, MI	BLANK0000028168	299.6
	WLFG	D14	DT	CP	GRUNDY, VA	BLANK0000026306	358.8
	WOHL-CD	D15	DC	BL	LIMA, OH	DTVBL68549	127.2
	WQCW	D15	DT	CP	PORTSMOUTH, OH	BLANK0000025192	176.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
28671.4	2,754,421	27841.5	2,709,308	27314.0	2,682,179	27103.2	2,669,661	0.77	0.47

Undesired		Total IX	Unique IX, before		Unique IX, after	
WLKY D14 DT BL	195.9	14,473	142.0	11,756		
WLKY D14 DT APP	458.6	28,719			352.8	24,274
WLAJ D14 DT CP	176.8	10,019	16.9	2,507	14.9	2,363
WLFG D14 DT CP	128.0	3,240	89.3	2,379	72.4	1,853
WOHL-CD D15 DC BL	196.6	7,570	59.8	1,679	59.8	1,679
WQCW D15 DT CP	40.7	638	19.9	435	18.9	429

Interference to BLANK0000027938 CP, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WDSI-TV	D14	DT	CP	CHATTANOOGA, TN	BLANK0000027938	
Undesireds:	WLKY	D14	DT	BL	LOUISVILLE, KY	DTVBL53939	354.5 km
	WLKY	D14	DT	APP	LOUISVILLE, KY	WLKY 710KW TUM 2017100	354.5
	WDBB	D14	DT	CP	BESSEMER, AL	BLANK0000025692	273.6
	WSKC-CD	D14	DC	CP	ATLANTA, GA	BLANK0000025394	171.2
	WHKY-TV	D14	DD	CP	HICKORY, NC	BLANK0000024614	362.0
	WLJT-DT	D14	DT	CP	LEXINGTON, TN	BLANK0000027017	305.9
	WLFG	D14	DT	CP	GRUNDY, VA	BLANK0000026306	339.3
	WAFF	D15	DT	CP	HUNTSVILLE, AL	BLANK0000025101	127.2
	WTNZ	D15	DT	CP	KNOXVILLE, TN	BLANK0000025183	149.5

Table 1 WLKY(DT) OET Bulletin 69 Interference Study

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
19182.2	1,062,412	16493.1	992,599	16117.0	980,290	16103.1	980,243	0.09	0.00

Undesired		Total IX		Unique IX, before		Unique IX, after	
WLKY D14 DT BL	8.9	91	7.0	91			
WLKY D14 DT APP	22.9	138			20.9	138	
WDBB D14 DT CP	235.5	9,693	202.4	9,350	202.4	9,350	
WSKC-CD D14 DC CP	55.2	1,250	35.1	1,095	35.1	1,095	
WHKY-TV D14 DD CP	1.0	0	1.0	0	1.0	0	
WLJT-DT D14 DT CP	12.9	51	5.0	18	5.0	18	
WLFG D14 DT CP	46.7	699	29.8	426	29.8	426	
WAFF D15 DT CP	13.0	216	6.0	61	6.0	61	
WTNZ D15 DT CP	54.6	925	37.7	652	37.7	652	

Interference to BLANK0000026306 CP, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WLFG	D14	DT	CP	GRUNDY, VA	BLANK0000026306	
Undesireds:	WLKY	D14	DT	BL	LOUISVILLE, KY	DTVBL53939	372.0 km
	WLKY	D14	DT	APP	LOUISVILLE, KY	WLKY 710KW TUM 2017100	371.9
	WRDC	D14	DT	CP	DURHAM, NC	BLANK0000027404	342.5
	WHKY-TV	D14	DD	CP	HICKORY, NC	BLANK0000024614	139.1
	WCMH-TV	D14	DT	LIC	COLUMBUS, OH	BLCDT20050823AAD	358.8
	WDSI-TV	D14	DT	CP	CHATTANOOGA, TN	BLANK0000027938	339.3
	WQCW	D15	DT	CP	PORTSMOUTH, OH	BLANK0000025192	187.2
	WTNZ	D15	DT	CP	KNOXVILLE, TN	BLANK0000025183	190.3

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
46552.6	1,617,143	38141.4	1,289,069	36641.4	1,247,201	36595.4	1,246,151	0.13	0.08

