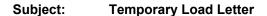
APPENDIX C-4

March 29, 2023

Alicia Harris Mississippi Authority for Educational Television 3825 Ridgewood Rd. Jackson, MS 39211-6497 (601) 432-6770 Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 (919) 661-6351 SDD@tepgroup.net



Client Designation: Mississippi Public Broadcasting Reconfiguration

FCC ASR Number: 1041037

Client Site Name: WMAW Rose Hill

Engineering Firm Designation: TEP Project Number: 327679.814194

Site Data: 2315 County Road 20, Louin, Jasper County, MS 39338

Latitude 32° 08' 19.13", Longitude -89° 05' 37.15"

997.5± 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, <u>Standard for Loading, Analysis</u>, 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
58	45	Continuous Workday
70	54	Less than 24 hours
78	60	24 hours to less than 1 week
87	67	1 week to 6 weeks
93	72	6 weeks to 6 months
116	90	Greater than 6 months

We have reviewed the structural integrity of the tower using an ultimate Construction Duration 3-second gust wind speed of 93 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 provided the antennas and feed lines are reconfigured as listed in Table 1 within 6 months of the proposed lighting system installation.

Respectfully submitted by:

Aaron T. Rucker, P.E.



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

Existing/ Proposed/ Reserved	Mount Level (ft)		Qty	nd Reserved Antenna and Ca Antenna Model	Mount Type	Qty Coax	Coax Size	Coax Location	Owner/ Tenant
Proposed	0 - 1054		-	FAA F3 Lighting System	-	1	1" M.C.	CA-Face	MPB
To Be Removed	0 – 1054		-	Existing Lighting System	-	1	2-1/4" M.C.	CA-Face	MPB
Reserved	997.5	1025	1	Dielectric TFU-28ETT/VP-R O4	Tower Top	1	6-1/8"	Inside A-Leg	WMAW- TV
To Be Removed	997.5	1025	1	Dielectric TUF-O4-14/56H-1-T	Tower Top	1	6-1/8"	Inside A-Leg	WMAW- TV
Reserved	876	876	1	ERI SHPX-10AC	(10) Standoffs	1	3-1/8"	Inside C-Leg	WMAW- FM
To Be Removed	876	876	1	Jampro JHPC-10	(10) Standoffs	1	3-1/8"	Inside C-Leg	WMAW- FM
		808	1	21', 4-Element Dipole			1-1/4"		
		804	1	1" Dia. x 7' Omni					
То Ве	700	800	1	Equipment Box 19"x26"x10"	Side				
Removed	798		1	Equipment Box 16"x24"x31"	Platform 1	M.C.	AB-Face	Unknown	
		798	1	Equipment Box 24"x24"x8"					
			1	Equipment Box 42"x26"x19"					
То Ве		767	1	5.5' x 3' Grid Dish	Standoff	-	-	-	Unknown
Removed	765	763	1	5.5' x 3' Grid Dish					
To Be Removed	747	-	-	-	Standoff	-	-	-	Unknown
Reserved	730	730	1	Kathrein Scala PR-TV	Pipe	1	1/2	CA-Face	MPB
Existing	697	697	1	44', 8-Element Dipole	(4) Standoffs	1	7/8	AB-Face	NWS
Reserved	654	654	1	Dielectric TFU-8WB-R C160	Standoff	1	4-1/16"	Inside CA-Face	WMAW- TV
Existing	616	626	1	21', 4-Element Dipole	Standoff	1	7/8	AB-Face	FBI
Reserved	525	525	1	Jampro JHPC-10	(10) Standoffs	1	3"	CA-Face	WMAW- FM
To Be Removed	520.5	520.5	1	20', 4-Element Dipole	(2) Standoffs	1	7/8	AB-Face	Unknown
To Be	496	496	1	10', Single Element Dipole	Direct		1/0	40 5	Unknown
Removed	482	482	1	10', Single Element Dipole	Direct	1	1/2	AB-Face	
To Be Removed	465	465	1	8' Dia. Dish	Direct	-	-	-	Unknown
Existing	392	402	1	21', 4-Element Dipole	Standoff	1	7/8	AB-Face	FBI
To Be Removed	392	392	1	20', 4-Element Dipole	(2) Standoffs	1	7/8	AB-Face	Unknown
Existing	370	370	1	8' Dia. Dish w/ Radome	Standoff	1	EW63	CA-Face	MPB
То Ве	348	18	(2) Face-						
Removed	342	-	-	-	Mounted Angles	-	-	-	Unknown
Existing	331	331	1	8' Dia. Dish w/ Radome	Pipe	1	EW63	CA-Face	MPB

Existing/ Proposed/ Reserved	Mount Level (ft)	Ant CL (ft)	Qty	Antenna Model	Mount Type	Qty Coax	Coax Size	Coax Location	Owner/ Tenant
To Be Removed	213	215	1	Damaged 10', 5-Element Yagi	Standoff	1	1/4"	CA-Face	Unknown
To Be Removed	190	196	1	40" x 32" Grid Panel Antenna	Standoff	1 1 1	1/8" 3/8" 1/2"	AB-Face	Unknown
To Be Removed	132	129	1	Damaged 6-Element Yagi	Standoff	-	-	-	Unknown
Existing	34	34	1	Compound Light	Standoff	1	5/8"	C-Leg	MPB
Existing	34	34	1	1.7' x 2' Ice Shield	Standoff	-	-	-	MPB
Existing	31	32	1	Anemometer	Standoff	1	5/16"	Inside A-Leg	MPB
To Be Removed	Multiple abandoned feed lines throughout tower. See note 1.							Unknown	

Notes

¹⁾ For abandoned feed line details, refer to the Tower Mapping Report by Tower Engineering Professionals, dated March 28, 2023, project # 327679.814193.