

Federal Communications Commission

(REFERENCE COPY - Not for submission)
FCC Form 399:
Reimbursement Request

			-			
Facility	43192	Service: DTV	Call	WMAB-TV	Channel:	
ID:			Sign:			
8 (High	vHF)	File 000	0026622			
	I	Number:				
FRN: 00	01739002	Date	07/06			
		Submitted:	/2020			

Applicant Name, Type, and Contact Information

Information

Applicant	Address	Phone	Email	Applicant Type
MISSISSIPPI AUTHORITY FOR EDUCATIONAL TV Doing Business As: MISSISSIPPI AUTHORITY FOR EDUCATIONAL TV	Greg Wells 3825 RIDGEWOOD ROAD JACKSON, MS 39211 United States	+1 (601) 432- 6197	Greg. Wells@mpbonline. org	Government Entity

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Name and Information Preparer Contact Applicant Address Phone Email Information **Robert Gehman** Robert Gehman +1 (352) 332bob@kesslerandgehman. Kessler and Gehman 507 NW 60 3157 com Associates, Inc. Street Suite D Gainesville, FL 32607 **United States**

Broadcaster	Question	Response
Information and Transition Plan	Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	No
	Briefly describe transition plan	Replace transmitter and antenna using existing line. Acquire interim antenna and line for continued operation during construction and duration of the assigned phase. Map and analyze tower; design and implement modifications if required.

Transmitters	Section	Question	Response
	Transmitter Related Expenses	Do you have transmitter related expenses?	Yes

Primary	Existing Transmitter Information				
Transmitter	Section	Question	Response		
	Existing Transmitter Description	Type of change	Purchase New		
		Use	Primary (Main)		
		Description of Use	N/A		
		Ownership	Owned		
		Owner	N/A		
		Site	N/A		
		Is this transmitter currently shared with another station?	No		
		Is this transmitter currently in operating condition?	Yes		
	Existing Transmitter	Manufacturer			
	Manufacturer and Type	Model	PLATINUM PTCD10P1		
		Year	2008		
		Туре	Solid State		
		Solid State Cooling	Air Cooled		
		Solid State Power Capacity	2.2 kW		

Existing Transmitter Information

Primary	New Transmitter Costs		
Transmitter	Section	Question	Response
	New Transmitter	Use	Primary (Main)
		Change Type	Purchase New
		Is this a request for upgraded equipment?	No
		Manufacturer	
		Model	LPTV-5000- 2000V3
		Transmitter Type	Solid State
		Solid State Cooling	Air Cooled
		Solid State Power capacity	2 kW
		Justification for New Transmitter	The manufacturer of the existing transmitter advises that the transmitter cannot be re- tuned to the assigned channel. See attachment.

Primary	Other Transmitter Costs				
Transmitter	Section	Question	Response		
	Electrical Service	Service Entrance (3 phases 800A 208V)	No		
		Switchgear (industrial 800 amp)	No		
		Transformer (480V)	Yes		
		Power	150 kVA		
		Rigid Conduit and Wiring	No		

	Size	N/A
	Length	N/A
	Other Electrical Service	No
	Description	N/A
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Primary Other Transmitter Cost Not Listed Transmitter

ter	Name	Description
	Additional Interior RF System	Interior RF System Existing Transmitter to Interim Transmission line
	Electrical	Electrical
	Standby Exciter and Switch	Standby Exciter with Automatic Change Over Switch

Antennas Section		Question	Response
Antenna Rela	ated Expenses	Do you have antenna related expenses?	Yes

Primary Antenna	Existing Antenna Information			
	Section	Question	Response	
	Existing Antenna Description	Type of change	Purchase New	
		Antenna Use	Primary (Main)	
		Description of Use	N/A	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is the existing antenna shared with another station or stations?	No	
		Is the existing antenna directional?	No	
		Is antenna in operating condition?	Yes	
		Is antenna located on or in close proximity to an antenna farm?	No	
	Existing Antenna	Class	Full Power	
	Manufacturer and Type	Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		Туре	Other	
		Number of Stations Supported	N/A	
		Number of Panels	N/A	
		Design power capacity in use	N/A	
		Lower Limit	N/A	
		Upper Limit	N/A	
		Other Antenna Type	Travelling Wave	
		ERP: (Effective Radiated Power)	8.0 kW	

