

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility 43192 Service: DTV Call WMAB-TV Channel:

ID: Sign: **8 (High VHF)** File **0000026622**

Number:

FRN: **0001739002** Date **09/17**

Submitted: /2020

Applicant Information

Applicant Name, Type, and Contact 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 Information

Preparer Contact Name and Information

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

Broadcaster Information and Transition Plan

Question	Response
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

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

Primary Transmitter

Existing Transmitter Information

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

Primary Transmitter

New Transmitter Costs

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 retuned to the assigned channel. See attachment.

Primary Transmitter

Other Transmitter Costs

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 Transmitter

Other Transmitter Cost Not Listed

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

Antennas

Section	Question	Response
Antenna Related Expenses	Do you have antenna related expenses?	Yes

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

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	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	Class	Full Power
Manufacturer and Types	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

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

Other Antenna Cost Not Listed

Information 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	Class	Full Power
Manufacturer and Type	Mounting	Side Mount
	Antenna position in stack	Not in Stac
	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 Antenna

Other Antenna Costs

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 Antenna

Other Antenna Cost Not Listed

Information not provided.

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

Primary Transmission

Existing Transmission Line

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	Name Description	
	Sweep Tests	Sweep test to verify performance on the assigned channel

Interim

Interim	New Transmission Line	•	
Transmissio	n 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 loine tion not provided.

Tower Equipment And Rigging Costs

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

Primary Tower

Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	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 (Latitude (NAD83)	33° 21' 14.0" N-
North American Datum of 1983))	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 ID	Call Sign	Service
43212	WMAB-FM	FM

Other Types of Users

Users	
WMAB microwave	

Primary Tower

Tower Modification Costs

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

Helicopter Services	Are helicopter services required?	No
Required		

Primary Tower

Other Tower Expenses Not Listed

Name	Description
Bond Cost	Bond Cost
Material Purchase Certificate	Material Purchase Certificate

Outside Professional

Section	Question	Response
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

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.

Outside Professional

Other Professional Services Expenses Not Listed

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 Expenses

Section	Question	Response
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

Other Expenses Not Listed

Name	Description
Station travel expenses	Station travel expenses

Cost Information

Transmitters

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
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
Additional Interior RF System	\$75,000.00	\$75,000.00	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	\$1,878,416.67	\$1,708,953.67	N/A	\$854,122.53	N/A

Components

Actual Information Description	File Name	
High VHF - Air Cooled Solid State Transmitter 1.1 . 4.4 kW	Component Description: Amount:	Comark 001 v200615jgv1 \$84,137.32
Electrical		
	Component Description: Amount:	TSG TSG-MPB-2 v200604jgv2 \$86,797.57
Standby Exciter and Switch	Information not provided.	
Additional Interior RF System	Information not provided.	
Transformer 3 phase/480v - 150 KVA	Information not provided.	

Cost Information

Antennas

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

Description Interim Antenna JSM-7/8 SHTO-R	Predetermined Cost Estimate \$217,535.00	Estimated Cost \$188,795.00	Estimated Cost Justification	Actual Cost \$179,355.25	Actual Cost Justification
Sweep test of existing antenna	\$6,730.00	\$6,400.00	See attached / uploaded PDF file titled "Comark 002 v200916jgv1 reduced size. pdf"	\$6,080.00	N/A
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$0.00	N/A	N/A	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$0.00	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 002 v200916jgv1 reduced size. pdf"	\$173,275.25	N/A
Primary Antenna JSM-7/8 SHTO-R	\$217,535.00	\$182,395.00		\$173,275.25	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$0.00	N/A	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$0.00	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 002 v200916jgv1 reduced size. pdf"	\$173,275.25	N/A

Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$0.00	N/A	N/A	N/A
Sub-total	\$435,070.00	\$371,190.00	N/A	\$352,630.50	N/A
Total for all systems	\$1,878,416.67	\$1,708,953.67	N/A	\$854,122.53	N/A

Components

Actual Information Description	File Name	
Sweep test of existing antenna	Component Description: Amount:	Comark 002 v200916jgv1 \$6,080.00
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.	
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.	
High VHF - High Power Side Mount One Station horizontally polarized	Component Description: Amount:	Comark 002 v200916jgv1 \$173,275.25
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.	

