TECHNICAL STATEMENT
IN SUPPORT OF A REQUEST FOR
SPECIAL TEMPORARY AUTHORIZATION
WISE-TV 426 KW-DA 153.1 M HAAT CH. 34
FORT WAYNE, INDIANA

INTRODUCTION

WPTA License, LLC (the "Applicant"), the licensee of digital television station WISE-TV Channel 18, Facility ID No. 13960, requests special temporary authorization (STA) for transitioning WISE-TV to its reassignment channel on or before September 1, 2018 using an interim antenna facility with parameters at variance from those specified in the station's post-auction construction permit.[1] WISE-TV is currently authorized to transition to Channel 34 using its existing antenna system, which it presently shares with co-owned station WPTA, Facility ID 73905. Because the authorized antenna is being relocated to a replacement tower, the station needs to utilize a different antenna during the process of moving the shared facilities. The interim antenna will be side mounted on the new tower structure at an elevation below the authorized antenna height. Effective radiated power (ERP) for the interim operation will also not exceed the authorized. The technical operating parameters for the proposed STA facility are described in greater detail below.

INTERIM ANTENNA AND OPERATING PARAMETERS

An STA will enable WISE-TV to facilitate the transition to Channel 34 during its designated construction phase. The antenna to be employed is a directional Dielectric Model TFU-16WB-1-R S230 with 0.55 degrees electrical beam tilt. This antenna is horizontally polarized and the maximum ERP will be 426 kW. As with WISE-TV's main antenna, the interim antenna will be shared with WPTA. WPTA intends to move to the new tower once the necessary combining system has been installed, which is the next step before the main antenna can be relocated.

The height of the antenna radiation center will be 152.4 meters above ground level (AGL) or 401.1 meters above mean sea level (AMSL). Because the technical parameters

[1] FCC File No. 0000027665 authorizes a nondirectional ERP of 456 kW at an antenna radiation HAAT of 224 meters. The construction permit site coordinates are 41-6-8.0 N, 85-11-5.0 W.

proposed for the interim facility are less than those specified in the post-auction construction permit, no extension of the authorized coverage area will result in any direction.[2] The *TVStudy* summary report provided in Figure 1 demonstrates that no interference beyond 0.5 percent will be caused to the technical parameters of any other station.

ENVIRONMENTAL IMPACT

The proposed STA facility for WISE-TV does not exceed the criteria outlined in 47 CFR § 1.1307(a) for certain types of facilities that may significantly affect the environment. More specifically, the collocation of WISE-TV's interim antenna on a newly registered replacement tower (i.e. the original structure was constructed before March 16, 2001) is not expected to exceed the conditions outlined in 47 CFR Part 1, App. B, § III.A.[3] With regard to the rules for limiting human exposure to radio-frequency (RF) energy in 47 CFR § 1.1307(b), this application seeks authority to operate an interim facility in full compliance with those guidelines. The technical parameters for the interim facility are listed below.

Frequency:	590 - 596 MHz (UHF Channel 34)
Antenna Type:	TFU-16WB-1-R S230
Antenna Polarization:	Horizontal
Effective Radiated Power:	426 kW (H)
Location coordinates:	41-06-07.6 N, 85-11-03.6 W (NAD83)
Site elevation:	248.7 meters AMSL
Antenna Height:	152.4 meters AGL; 153.1 meters HAAT
Overall tower height:	235.0 meters AGL
FCC ASRN:	1306723 (replacement tower for 1029441)

[2] The proposed STA and construction permit site coordinates are different by 0.4 seconds in latitude and 1.4 seconds longitude, however, this difference is insignificant and will not result in an extension of coverage.

[3] 47 CFR Part 1, App. B, § III.A. This section applies to the collocation of antennas on towers constructed on or before March 16, 2001. It is also applies to eligible replacement towers for such structures. *"An antenna may be mounted on an existing tower constructed on or before March 16, 2001 without such collocation being reviewed through the Section 106 process set forth in the NPA, unless: 1. The mounting of the antenna will result in a substantial increase in the size of the tower as defined in Stipulation I.E, above; or, 2. The tower has been determined by the FCC to have an adverse effect on one or more historic properties, where such effect has not been avoided or mitigated through a conditional no adverse effect determination, a Memorandum of Agreement, a programmatic agreement, or a finding of compliance with Section 106 and the NPA; or, 3. The tower is the subject of a pending environmental review or related proceeding before the FCC involving compliance with Section 106 of the National Historic Preservation Act; or, 4. The collocation licensee or the owner of the tower has received written or electronic notification that the FCC is in receipt of a complaint from a member of the public, an Indian Tribe, a SHPO or the Council, that the collocation has an adverse effect on one or more historic properties."*