Manufacturer	
Model	TW-7B10-R SM
Year	2008

Primary Antenna	Section	Question	Response
	New Antenna Description	Use	Primary (Main
		Description of Use	N/A
		Change Type	Purchase Nev
		Is this a request for upgraded equipment?	No
		Ownership	Owned
		Owner	N/A
		Is antenna shared?	No
		Is antenna directional?	No
		Will antenna be located on or in close proximity to an antenna farm?	No
	New Antenna Manufacturer and Types	Class	Full Power
		es Mounting	Side Mount
		Antenna position in stack	Not in Stack
		Polarization	Horizontal
		Туре	Slotted Coaxial
		Number of Stations Supported	N/A
		Number of Panels/Bays	N/A
		Lower Limit	N/A
		Upper Limit	N/A
		Design power capacity in use	N/A
		Other Antenna Type	N/A
		ERP: (Effective Radiated Power)	8.0 kW
		Manufacturer	
		Model	JSM-7/8 SHTO-R

Year	2018
Justification for New Antenna	The existing primary antenna is a single channel travelling wave which cannot accommodate the assigned channel.

Other Antenna Costs

Primary Antenna

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	
	Туре	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	No
	Broadband or Single Channel?	N/A
	Feed Line Size	N/A
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

PrimaryOther Antenna Cost Not ListedAntennaInformation not provided.

Interim Antenna	New Antenna Costs			
	Section	Question	Response	
	New Antenna Description	Use	Interim	
		Description of Use	N/A	
		Change Type	Purchase New	
		Ownership	Owned	
		Owner	N/A	
		Is antenna shared?	No	
		Is antenna directional?	No	
		Will antenna be located on or in close proximity to an antenna farm?	No	
	New Antenna Manufacturer and Type	Class	Full Power	
		Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		Туре	Slotted Coaxial	
		Number of Stations Supported	N/A	
		Number of Panels/Bays	N/A	
		Lower Limit	N/A	
		Upper Limit	N/A	
		Design power capacity in use	N/A	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	8.0 kW	
		Manufacturer		
		Model	JSM-7/8 SHTO-R	
		Year	2018	

Justification for New Antenna	An interim
	antenna is
	necessary
	to keep
	station on
	the air
	during
	primary
	antenna
	replacement
	and for the
	duration of
	the
	assigned
	phase.
	Station will
	attempt to
	lease if
	leasing is available at
	time of
	acquisition.

Interim Other Antenna Costs

Antenna

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	No
	Broadband or Single Channel?	N/A
	Feed Line Size	N/A
Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Interim Other Antenna Cost Not Listed

Antenna Information not provided.

Transmissior	n Seffien	Question	Response
	Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

Existing Transmission Line Primary Existing Transmission

ssior	Section	Question	Response
	Existing Transmission Line Description	Type of change	Utilize Existing
		Use	Primary (Main)
		Description of Use	N/A
		Ownership	Owned
		Owner	N/A
		Site	N/A
-		Is the existing transmission line shared with another station or stations?	No
		Is Transmission Line in operating condition?	Yes
	Existing Transmission Line Manufacturer and Type	Manufacturer	ERI
		Туре	Flexible Air
		Diameter	1 5/8 inches
		Other Diameter	N/A
		Segment Length	N/A
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	935 feet per run

Primary Other Transmission Line Expenses Not Listed

Transmission	Naine	Description
	Sweep Tests	Sweep test to verify performance on the assigned channel

New Transmission Line

Interim Transmission

on Line Section	Question	Response
New Transmission Line	Use	Interim
Costs	Description of Use	N/A
	Change Type	Lease New
	Туре	Flexible Air
	Diameter	1 5/8 inches
	Segment Length	N/A
	Other Segment Length	
	Number of parallel runs	1
	Length	835 feet per run
	Justification for New Transmission Line	An interim transmission line is necessary for the interim antenna to keep station on the air during primary antenna replacement and for the duration of the assigned phase.

Other Transmission Line Expenses Not Listed

Transmission not provided.