Sweep test of existing antenna	Information not provided.	
High VHF - High Power Side Mount One Station norizontally polarized	Component Description: Amount:	Comark 002 v200916jgv1 \$173,275.25
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.	

Cost Information

Transmission Line

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

Description Interim Transmission Line	Predetermined Cost Estimate \$27,555.00	Estimated Cost \$37,892.00	Estimated Cost Justification	Actual Cost \$35,997.40	Actual Cost Justification
Flexible Air Transmission Line - dielectric, 1 5 /8"	\$27,555.00	\$37,892.00	See attached / uploaded PDF files titled "Comark 001 v200615jgv1. pdf" and "Comark 002 v200916jgv1 reduced size. pdf"	\$35,997.40	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	\$35,997.40	N/A
Total for all systems	\$1,878,416.67	\$1,708,953.67	N/A	\$854,122.53	N/A

Components

Actual Information Description	File Name	
Flexible Air Transmission Line - dielectric, 1 5/8"	Component Description: Amount:	Comark 002 v200916jgv1 \$35,997.40

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Information not provided.

Cost Information

Tower Equipment and Rigging Costs

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 Cos	
Primary Tower TOWER	\$698,377.72	\$639,980.72		\$137,198.62		
Tall Tower (greater than 500')	\$210,500.00	\$174,403.00	See attached / uploaded PDF file titled "Comark 002 v200916jgv1 reduced size. pdf" \$174,403 figure consists of SOV items 16 (\$21,500), 17 (\$83,022) and 19 (\$69,881)	\$78,870.90	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	\$17,750.00	N/A	
Major tower reinforcement /modifications	\$421,000.00	\$400,000.00	N/A	N/A	N/A	

Bond Cost	\$18,828.56	\$18,828.56	See attached / uploaded PDF file titled "Deep South 1 v200827jgv1. pdf"	\$18,828.56	N/A
Material Purchase Certificate	\$21,749.16	\$21,749.16	See attached / uploaded PDF file titled "Deep South 1 v200827jgv1. pdf"	\$21,749.16	N/A
Sub-total	\$698,377.72	\$639,980.72	N/A	\$137,198.62	N/A
Total for all systems	\$1,878,416.67	\$1,708,953.67	N/A	\$854,122.53	N/A

Components

Actual Information Description	File Name	
Tall Tower (greater than 500')	Component Description:	Comark 002 v200916jgv1
	Amount:	\$78,870.90

Tower mapping for an undocumented/poorly documented tower and preparation of	Component Description:	TEP CI-419681 v200602jgv1
documentation necessary for tower load study	Amount:	\$12,000.00
	Component Description:	TEP 454890
		v200722jgv1
	Amount:	\$3,250.00
	Component Description:	TEP 378950
		v191104jgv1
	Amount:	\$2,500.00
Major tower reinforcement /modifications	Information not provided.	
Bond Cost		
	Component Description:	Deep South 1
		v200827jgv1
	Amount:	\$18,828.56
Material Purchase Certificate		
	Component Description:	Deep South 1
		v200827jgv1
	Amount:	\$21,749.16

Cost Information

Outside Professional Services

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	\$249,572.00		\$108,276.06	
ASR modification (prepare FCC Form 854)	\$2,105.00	\$2,000.00	N/A	N/A	N/A
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
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 management of the transition	\$3,160.00	\$3,300.00	This component is being used to apply expenses for such tasks as project management and Form 387 Transition Plan Progress Report preparation.	\$3,300.00	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.	\$80,618.88	N/A
Other Legal Services	\$10,000.00	\$10,000.00	N/A	\$6,224.00	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
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 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$2,000.00	N/A
Sub-total	\$255,569.00	\$249,572.00	N/A	\$108,276.06	N/A
Total for all systems	\$1,878,416.67	\$1,708,953.67	N/A	\$854,122.53	N/A