Undesired		Total IX		Unique IX, before		Unique IX, after	
WLKY D14 DT BL	94.2	1,579	62.1	777			
WLKY D14 DT APP	148.2	2,894			108.0	1,827	
WRDC D14 DT CP	417.0	12,843	161.6	4,421	161.6	4,421	
WHKY-TV D14 DD CP	1145.1	34,125	822.1	23,472	816.0	23,207	
WCMH-TV D14 DT LIC	101.1	3,072	42.5	919	40.5	919	
WDSI-TV D14 DT CP	8.1	19	4.0	0	4.0	0	
WQCW D15 DT CP	56.7	782	43.5	196	43.5	196	
WTNZ D15 DT CP	29.2	1,022	27.2	982	27.2	982	

Interference to BLANK0000024884 CP, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WTTK	D15	DT	CP	KOKOMO, IN	BLANK0000024884	
Undesireds:	WLKY	D14	DT	BL	LOUISVILLE, KY	DTVBL53939	172.0 km
	WLKY	D14	DT	APP	LOUISVILLE, KY	WLKY 710KW TUM 2017100	172.0
	WICS	D15	DT	CP	SPRINGFIELD, IL	BLANK0000027418	278.3
	WYYW-CD	D15	DC	LIC	EVANSVILLE, IN	BLDTA20130109AGB	230.7
	WXIX-TV	D15	DT	CP	NEWPORT, KY	BLANK0000025169	165.5
	WOHL-CD	D15	DC	APP	LIMA, OH	BLANK0000029918	202.0
	WQCW	D15	DT	CP	PORTSMOUTH, OH	BLANK0000025192	375.7
	WDNI-CD	D16	DC	CP	INDIANAPOLIS, IN	BLANK0000025370	14.5
	WMYO	D16	DT	CP	SALEM, IN	BLANK0000029887	173.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
27279.7	2,816,796	27021.6	2,801,883	26007.3	2,768,772	26007.3	2,768,772	0.00	0.00

Undesired		Total IX		Unique IX, before		Unique IX, after	
WLKY D14 DT BL	0.0	0	0.0	0			
WLKY D14 DT APP	2.0	46			0.0	0	
WICS D15 DT CP	230.1	7,333	193.2	6,565	193.2	6,565	
WYYW-CD D15 DC LIC	6.0	11	0.0	0	0.0	0	
WXIX-TV D15 DT CP	819.0	26,481	723.4	22,546	721.4	22,500	
WOHL-CD D15 DC APP	14.0	1,263	0.0	0	0.0	0	
WQCW D15 DT CP	41.9	2,601	0.0	0	0.0	0	
WDNI-CD D16 DC CP	2.0	65	1.0	65	1.0	65	
WMYO D16 DT CP	13.9	555	0.0	0	0.0	0	

Interference to BLANK0000024884 CP, scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WTTK	D15	DT	CP	KOKOMO, IN	BLANK0000024884	
Undesireds:	WLKY	D14	DT	BL	LOUISVILLE, KY	DTVBL53939	172.0 km
	WLKY	D14	DT	APP	LOUISVILLE, KY	WLKY 710KW TUM 2017100	172.0
	WICS	D15	DT	CP	SPRINGFIELD, IL	BLANK0000027418	278.3
	WYYW-CD	D15	DC	LIC	EVANSVILLE, IN	BLDTA20130109AGB	230.7
	WXIX-TV	D15	DT	CP	NEWPORT, KY	BLANK0000025169	165.5
	WOHL-CD	D15	DC	BL	LIMA, OH	DTVBL68549	199.7
	WQCW	D15	DT	CP	PORTSMOUTH, OH	BLANK0000025192	375.7
	WDNI-CD	D16	DC	CP	INDIANAPOLIS, IN	BLANK0000025370	14.5
	WMYO	D16	DT	CP	SALEM, IN	BLANK0000029887	173.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
27279.7	2,816,796	27021.6	2,801,883	26007.3	2,768,772	26007.3	2,768,772	0.00	0.00

Undesired		Total IX		Unique IX, before		Unique IX, after	
WLKY D14 DT BL	0.0	0		0.0	0		
WLKY D14 DT APP	2.0	46				0.0	0
WICS D15 DT CP	230.1	7,333		193.2	6,565	193.2	6,565
WYYW-CD D15 DC LIC	6.0	11		0.0	0	0.0	0
WXIX-TV D15 DT CP	819.0	26,481		723.4	22,546	721.4	22,500
WOHL-CD D15 DC BL	5.0	574		0.0	0	0.0	0
WQCW D15 DT CP	41.9	2,601		0.0	0	0.0	0
WDNI-CD D16 DC CP	2.0	65		1.0	65	1.0	65
WMYO D16 DT CP	13.9	555		0.0	0	0.0	0