Tower	Section	Question	Response
Equipment And Rigging Costs	Tower Equipment or Rigging Costs Changes	Do you have tower equipment or rigging costs changes?	Yes

Existing Tower

Primary	Existing Tower				
Tower	Section	Question	Response		
	Existing Tower	Type of change	Modify Existing		
	Description	Tower Use	Primary (Main)		
		Description of Use	N/A		
		Ownership	Owned		
		Is this tower consider Complex?	No		
		Is this tower currently shared with any other stations?	Yes		
		One or more FM, AM or TV radio broadcaster(s)	Yes		
		Others Types of Users	Yes		
		Is tower documented for structural analysis?	No		
		Is tower compliant with Rev G?	No		
	Existing Tower Structure Registration	Do you have a tower registration number?	Yes		
		ASR Number	1041039		
	Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	33° 21' 14.0" N-		
		Longitude (NAD83)	089° 09' 00.0" W-		
		Overall Structure Height	1092.51 feet		
		Support Structure Height	1000.64 feet		
		Ground Elevation Above Mean Sea Level (AMSL)	666.00 feet		
		Structure Type	TOWER - Free Standing or Guyed Structure		

Tower Owner	MISSISSIPPI AUTHORITY FOR EDUCATIONAL TELEVISION
Date Constructed	01/01/1973

FM, AM or TV radio broadcasters. Facility ID's, Call Signs and Services of other broadcast stations with whom the tower is shared

Facility IDCall SignService43212WMAB-FMFM

Other Types of Users

Users

WMAB microwave

Primary Tower Modification Costs

Tower

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for undocumented /poorly documented tower
Tower Reinforcements	Please select whether tower reinforcements are needed:	Major Reinforcements needed

Primary Tower	Tower Rigging Costs				
	Section	Question	Response		
	Tower Rigging Costs	Complex Tower	N/A		

Other Tower Expenses Not Listed Primary Tower

Information not provided.

Outside	Section	Question	Response
Professional	Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	20
		Explanation	Fewer Project Management "PM" tasks are required & Other Engineering Services "OES" are required, therefore the PM total has been reduced to 20 hrs (\$3,000 at \$150/hr), & a new OES category has been created & funded with the money removed from PM.
	Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	Yes
		Prepare engineering section of Form FCC Construction Permit Application	Yes
		For Auxiliary Facility	No
		For Main Facility	Yes
		Prepare engineering section of Form FCC License to Cover Application	Yes
		For Auxiliary Facility	No
		For Main Facility	Yes

	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting	Prepare and file Form FCC Construction Permit Application	Yes
Services	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	No
	Quantity	N/A
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	Yes
	FAA Consultation (including preparation of FAA Form 7460)	Yes
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
RF Field Engineering Services	Comprehensive coverage verification via field study	Yes
		L

RF exposure measurements	No
Additional Field Engineering Service	Yes
Number of Days	18
Justification	It will be necessary to survey the site, plan the equipment, develop specifications for purchasing, and oversee multiple vendor RF projects. Station does not have available personnel or personnel trained in such services.

Other Professional Services Expenses Not Listed

Outside	Other Professional Services Expenses Not Listed			
	I Services Costs	Description		
	Other Legal Services	Other Legal Services related to the DTV Repack		
	Other Engineering Services	Fewer Project Management "PM" tasks are required & Other Engineering Services "OES" are required, therefore the PM total has been reduced to 20 hrs (\$3,000 at \$150 /hr), & a new OES category has been created & funded with the money removed from PM.		

Other	Section	Question	Response
Expenses	AM Pattern Disturbance	Is an Impact Study needed?	No
		Is Remediation needed?	No
	Facility Expenses	Name	N/A
		Other Distributed Transmission System Expenses Not listed	N/A
		Name	N/A
		Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
	Permit and Filing Costs	Local Zoning	No
		Non-zoning permits	No
		BLM or NFS Coordination	No
		FCC Construction Permit Minor Change	No
		FCC License to Cover Application	No
		FCC Special Temporary Authority Application	No
	Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
		Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
		Does this relocation require Equipment Storage?	Yes
		Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
		Does this relocation require MVPD Notification of a Channel Change?	Yes

Other Expenses Not Listed

Expenses Information not provided.