Actual Information Description	File Name	
ASR modification (prepare FCC Form 854)	Information not provided.	
Prepare request for Special Temporary Authorization	Component Description: Amount:	KGA 139-384 v200706jgv1 \$1,553.00
Perform engineering study for new channel assignment and antenna development	Component Description: Amount:	WMAB KGA inv #139-281 New channel assignment UL20180809jgv1 \$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 UL20180813jgv1
	Amount:	\$2,500.00
Project management of the transition	Component Description: Amount:	KGA 139-334 v191011jgv1 \$300.00
	Component Description:	KGA 139-360 v200207jgv1
	Amount:	\$300.00

Component Description: KGA 139-302

v190703jgv1

Amount: \$300.00

Component Description: KGA 139-317

v190715jgv1

Amount: \$300.00

Component Description: KGA 139-391

v200713jgv1

Amount: \$300.00

Component Description: WMAB KGA inv

#139-295 2018Q1

387

UL20180810jgv1

Amount: \$150.00

Component Description: KGA 139-305

v190716jgv1

Amount: \$300.00

Component Description: WMAB KGA inv

#139-289 2017Q4

387

UL20180809jgv1

Amount: \$150.00

Component Description: KGA 139-371

v200415jgv1

Amount: \$300.00

Amount:

Component Description: WMAB KGA inv

#139-286 2017Q3

387

UL20180810jgv1

\$300.00

Component Description: KGA 193-304

v190716jgv1

Amount: \$300.00

Component Description: KGA 139-299

v200128jgv1

Amount: \$150.00

Other Engineering Services

Component Description: KGA 139-381

v200608jgv1

Amount: \$5,704.92

Component Description: KGA 139-332

v191009jgv1

Amount: \$5,704.92

Component Description: KGA 139-350

v200207jgv1

Amount: \$5,704.92

Component Description: KGA 139-323

v190909jgv1

Amount: \$5,704.92

Component Description: KGA 139-337

v191112jgv1

Amount: \$5,704.92

Component Description: KGA 139-326

v190909jgv1

Amount: \$5,704.92

Component Description: KGA 139-339

v191210jgv1

Amount: \$5,704.92

Component Description: KGA 139-320

v190909jgv1

Amount: \$5,704.92

Component Description: KGA 139-316

v190625jgv1

Amount: \$5,704.92

Component Description: KGA 139-355

v200207jgv1

Amount: \$5,704.92

Component Description: KGA 139-313

v190605pmv1

Amount: \$600.00

Component Description: KGA 139-363

v200320jgv1

Amount: \$5,704.92

Component Description: KGA 139-308

v200128jgv1

Amount: \$150.00

Component Description: KGA 139-366

v200408jgv1

Amount: \$5,704.92

Component Description: KGA 139-378

v200506jgv1

Amount: \$5,704.92

Component Description: KGA 139-385

v200709jgv1

Amount: \$5,704.92

Component Description: GMP 32683

v200605jgv1

Amount: \$1,010.00

Component Description: GSB inv #662020

DTV Repack legal

services

UL20180914jgv2

Amount: \$690.00

Component Description: GMP 32826

v200713jgv1

Amount: \$1,438.00

Component Description: GMP 33158

v200909jgv1

Amount: \$39.00

Component Description: GSB 679880

v190516pmv1

Amount: \$120.00

Component Description: GMP 31015

v190926jgv2

Amount: \$35.00

Component Description: GMP 32517

v200506jgv1

Amount: \$101.00

Component Description: GMP 31983

v200219jgv1

Amount: \$140.00

Component Description: GSB 710996

v190605pmv1

Amount: \$46.50

Component Description: GSB 710370

v190605pmv1

Amount: \$46.50

Component Description: GMP 31399

v191114jgv1

Amount: \$85.50

Component Description: GMP 31785

v200112jgv1

Amount: \$252.50

Component Description: WMAB GSB inv

#667584 DTV Repack legal services

UL20180823jgv1

Amount: \$150.00

Component Description: GMP 32343

v200408jgv1

Amount: \$39.00

Component Description: WMAB GSB inv

#679880 DTV Repack legal services

UL20180823jgv1

Amount: \$120.00