Interference to BLANK0000025169 CP, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WXIX-TV	D15	DT	CP	NEWPORT, KY	BLANK0000025169	
Undesireds:	WLKY	D14	DT	BL	LOUISVILLE, KY	DTVBL53939	139.1 km
	WLKY	D14	DT	APP	LOUISVILLE, KY	WLKY 710KW TUM 2017100	139.1
	WTTK	D15	DT	CP	KOKOMO, IN	BLANK0000024884	165.5
	WEWS-TV	D15	DT	LIC	CLEVELAND, OH	BLCDT20091211ACS	346.8
	WOHL-CD	D15	DC	APP	LIMA, OH	BLANK0000029918	187.3
	WQCW	D15	DT	CP	PORTSMOUTH, OH	BLANK0000025192	212.8
	WTNZ	D15	DT	CP	KNOXVILLE, TN	BLANK0000025183	350.7
	WMYO	D16	DT	CP	SALEM, IN	BLANK0000029887	141.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
19487.8	2,823,879	19343.7	2,807,778	17372.4	2,708,992	17371.4	2,708,992	0.01	0.00

Undesired		Total IX		Unique IX, before		Unique IX, after	
WLKY D14 DT BL	2.0	32		0.0	0		
WLKY D14 DT APP	12.0	32				1.0	0
WTTK D15 DT CP	1581.7	79,208		1112.1	47,828	1112.1	47,828
WEWS-TV D15 DT LIC	10.1	6,488		0.0	0	0.0	0
WOHL-CD D15 DC APP	14.0	10,115		0.0	0	0.0	0
WQCW D15 DT CP	824.3	45,317		381.6	19,528	381.6	19,528
WTNZ D15 DT CP	4.0	1		1.0	0	1.0	0
WMYO D16 DT CP	50.8	292		3.0	35	3.0	35

Interference to BLANK0000025169 CP, scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WXIX-TV	D15	DT	CP	NEWPORT, KY	BLANK0000025169	
Undesireds:	WLKY	D14	DT	BL	LOUISVILLE, KY	DTVBL53939	139.1 km
	WLKY	D14	DT	APP	LOUISVILLE, KY	WLKY 710KW TUM 2017100	139.1
	WTTK	D15	DT	CP	KOKOMO, IN	BLANK0000024884	165.5
	WEWS-TV	D15	DT	LIC	CLEVELAND, OH	BLCDT20091211ACS	346.8
	WOHL-CD	D15	DC	BL	LIMA, OH	DTVBL68549	184.1
	WQCW	D15	DT	CP	PORTSMOUTH, OH	BLANK0000025192	212.8
	WTNZ	D15	DT	CP	KNOXVILLE, TN	BLANK0000025183	350.7
	WMYO	D16	DT	CP	SALEM, IN	BLANK0000029887	141.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	

19487.8	2,823,879	19343.7	2,807,778	17372.4	2,708,992	17371.4	2,708,992	0.01	0.00

Undesired		Total IX		Unique IX, before		Unique IX, after	
WLKY D14 DT BL	2.0	32		0.0	0		
WLKY D14 DT APP	12.0	32				1.0	0
WTTK D15 DT CP	1581.7	79,208		1113.1	50,698	1113.1	50,698
WEWS-TV D15 DT LIC	10.1	6,488		0.0	0	0.0	0
WOHL-CD D15 DC BL	4.0	2,925		0.0	0	0.0	0
WQCW D15 DT CP	824.3	45,317		382.6	19,533	382.6	19,533
WTNZ D15 DT CP	4.0	1		1.0	0	1.0	0
WMYO D16 DT CP	50.8	292		3.0	35	3.0	35

Interference to proposal, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WLKY	D14	DT	APP	LOUISVILLE, KY	WLKY 710KW TUM 2017100	
Undesireds:	WCMH-TV	D14	DT	LIC	COLUMBUS, OH	BLCDT20050823AAD	300.0 km
	WLFG	D14	DT	CP	GRUNDY, VA	BLANK0000026306	371.9
	WYYW-CD	D15	DC	LIC	EVANSVILLE, IN	BLDTA20130109AGB	132.8
	WLCU-CD	D15	DC	CP	CAMPBELLSVILLE, KY	BLANK0000028622	121.2
	WXIX-TV	D15	DT	CP	NEWPORT, KY	BLANK0000025169	139.1