Using the methodology for predicting power density levels for television broadcast antennas outlined in *FCC OET Bulletin No. 65, Edition 97-01,* (OET-65), the proposed facility is calculated to produce a maximum power density of 3.02 μW/cm² at points 2 meters above ground (approximate human head height). As shown in Figure 2, this maximum ground-level exposure value was calculated at a horizontal distance of 86.83 meters from the base of the tower. This determination was made using the antenna relative field data listed in Figure 3. The maximum exposure limits applicable to Channel 34, as determined in accordance with 47 CFR § 1.1310 for uncontrolled and controlled situations, are 393 μW/cm² and 1,967 μW/cm² respectively. Because the worst-case exposure level determined for the proposed facility is not more than 5% of those guidelines and considering that the existing tower location is fenced and suitable warning signs are posted, no further showing of compliance is necessary. Accordingly, this application complies with the RF exposure limits and is categorically excluded from environmental processing by 47 CFR § 1.1306.

Steps to limit exposure to persons authorized to access the transmitter site will be consistent with the appropriate recommendations in OET-65. All maintenance and other related work to be performed at elevations higher than 2 meters above ground will be coordinated to prevent exposure to RF fields in excess of the controlled limit. Such preventative steps shall include reducing power or shutting down the facility.

Respectfully submitted,

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August 23, 2018

Attachments:
Figure 1 – Summary of TV Study Results
Figure 2 – Calculated Ground-Level Exposure
Figure 3 – Antenna Elevation Pattern

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FIGURE 1
Analysis Summary
TVSTUDY, VERSION 2.2.5.

Study created: 2018.08.23 17:58:47

Study build station data: LMS TV 2018-08-22

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    Proposal: WISE-TV D34 DT STA FORT WAYNE, IN
 File number: InterimSTA34_20180823
 Facility ID: 13960
Station data: User record
   Record ID: 241
     Country: U.S.
        Zone: I
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Build options:
Protect pre-transition records not on baseline channel