Transmitters

Cost Information

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter LPTV-5000- 2000V3	\$393,780.09	\$350,737.09		\$170,934.89	
High VHF - Air Cooled Solid State Transmitter 1.1 . 4.4 kW	\$152,500.00	\$110,707.00	See attached / uploaded PDF file titled "Comark 001 v200615jgv1. pdf"	\$84,137.32	N/A
Additional Interior RF System	\$75,000.00	\$75,000.00	N/A	N/A	N/A
Electrical	\$115,730.09	\$115,730.09	See attached / uploaded PDF file titled "TSG TSG-MPB-2 v200511jgv1. pdf"	\$86,797.57	N/A
Standby Exciter and Switch	\$25,000.00	\$25,000.00	N/A	N/A	N/A
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$24,300.00	N/A	N/A	N/A
Sub-total	\$393,780.09	\$350,737.09	N/A	\$170,934.89	N/A
Total for all systems	\$1,837,695.09	\$1,753,929.09	N/A	\$314,649.73	N/A

Components

Description	File Name	
High VHF - Air Cooled Solid State Transmitter 1.1 . 4.4 kW	Component Description: Amount:	Comark 001 v200615jgv1 \$84,137.32
Additional Interior RF System	Information not provided.	
Electrical		
	Component Description:	TSG TSG-MPB- v200604jgv2
	Amount:	\$86,797.57
Standby Exciter and Switch	Information not provided.	
Transformer 3 phase/480v - 150 KVA	Information not provided.	

Antennas

Cost Information

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna JSM-7/8 SHTO-R	\$217,535.00	\$215,795.00		\$0.00	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$22,000.00	N/A	N/A	N/A
High VHF - High Power Side Mount One Station horizontally polarized	\$182,395.00	\$182,395.00	See attached / uploaded PDF file titled "Comark 001 v200615jgv1. pdf"	N/A	N/A

Primary Antenna JSM-7/8 SHTO-R	\$217,535.00	\$215,795.00		\$0.00	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$22,000.00	N/A	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
High VHF - High Power Side Mount One Station horizontally polarized	\$182,395.00	\$182,395.00	See attached / uploaded PDF file titled "Comark 001 v200615jgv1. pdf"	N/A	N/A
Sub-total	\$435,070.00	\$431,590.00	N/A	\$0.00	N/A
Total for all systems	\$1,837,695.09	\$1,753,929.09	N/A	\$314,649.73	N/A

Components

Information not provided.

Transmission Line

Cost Information

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Transmission Line	\$27,555.00	\$37,892.00		\$0.00	
Flexible Air Transmission Line - dielectric, 1 5 /8"	\$27,555.00	\$37,892.00	See attached / uploaded PDF file titled "Comark 001 v200615jgv1. pdf"	N/A	N/A
Primary Transmission Line	\$6,400.00	\$6,400.00		\$0.00	
Sweep Tests	\$6,400.00	\$6,400.00	N/A	N/A	N/A
Sub-total	\$33,955.00	\$44,292.00	N/A	\$0.00	N/A
Total for all systems	\$1,837,695.09	\$1,753,929.09	N/A	\$314,649.73	N/A

Components

Information not provided.

Tower Equipment and Rigging Costs

Cost Information

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower TOWER	\$657,800.00	\$625,000.00		\$14,500.00	
Tall Tower (greater than 500')	\$210,500.00	\$200,000.00	N/A	N/A	N/A
Major tower reinforcement /modifications	\$421,000.00	\$400,000.00	N/A	N/A	N/A
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$25,000.00	N/A	\$14,500.00	N/A
Sub-total	\$657,800.00	\$625,000.00	N/A	\$14,500.00	N/A
Total for all systems	\$1,837,695.09	\$1,753,929.09	N/A	\$314,649.73	N/A

Components

Actual Information Description	File Name
Tall Tower (greater than 500')	Information not provided.
Major tower reinforcement /modifications	Information not provided.

undocumented/poorly documented tower and preparation of documentation necessary for tower load study	Component Description: Amount:	TEP CI-419681 v200602jgv1 \$12,000.00
	Component Description:	TEP 378950
		v191104jgv1
	Amount:	\$2,500.00