Component Description: GMP 31599

v191211jgv1

Amount: \$303.00

Component Description: GSB 664826

v190516pmv1

Amount: \$150.00

Component Description: GSB 667584

v190516pmv1

Amount: \$150.00

Component Description: WMAB GSB inv

#670598 DTV Repack legal services

UL20180823jgv1

Amount: \$120.00

Component Description: GMP 32981

v200806jgv1

Amount: \$1,710.50

Component Description: GSB 670598

v190516pmv1

Amount: \$120.00

Component Description: WMAB GSB inv

#664826 DTV Repack legal services

UL20180823jgv1

Amount: \$150.00

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.	
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 UL20180914jgv2
	Amount:	\$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:	WMAB KGA inv #139-281 CP App UL20180809jgv1
	Amount:	\$2,000.00

Cost Information

Other Expenses

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	\$61,664.86	\$53,181.86		\$49,085.06	
Station travel expenses	\$1 43 .86	\$143.86	Station travel expenses	\$143.86	N/A
MVPD Notification of Channel Change	\$2,935.00	\$2,935.00	N/A	\$2,935.00	N/A
Develop and air announcement of upcoming channel change	\$0.00	\$0.00	N/A	N/A	N/A
Equipment Storage	\$5,000.00	\$5,000.00	N/A	\$3,005.00	N/A

Equipment Delivery and Handling Charges	\$22,153.00	\$22,153.00	See attached / uploaded PDF files titled "Comark 001 v200615jgv1. pdf" "Comark 002 v200916jgv1 reduced size. pdf" \$22,153 figure is from SOV items 2 (\$2,353) and 14 (\$19,800)	\$21,045.35	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
DTV Medical Facility Notification	\$11,550.00	\$3,067.00	N/A	\$3,067.00	N/A
Sub-total	\$61,664.86	\$53,181.86	N/A	\$49,085.06	N/A
Total for all systems	\$1,878,416.67	\$1,708,953.67	N/A	\$854,122.53	N/A

Components

Actual Information		
Description	File Name	

Station travel expenses		
	Component Description:	MPB WMAB-TV-
		071520-B
		v200715jgv1
	Amount:	\$143.86
MVPD Notification of		
Channel Change	Component Description:	KGA 139-382
		v200623jgv1
	Amount:	\$1,174.00
	Component Description:	KGA 139-375
		v200420jgv1
	Amount:	\$1,761.00
Develop and air announcement of upcoming channel change	Information not provided.	
Equipment Storage		
	Component Description:	A and M 45713
		v200601jgv1
	Amount:	\$3,005.00
Equipment Delivery and		
Handling Charges	Component Description:	Comark 001
		v200615jgv1
	Amount:	\$2,235.35
	Component Description:	Comark 002
		v200916jgv1
	Amount:	\$18,810.00
Disposal Costs (for		
equipment and other waste,	Component Description:	Comark 001
	Component Description:	Comark 001 v200615jgv1

DTV Medical Facility Notification

Component Description: KGA 139-374

v200420jgv1

Amount: \$3,067.00

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$1,878,416.67	\$1,708,953.67	\$854,122.53

Reimbursem	enrestiatus	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

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.

- 1. 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 abovenamed applicant for the Authorization(s) specified above. Jeffrey C Gehman Engineering Associate

09/17/2020

Section Question Response

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).

- 1. 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.
- The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.
- 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).
- 6. 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.

- 8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
- 9. 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.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Jeffrey C Gehman Engineering Associate

09/17/2020

Attachments