Search options:
Non-U.S. records included

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WLWD-LD	N20+	TX	LIC	SPRINGFIELD, OH	BLTT20051219ADW	168.8 km
No	WDFM-LP	N26-	TX	LIC	DEFIANCE, OH	BLTTL20031007AAN	58.0
No	WFHD-LP	N27z	TX	LIC	ANN ARBOR, MI	BLTT20000925AAY	177.2
No	WMAQ-TV	D33	DT	CP	CHICAGO, IL	BLANK0000034535	221.6
No	WCHU-LD	D33	LD	CP	CHICAGO, IL	BMPDTL20110912ACN	221.5
No	WCHU-LD	D33	LD	CP	CHICAGO, IL	BDISDTL20100720ABQ	221.5
No	WCHU-LD	D33	LD	LIC	CHICAGO, IL	BLDTL20110928ALC	221.5
No	WMAQ-TV	D33	DT	BL	CHICAGO, IL	DTVBL47905	221.6
No	WTIU	D33	DT	CP	BLOOMINGTON, IN	BLANK0000034852	244.7
No	WTIU	D33	DT	BL	BLOOMINGTON, IN	DTVBL66536	244.7
Yes	W33DC-D	D33	LD	CP	FORT WAYNE, IN	BNPDTL20091228AAX	13.3
No	WQDE-LD	D33	LD	CP	Indianapolis, IN	BLANK0000001737	159.6
No	WQDE-LD	D33	LD	LIC	Indianapolis, IN	BLANK0000001378	159.8
No	WKAR-TV	D33	DT	LIC	EAST LANSING, MI	BLANK0000054990	188.9
No	WOKZ-CD	D33	DC	CP	KALAMAZOO, MI	BLANK0000027731	138.1
No	WOKZ-CD	D33	DC	BL	KALAMAZOO, MI	DTVBL36841	138.1
No	WSTR-TV	D33	DT	LIC	CINCINNATI, OH	BLCDT20091117ACS	218.7
No	WCSN-LD	D33	LD	LIC	COLUMBUS, OH	BLDTL20100728AAG	219.0
No	WHIO-TV	D33	DT	CP	DAYTON, OH	BLANK0000025295	171.5
No	WHIO-TV	D33	DT	BL	DAYTON, OH	DTVBL41458	171.5
No	KQIN	D34	DT	LIC	DAVENPORT, IA	BLEDT20120921ADS	435.0
No	WEDE-CD	D34	DC	LIC	ARLINGTON HEIGHTS, IL	BLDTA20140430ACQ	221.6
No	W34EH-D	D34	LD	LIC	CHAMPAIGN, IL	BLANK0000014112	370.4
Yes	WCIA	D34	DT	CP	CHAMPAIGN, IL	BLANK0000034728	297.0
Yes	WCIA	D34	DT	BL	CHAMPAIGN, IL	DTVBL42124	297.0
Yes	WCPX-TV	D34	DT	CP	CHICAGO, IL	BLANK0000034347	221.6
Yes	WCPX-TV	D34	DT	BL	CHICAGO, IL	DTVBL10981	221.6
No	W34EM-D	D34	LD	CP	LEE, IL	BNPDTL20100524AFR	348.7
No	W34ET-D	D34	LD	CP	BRAZIL, IN	BNPDTL20100510AFJ	283.5
Yes	WIPX-LD	D34	LD	LIC	INDIANAPOLIS, IN	BLANK0000004295	159.6
Yes	WBND-LD	D34	LD	LIC	SOUTH BEND, IN	BLDTL20121022ABX	101.1
Yes	WKMJ-TV	D34	DT	CP	LOUISVILLE, KY	BLANK0000034636	309.0
Yes	WKMJ-TV	D34	DT	BL	LOUISVILLE, KY	DTVBL34195	309.0
No	WCMV	D34	DT	CP	CADILLAC, MI	BLANK0000029577	405.4
No	WCMV	D34	DT	BL	CADILLAC, MI	DTVBL9922	405.4
Yes	WKBD-TV	D34	DT	CP	DETROIT, MI	BLANK0000058478	218.3
Yes	WKBD-TV	D34	DT	BL	DETROIT, MI	DTVBL51570	218.3
No	WOOD-TV	D34	LD	CP	GRAND RAPIDS, MI	BLANK0000054161	251.1
No	WIEK-LD	D34	LD	APP	MIDLAND, MI	BLANK0000052615	232.6
No	W24DL-D	D34	LD	CP	SAGINAW, MI	BLANK0000051774	293.0
Yes	WCET	D34	DT	LIC	CINCINNATI, OH	BLEDT20061031AAR	226.9
Yes	WQHS-DT	D34	DT	LIC	CLEVELAND, OH	BLCDT20031030AGJ	292.7
Yes	WKEF	D34	DT	CP	DAYTON, OH	BLANK0000034522	172.1
Yes	WKEF	D34	DT	BL	DAYTON, OH	DTVBL73155	172.1
No	W38ET-D	D34	LD	APP	EASTLAKE, OH	BLANK0000054261	351.1
No	WPXI	D34	LD	CP	PITTSBURGH, PA	BLANK0000054534	410.7
No	WWRS-TV	D34	DT	CP	MAYVILLE, WI	BLANK0000026658	377.9
No	WWRS-TV	D34	DT	BL	MAYVILLE, WI	DTVBL68547	377.9
No	WISN-TV	D34	DT	LIC	MILWAUKEE, WI	BLCDT20101104AAA	317.9
No	WVPB-TV	D34	DT	LIC	HUNTINGTON, WV	BLEDT20120214AAS	385.8
No	W51EG-D	D34	LD	CP	PARKERSBURG, WV	BLANK0000054632	370.5
No	WGBO-DT	D35	DT	CP	JOLIET, IL	BLANK0000034007	221.5
No	WGBO-DT	D35	DT	BL	JOLIET, IL	DTVBL12498	221.5
Yes	NEW	D35	LD	APP	FORT WAYNE, IN	BNPDTL20091218AFM	12.5
No	WPBY-LD	D35	LD	LIC	LAFAYETTE, IN	BLANK0000058858	160.4
No	WBND-LD	D35	LD	APP	SOUTH BEND, IN	BLANK0000054331	101.1
Yes	WNIT	D35	DT	LIC	SOUTH BEND, IN	BLEDT20110516ADN	101.3
No	WOLP-CD	D35	DC	CP	GRAND RAPIDS, MI	BLANK0000027729	178.3
No	WOLP-CD	D35	DC	BL	GRAND RAPIDS, MI	DTVBL167892	178.2
No	WLWT	D35	DT	LIC	CINCINNATI, OH	BLCDT20050502ABC	226.9
No	WPTD	D35	DT	CP	DAYTON, OH	BLANK0000026763	172.7
No	WPTD	D35	DT	BL	DAYTON, OH	DTVBL25067	172.7
Yes	WDFM-LP	D35-	LD	APP	DEFIANCE, OH	BLANK0000052373	58.0
No	WOHL-CD	D35	DC	LIC	LIMA, OH	BLDTA20090817ACL	96.8
No	WLMO-LP	N38z	TX	LIC	LIMA, OH	BLTTL20050527BIT	97.2
No	CIII-DT-22	D33	DT	LIC	STEVENSON, ON	BLANKCANADA222	248.5