Outside Professional Services

Cost Information

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$255,569.00	\$249,272.00		\$99,083.64	
Prepare request for Special Temporary Authorization	\$2,050.00	\$1,553.00	See attached / uploaded PDF file titled "KGA 139-384 v200706jgv1. pdf"	\$1,553.00	N/A
Other Engineering Services	\$90,969.00	\$90,969.00	See KGA Quote dated 3/4/19 attached to invoices 139- 320, 139- 323, 139- 326 and 139- 332 in this Other Engineering Services component. \$90,969 Estimate Cost also includes \$600 invoice 139-313.	\$74,913.96	N/A
Other Legal Services	\$10,000.00	\$10,000.00	N/A	\$3,036.50	N/A
Additional Field Engineering Service, 18 Days	\$36,000.00	\$36,000.00	N/A	\$9,280.68	N/A

Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	N/A	N/A
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	\$2,105.00	\$2,000.00	N/A	N/A	N/A
ASR modification (prepare FCC Form 854)	\$2,105.00	\$2,000.00	N/A	N/A	N//
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$49.50	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A

Prepare engineering section of FCC Form 2100	\$3,155.00	\$3,000.00	N/A	\$2,000.00	N/A
(main), Construction Permit Application					
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$2,750.00	N/A
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	\$2,500.00	N/A

Project	\$3,160.00	\$3,000.00	Fewer	\$3,000.00	N/A
management of			Project		
the transition			Management		
			"PM" tasks		
			are required		
			& Other		
			Engineering		
			Services		
			"OES" are		
			required,		
			therefore the		
			PM total has		
			been		
			reduced to		
			20 hrs		
			(\$3,000 at		
			\$150/hr), & a		
			new OES		
			category has		
			been		
			created &		
			funded with		
			the money		
			removed		
			from PM.		
Sub-total	\$255,569.00	\$249,272.00	N/A	\$99,083.64	N/A
Total for all systems	\$1,837,695.09	\$1,753,929.09	N/A	\$314,649.73	N/A

Components

Actual Information Description	File Name	
Prepare request for Special Temporary Authorization	Component Description: Amount:	KGA 139-384 v200706jgv1 \$1,553.00
Other Engineering Services	Component Description: Amount:	KGA 139-381 v200608jgv1 \$5,704.92

Component Description: Amount:	KGA 139-366 v200408jgv1 \$5,704.92
Component Description: Amount:	KGA 139-350 v200207jgv1 \$5,704.92
Component Description: Amount:	KGA 139-323 v190909jgv1 \$5,704.92
Component Description: Amount:	KGA 139-337 v191112jgv1 \$5,704.92
Component Description: Amount:	KGA 139-326 v190909jgv1 \$5,704.92
Component Description: Amount:	KGA 139-339 v191210jgv1 \$5,704.92
Component Description: Amount:	KGA 139-320 v190909jgv1 \$5,704.92
Component Description: Amount:	KGA 139-316 v190625jgv1 \$5,704.92
Component Description: Amount:	KGA 139-355 v200207jgv1 \$5,704.92

