

APPENDIX A-4



March 24, 2023

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Subject: Temporary Load Letter

Client Designation:

Mississippi Public Broadcasting Reconfiguration

Client Site Name: WMPN Raymond

FCC Site Number: 1046007

Engineering Firm Designation:

TEP Project Number: 250673.814216

Site Data:

4700 Oakley Palestine Rd., Raymond, Hinds County, MS 39154
Latitude 32° 11' 30.42", Longitude -90° 24' 22.71"
1510± Foot - Guyed Tower

Dear Alicia Harris,

This letter is being written to address the ability of the tower owner to install their proposed tower lighting system prior to the reconfiguration of antenna loading. Refer to Table 1 for the final loading configuration.

The objective of this review is to ensure an adequate level of safety for the proposed tower configuration, considering a reduced wind speed during an established construction period. To achieve this, Non-Operational wind speeds are used to represent the effective 3-second gust wind speed while considering the appropriate Construction Duration Wind Speed as specified in Section 4.5 of the **TIA-322, Standard for Loading, Analysis, and Design Criteria Related to the Installation, Alteration and Maintenance of Communication Structures**.

Ultimate Construction Duration Wind Speeds (mph)	Nominal Construction Duration Wind Speeds (mph)	Construction Duration
55	43	Continuous Workday
66	51	Less than 24 hours
74	57	24 hours to less than 1 week
83	64	1 week to 6 weeks
88	68	6 weeks to 6 months
110	85	Greater than 6 months

We have reviewed the structural integrity of the tower using an ultimate Construction Duration 3-second gust wind speed of 110 mph and found that the tower has sufficient capacity to support the proposed loading with this consideration.

It is therefore acceptable to install the proposed tower lighting system at any time relative to the reconfiguration of antenna loading. There is no limit for the construction period.

Respectfully submitted by:

Aaron T. Rucker, P.E.



03/24/2023

Table 1 - Existing, Proposed, and Reserved Antenna and Cable Information

Existing/ Proposed/ Reserved	Mount Level (ft)	Ant CL (ft)	Qty	Antenna Model	Mount Type	Qty Coax	Coax Size	Coax Location	Owner/ Tenant
Proposed	0-1551.6		-	FAA F5 Lighting System	-	1	1" M.C.	CA Face	MPB
<i>To Be Removed</i>	<i>0-1550.0</i>		-	<i>Existing Lighting System</i>	-	<i>1</i>	<i>2-1/4" M.C.</i>	<i>CA Face</i>	<i>MPB</i>
Proposed	1510.0	1530.8	1	Dielectric TFU-20GTH/VP-R	Top of Tower	1	6-1/8	Inside C Leg	WPMN-TV
<i>To Be Removed</i>	<i>1510.0</i>	<i>1530.0</i>	<i>1</i>	<i>Dielectric TFU-20GTH-PO4</i>	<i>Top of Tower</i>	<i>1</i>	<i>6.1"</i>	<i>Inside C Leg</i>	<i>WPMN</i>
<i>To Be Removed</i>	<i>1339.5</i>	<i>1339.5</i>	<i>1</i>	<i>Jampro JHPC-6</i>	<i>Standoff</i>	<i>1</i>	<i>3.1"</i>	<i>AB Face</i>	<i>WPMN</i>
Proposed	1339.0	1339.0	1	ERI SHPX-6AC	Standoff	1	3-1/8	AB Face	WPMN-FM
Proposed	1180.0	1180.0	1	Jampro JHPC-6	Standoff	1	3"	B Leg	WPMN-FM
<i>To Be Removed</i>	<i>1179.0</i>	<i>1179.0</i>	<i>1</i>	<i>ERI SHPX-10AC6-SP</i>	<i>Standoff</i>	<i>1</i>	<i>4"</i>	<i>B Leg</i>	<i>WJJK & WUSJ</i>
Proposed	1130.0	1130.0	1	Dielectric TFU-8WB-R C160	Direct	1	4-1/16	BC Face¹	WPMN-TV
Existing	800.5	800.5	1	8 Element Dipole	Standoff	1	7/8	CA Face	NWS
Proposed	680.0	680.0	1	Kathrein Scala PR-TV	Standoff	1	1/2	BC Face¹	MPB
Existing	599.0	605.0	1	Amphenol BCD-7509-EDIN-25	Standoff	1	1-5/8	AB Face	Wireless Commission
Existing	571.0	577.0	1	Amphenol BCD-7509-EDIN-25	(2) Standoffs	2 2	7/8 1/2	AB Face	Wireless Commission
		576.0	1	2.5" Dia. x 10-ft Omni					
		571.0	2	Bird Technologies Group 434B-83H-01-T					
Existing	440.5	440.5	1	6-ft Dia. Grid Dish	Pipe	1	7/8	B Leg	WJJK
Existing	400.5	400.5	1	RFS Celwave DA8-59	Pipe	1	EW63	AB Face	Wireless Commission
Existing	370.0	370.0	1	8-ft Dia. Dish w/ Shroud	Pipe	1	EW63	AB Face	MPB
Existing	361.0	361.0	1	RFS Celwave DA8-59	Pipe	1	EW63	AB Face	Wireless Commission
Existing	298.5	298.5	6	Kathrein 80010992	(3) Sectors	2 4 2	1-1/4 15/16 3/8	CA Face	AT&T
			3	Ericsson Radio 8843					
			3	Ericsson Radio 8843 B2 B66A					
			3	Ericsson Radio 4478 B14					
			3	Ericsson Radio 4415 B30					
			2	Raycap DC9-48-60-24-8C-EV					
Reserved	298.5	298.5	1	Raycap DC9-48-60-24-8C-EV		2 1	15/16 3/8	CA Face	AT&T
Existing	287.5	287.5	1	Mark Antennas P-9A96GN	Pipe	1	7/8	B Leg	WUSJ
Existing	196.5	196.5	1	Andrew HP6-59-P3A/K	Pipe	1	EW63	AB Face	Wireless Commission

Existing/ Proposed/ Reserved	Mount Level (ft)	Ant CL (ft)	Qty	Antenna Model	Mount Type	Qty Coax	Coax Size	Coax Location	Owner/ Tenant
Existing	162.0	162.0	1	Andrew HP6-59-P3A/K	Pipe	1	EW63	AB Face	Wireless Commission
Existing	70.0	70.0	1	3"x2"x8" Panel	Direct	1	3/8	AB Face	Unknown
<i>To Be Removed</i>	44.0	50.5	1	40"x32" Grid Dish	Pipe	1	1/4	BC Face	MPB
Existing	26.0	29.0	1	1'-8"x2'-0" Ice Shield	Standoff	1	5/16	CA Face	MPB
		26.0	1	Weather Equipment					

Note:

- 1) Coax location assumed