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

```
    Channel: D34
   Latitude:  41  6  7.60 N (NAD83)
  Longitude:  85 11  3.60 W
Height AMSL: 401.1 m
       HAAT: 153.1 m
   Peak ERP: 426 kW
    Antenna: DIE TFU-16WB-1-R S230 285.0 deg
Elev Pattrn: Generic
  Elec Tilt: 0.55
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40.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	233 kW	142.4 m	70.8 km
45.0	45.6	154.5	63.7
90.0	94.9	164.3	68.1
135.0	55.5	159.7	65.1
180.0	98.6	163.5	68.2
225.0	288	156.2	73.1
270.0	411	142.5	73.8
315.0	382	141.9	73.3

**Proposal is within coordination distance of Canadian border
Distance to Canadian border: 195.4 km

Distance to Mexican border: 1928.8 km

Conditions at FCC monitoring station: Allegan MI
Bearing: 339.3 degrees Distance: 178.9 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 273.0 degrees Distance: 1690.2 km

Study cell size: 2.00 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%

---- Below is IX received by proposal InterimSTA34_20180823 ----

Proposal receives 3.60% interference from scenario 1
Proposal receives 3.60% interference from scenario 2
Proposal receives 2.82% interference from scenario 3
Proposal receives 2.81% interference from scenario 4
Proposal receives 3.60% interference from scenario 5
Proposal receives 3.60% interference from scenario 6
Proposal receives 2.82% interference from scenario 7
Proposal receives 2.81% interference from scenario 8
Proposal receives 3.49% interference from scenario 9
Proposal receives 3.49% interference from scenario 10
Proposal receives 2.67% interference from scenario 11
Proposal receives 2.66% interference from scenario 12
Proposal receives 3.49% interference from scenario 13
Proposal receives 3.49% interference from scenario 14
Proposal receives 2.67% interference from scenario 15
Proposal receives 2.66% interference from scenario 16
No IX check failures found.

FIGURE 2

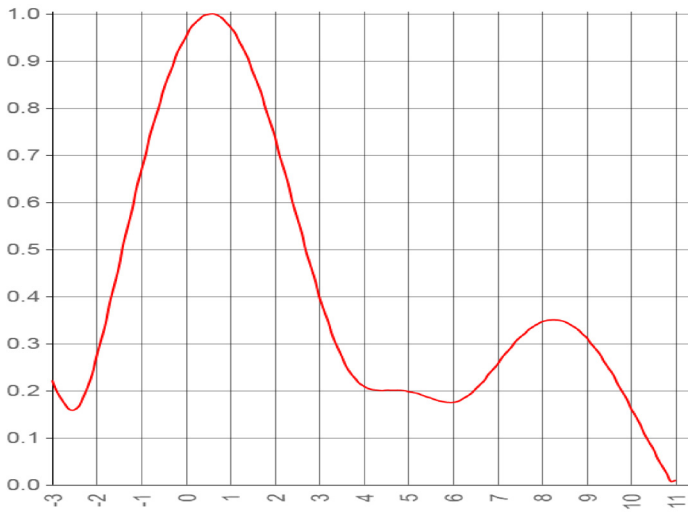
ERP (H-Pol):	426.0 kW	Channel:	34
ERP (V-Pol):		Bottom Frequency:	590
Antenna ht. AGL:	152.4 m		
Exposure ht. AGL:	2.0 m	General MPE Limit:	393
Ground reflection factor:	2.56	Occupational MPE Limit:	1967
Isotropic factor:	1.64		