Component Description:KGA 139-363 v200320[9]v1Amount:S5,704.92Component Description:KGA 139-313 v190605pmv1Amount:S600.00Component Description:KGA 139-308 v200128]gv1Amount:S150.00Component Description:KGA 139-378 v200506]gv1Amount:S5,704.92Other Legal ServicesComponent Description: v200506]gv1 Amount:S68 679880 v190516pmv1 s120.00Other Legal ServicesComponent Description: v19026]gv2 Amount:GSB 679880 v190516pmv1 s120.00Other Legal ServicesComponent Description: v19026]gv2 Amount:GMP 31015 v19026]gv2 s35.00		Component Description: Amount:	KGA 139-332 v191009jgv1 \$5,704.92
Amount:v190605pmv1 \$600.00Component Description:KGA 139-308 v200128jgv1 Amount:Amount:\$150.00Component Description:KGA 139-378 v200506jgv1 \$5,704.92Other Legal ServicesComponent Description:Component Description:GSB 679880 v190516pmv1 \$120.00Other Legal ServicesComponent Description:GSB 679880 v190516pmv1 \$120.00GMP 31015 			v200320jgv1
Amount:v200128jgv1 \$150.00Component Description:KGA 139-378 v200506jgv1 \$5,704.92Other Legal ServicesComponent Description:GSB 679880 v190516pmv1 \$120.00Other Legal ServicesComponent Description:GSB 679880 v190516pmv1 \$120.00Other Legal ServicesComponent Description:GSB 679880 v190516pmv1 \$120.00Other Legal ServicesComponent Description:GMP 31015 v190926jgv2 \$35.00Component Description:CMP 31015 v190926jgv2 \$35.00Component Description:GMP 32517 v200506jgv1 \$101.00Component Description:CMP 32517 v200506jgv1 \$101.00Component Description:GMP 31983 v200219jgv1			v190605pmv1
Amount:v200506jgv1 \$5,704.92Other Legal ServicesComponent Description: Amount:GSB 679880 v190516pmv1 \$120.00Amount:Component Description: \$120.00GMP 31015 v190926jgv2 \$35.00Component Description:GMP 31015 v190926jgv2 \$35.00Component Description: Amount:GMP 32517 v200506jgv1 \$101.00Component Description:GMP 32517 v200506jgv1 \$101.00Component Description:GMP 31983 v200219jgv1			v200128jgv1
Component Description:GSB 679880 v190516pmv1 \$120.00Amount:\$120.00Component Description:GMP 31015 v190926jgv2 \$35.00Amount:\$35.00Component Description:GMP 32517 v200506jgv1 \$101.00Amount:\$101.00Component Description:GMP 31983 v200219jgv1			v200506jgv1
Amount:v190516pmv1 \$120.00Component Description:GMP 31015 v190926jgv2 \$35.00Amount:\$35.00Component Description:GMP 32517 v200506jgv1 \$101.00Amount:\$101.00Component Description:GMP 31983 v200219jgv1	Other Legal Services		
Amount: v190926jgv2 Amount: \$35.00 Component Description: GMP 32517 v200506jgv1 v200506jgv1 Amount: \$101.00 Component Description: GMP 31983 v200219jgv1 v200219jgv1		Component Description:	
Amount: v200506jgv1 \$101.00 Component Description: GMP 31983 v200219jgv1		Amount:	
v200219jgv1		Component Description:	\$120.00 GMP 31015 v190926jgv2
		Component Description: Amount: Component Description:	\$120.00 GMP 31015 v190926jgv2 \$35.00 GMP 32517 v200506jgv1

Component Description: Amount:	GSB 710996 v190605pmv1 \$46.50
Component Description: Amount:	GSB 710370 v190605pmv1 \$46.50
Component Description: Amount:	GMP 31399 v191114jgv1 \$85.50
Component Description: Amount:	GMP 32343 v200408jgv1 \$39.00
Component Description: Amount:	GSB 667584 v190516pmv1 \$150.00
Component Description:	WMAB GSB inv #679880 DTV Repack legal services
Amount:	UL20180823jgv1 \$120.00
Component Description: Amount:	GMP 31785 v200112jgv1 \$252.50
Component Description:	WMAB GSB inv #670598 DTV Repack legal services
Amount:	UL20180823jgv1 \$120.00

Component Description: Amount:	GSB inv #662020 DTV Repack legal services UL20180914jgv2 \$690.00
Component Description: Amount:	WMAB GSB inv #664826 DTV Repack legal services UL20180823jgv1 \$150.00
Component Description: Amount:	GSB 664826 v190516pmv1 \$150.00
Component Description: Amount:	GMP 32683 v200605jgv1 \$1,010.00
Component Description:	WMAB GSB inv #667584 DTV Repack legal services
Amount:	UL20180823jgv1 \$150.00
Component Description: Amount:	GSB 670598 v190516pmv1 \$120.00
Component Description: Amount:	GMP 31599 v191211jgv1 \$303.00

Additional Field Engineering Service, 18 Days	Component Description:	KGA inv #139-285 On site survey split evenly between WMAB WMAE WMAW
	Amount:	UL20180814jgv1 \$4,405.68
	Component Description:	Inv: WMAB FCC audit attendance by KGA UL20180405
	Amount:	\$4,875.00
	Component Description:	Inv 139-292 WMAB FCC audit attendance by KGA UL20180716jgv2
	Amount:	\$4,875.00
Comprehensive coverage verification via field study, if needed	Information not provided.	
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	Information not provided.	
ASR modification (prepare FCC Form 854)	Information not provided.	
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description:	GSB inv #662020 DTV Repack legal services CP App
	Amount:	UL20180914jgv2 \$49.50

Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	WMAB KGA inv #139-281 CP App UL20180809jgv1 \$2,000.00
Perform engineering study for new channel assignment and antenna development	Component Description:	WMAB KGA inv #139-281 New channel assignment UL20180809jgv1
	Amount:	\$2,750.00
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	
Prepare and or review reimbursement form	Component Description:	WMAB KGA inv #139-284 Prepare and or review 399
	Amount:	UL20180813jgv1 \$2,500.00
Project management of the transition	Component Description:	WMAB KGA inv
	component Description.	#139-286 2017Q3 387
	Amount:	UL20180810jgv1 \$300.00
	Component Description:	KGA 193-304 v190716jgv1

Component Description: Amount:	KGA 139-371 v200415jgv1 \$300.00
Component Description: Amount:	KGA 139-334 v191011jgv1 \$300.00
Component Description: Amount:	KGA 139-360 v200207jgv1 \$300.00
Component Description: Amount:	KGA 139-376 v200430jgv1 \$150.00
Component Description: Amount:	KGA 139-302 v190703jgv1 \$300.00
Component Description: Amount:	KGA 139-317 v190715jgv1 \$300.00
Component Description:	WMAB KGA inv #139-295 2018Q1 387
Amount:	UL20180810jgv1 \$150.00
Component Description:	WMAB KGA inv #139-289 2017Q4 387
Amount:	UL20180809jgv1 \$150.00

Component Description: Amount:	KGA 139-299 v200128jgv1 \$150.00
Component Description:	KGA 139-305 v190716jgv1
Amount:	\$300.00

Other Expenses

Cost Information

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$61,521.00	\$53,038.00		\$30,131.20	
MVPD Notification of Channel Change	\$2,935.00	\$2,935.00	N/A	\$2,935.00	N/A
DTV Medical Facility Notification	\$11,550.00	\$3,067.00	N/A	\$3,067.00	N/A
Equipment Storage	\$5,000.00	\$5,000.00	N/A	\$3,005.00	N/A
Develop and air announcement of upcoming channel change	\$0.00	\$0.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$19,883.00	\$19,883.00	See attached / uploaded PDF file titled "Comark 001 v200615jgv1. pdf"	\$18,888.85	N/A
Equipment Delivery and Handling Charges	\$22,153.00	\$22,153.00	N/A	\$2,235.35	N/A
Sub-total	\$61,521.00	\$53,038.00	N/A	\$30,131.20	N/A
Total for all systems	\$1,837,695.09	\$1,753,929.09	N/A	\$314,649.73	N/A

Components

Actual Information Description	File Name	
MVPD Notification of Channel Change	Component Description: Amount:	KGA 139-382 v200623jgv1 \$1,174.00
	Component Description: Amount:	KGA 139-375 v200420jgv1 \$1,761.00
DTV Medical Facility Notification	Component Description: Amount:	KGA 139-374 v200420jgv1 \$3,067.00
Equipment Storage	Component Description: Amount:	A and M 45713 v200601jgv1 \$3,005.00
Develop and air announcement of upcoming channel change	Information not provided.	
Disposal Costs (for equipment and other waste, net of any salvage value)	Component Description: Amount:	Comark 001 v200615jgv1 \$18,888.85
Equipment Delivery and Handling Charges	Component Description: Amount:	Comark 001 v200615jgv1 \$2,235.35

Cost	Grand Total			
Information		Predetermined Cost Estimate	Estimated Cost	Actual Cost
	Total for all systems	\$1,837,695.09	\$1,753,929.09	\$314,649.73

Reimbursem	entestiatus	Response
	The facility has ceased operating on its pre- auction channel.	Yes
	Construction of final facilities or all necessary modifications are complete.	No
	All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out procedures with the Fund Administrator.	No

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.	
		 The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 	
		2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.	
		3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.	

- 4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- 5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
- 7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.	
I declare, under penalty of perjury, that I am an authorized representative of the above- named applicant for the Authorization(s) specified above.	Jeffrey C Gehman Engineering Associate 07/06/2020

Certification	Section	Question	Response
Certification	Submission of Actual Cost Documentation Statements	WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).	
		 The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 	
		2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.	
		3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.	

- 4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
- 5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster **Relocation Fund are** necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

	The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.	
an au name	are, under penalty of perjury, that I am thorized representative of the above- d applicant for the Authorization(s) fied above.	Jeffrey C Gehman Engineering Associate
		07/06/2020

Attachments