Service area		Terrain-limited		IX-free		Percent IX	
32299.2	1,926,419	31622.5	1,917,171	31210.0	1,908,617	1.30	0.45

Undesired		Total IX		Unique IX		Prcnt Unique IX	
WCMH-TV D14 DT LIC	237.0	5,584		158.1	3,948	0.50	0.21
WLFG D14 DT CP	27.2	278		11.1	66	0.04	0.00
WYYW-CD D15 DC LIC	70.6	1,569		70.6	1,569	0.22	0.08
WLCU-CD D15 DC CP	57.0	559		57.0	559	0.18	0.03
WXIX-TV D15 DT CP	99.6	2,200		36.8	776	0.12	0.04

Channel and Facility Information

Section	Question	Response
Proposed Community of License	Facility ID	53939
	State	Kentucky
	City	LOUISVILLE
	DTV Channel	14
Facility Type	Facility Type	Commercial
	Station Type	Main
Zone	Zone	1

Antenna Location Data

Section	Question	Response
Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1230057
Coordinates (NAD83)	Latitude	38° 22' 08.4" N+
	Longitude	085° 49' 47.6" W-
	Structure Type	GTOWER-Guyed Structure Used for Communication Purposes
	Overall Structure Height	292.9 meters
	Support Structure Height	274.3 meters
	Ground Elevation (AMSL)	299.6 meters
Antenna Data	Height of Radiation Center Above Ground Level	283 meters
	Height of Radiation Center Above Average Terrain	391.6 meters
	Height of Radiation Center Above Mean Sea Level	582.6 meters
	Effective Radiated Power	710 kW

Antenna Technical Data

Section	Question	Response
Antenna Type	Antenna Type	Directional Custom
	Do you have an Antenna ID?	No
	Antenna ID	
Antenna Manufacturer and Model	Manufacturer:	DIE
	Model	TUM30-AP-S4-14/56H-R-2-T
	Rotation	0 degrees
	Electrical Beam Tilt	1.0
	Mechanical Beam Tilt	Not Applicable
	toward azimuth	
	Polarization	Horizontal
DTV and DTS: Elevation Pattern	Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?	No
	Uploaded file for elevation antenna (or radiation) pattern data	

Directional Antenna Relative Field Values (Pre-rotated Pattern)

Degree	V_A (Authorized Value)	Degree	V_A (Authorized Value)	Degree	V_A (Authorized Value)	Degree	V_A (Authorized Value)
0	0.521	**90**	0.795	**180**	0.839	**270**	0.565
10	0.497	**100**	0.718	**190**	0.734	**280**	0.504
20	0.697	**110**	0.864	**200**	0.792	**290**	0.621
30	0.828	**120**	0.962	**210**	0.830	**300**	0.699
40	0.792	**130**	0.864	**220**	0.700	**310**	0.623
50	0.737	**140**	0.720	**230**	0.501	**320**	0.509
60	0.843	**150**	0.798	**240**	0.525	**330**	0.568
70	0.983	**160**	0.965	**250**	0.679	**340**	0.694
80	0.965	**170**	0.981	**260**	0.694	**350**	0.677

Additional Azimuths

Degree	V_A
74	1.000
32	0.833
256	0.711
208	0.834
166	0.999

Construction Permit Certifications

Section	Question	Response
Post-Incentive Auction Expedited Processing	It will operate on the DTV channel for this station as established in the post-incentive auction channel reassignment public notice.	Yes
	It will operate post-incentive auction facilities that do not expand the noise-limited service contour in any direction beyond that established by the post-incentive auction channel reassignment public notice.	No
	It will operate post-incentive auction facilities that match or reduce by no more than five percent with respect to predicted population from those defined in the post-incentive auction channel reassignment public notice.	Yes
	The antenna structure to be used by this facility has been registered by the Commission and will not require re-registration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely affect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7.	Yes
Environmental Effect	Would a Commission grant of Authorization for this location be an action which may have a significant environmental effect? (See Section 1.1306 of 47 C.F.R.)	No
Broadcast Facility	The proposed facility complies with the applicable engineering standards and assignment requirements of 47 C. F.R. Sections 73.616, 73.622(i), 73.623(e), 73.625, 73.1030, and 73.1125.	Yes