Depression Angle	Distance (meters)	Slope (meters)	Relative Field	Power Density ($\mu W/cm^2$)	General MPE Limit	Occupational MPE Limit
90	0.00	150.40	0.000	0.00	0.00%	0.00%
85	13.16	150.97	0.007	0.03	0.01%	0.00%
80	26.52	152.72	0.022	0.30	0.08%	0.02%
75	40.30	155.71	0.019	0.21	0.05%	0.01%
70	54.74	160.05	0.036	0.72	0.18%	0.04%
65	70.13	165.95	0.062	1.99	0.51%	0.10%
60	86.83	173.67	0.080	3.02	0.77%	0.15%
55	105.31	183.60	0.050	1.06	0.27%	0.05%
50	126.20	196.33	0.053	1.04	0.26%	0.05%
45	150.40	212.70	0.090	2.55	0.65%	0.13%
40	179.24	233.98	0.014	0.05	0.01%	0.00%
35	214.79	262.21	0.088	1.60	0.41%	0.08%
30	260.50	300.80	0.000	0.00	0.00%	0.00%
25	322.53	355.88	0.084	0.79	0.20%	0.04%
20	413.22	439.74	0.171	2.15	0.55%	0.11%
15	561.30	581.10	0.034	0.05	0.01%	0.00%
10	852.96	866.12	0.163	0.50	0.13%	0.03%

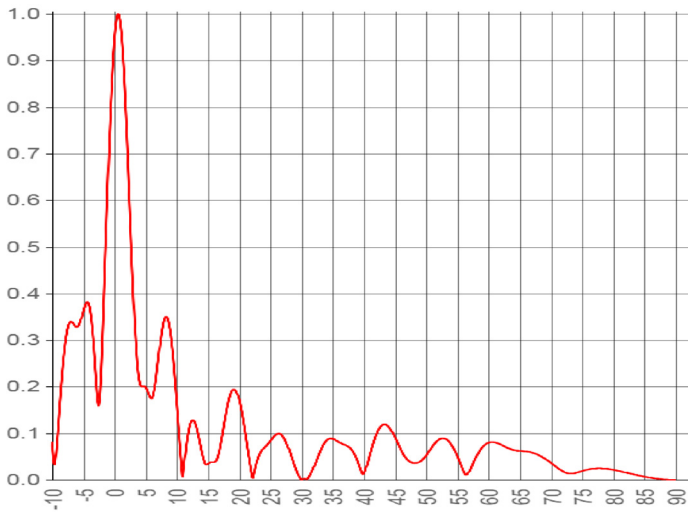
ELEVATION PATTERN

Exhibit No.	**FIGURE 3**
Date	**24 Aug 2018**
Call Letters	**WISE-TV 34 Interim STA**
Channel	**34**
Antenna Type	**TFU-NaNWB**
Location	**Fort Wayne, IN**
Customer	

RMS Gain at Main Lobe	**14.5 (11.61 dB)**	Beam Tilt	**0.55 Degrees**
RMS Gain at Horizontal	**13.1 (11.18 dB)**	Drawing #	**TFU-WB-16**
	Calculated		



Degrees below horizontal



Degrees below horizontal

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10	0.082	10	0.163	30	0.000	50	0.053	70	0.036
-9	0.126	11	0.010	31	0.003	51	0.072	71	0.026
-8	0.286	12	0.115	32	0.029	52	0.086	72	0.018
-7	0.340	13	0.118	33	0.062	53	0.088	73	0.014
-6	0.328	14	0.060	34	0.085	54	0.075	74	0.015
-5	0.363	15	0.034	35	0.088	55	0.050	75	0.019
-4	0.370	16	0.038	36	0.081	56	0.018	76	0.022
-3	0.222	17	0.076	37	0.075	57	0.022	77	0.024
-2	0.269	18	0.151	38	0.065	58	0.050	78	0.025
-1	0.666	19	0.193	39	0.040	59	0.070	79	0.024
0	0.952	20	0.171	40	0.014	60	0.080	80	0.022
1	0.973	21	0.097	41	0.058	61	0.081	81	0.019
2	0.738	22	0.013	42	0.098	62	0.075	82	0.016
3	0.401	23	0.045	43	0.118	63	0.069	83	0.013
4	0.209	24	0.069	44	0.113	64	0.064	84	0.010
5	0.198	25	0.084	45	0.090	65	0.062	85	0.007
6	0.175	26	0.098	46	0.062	66	0.061	86	0.005
7	0.257	27	0.093	47	0.043	67	0.058	87	0.003
8	0.346	28	0.064	48	0.036	68	0.053	88	0.001
9	0.312	29	0.025	49	0.040	69	0.046	89	0.000