



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **43170** | Service: **DTV** | Call **WMAE-TV** | Channel:
ID: | Sign:
9 (High VHF) | File **0000026661**
Number:
FRN: **0001739002** | Date **09/26**
Submitted: **/2019**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
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
Doing Business As:				
MISSISSIPPI AUTHORITY FOR EDUCATIONAL TV				

Reimbursement Contact Information

Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

Applicant	Address	Phone	Email
Robert Gehman <i>ConsultingEngineer Kessler and Gehman Associates, Inc.</i>	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 using existing antenna and line.

Transmitters

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 and Type	Manufacturer	
	Model	PLATINUM PTCD10P1
	Year	2007
	Type	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	TBD
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	2.2 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
Transmitter**

Other Transmitter Costs

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

	Size	3 inches
	Length	100.0 feet
	Other Electrical Service	No
	Description	N/A
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Type	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 leasehold 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
Additional Interior RF System	Interior RF System Existing Transmitter to Interim Transmission line
Standby Exciter and Switch	Standby Exciter with Automatic Change Over Switch

Antennas

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

**Primary
Antenna****Existing Antenna Information**

Section	Question	Response
Existing Antenna Description	Type of change	Retune Existing
	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 Manufacturer and Type	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	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	Batwing
ERP: (Effective Radiated Power)	31.0 kW
Manufacturer	Dielectric
Model	TAB-12H
Year	1990

**Primary
Antenna**

Adjustment to Existing Antenna

Section	Question	Response
Sweep Test of Existing Antenna	Do you need a sweep test of existing antenna?	Yes

**Primary
Antenna**

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	

**Primary
Antenna**

Other Antenna Cost Not Listed

Name	Description
Rigging	Rigging to replace elbow complex which was found to be mismatched

Transmission Line

Section	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	No

Tower Equipment And Rigging Costs

Section	Question	Response
Tower Equipment or Rigging Costs Changes	Do you have tower equipment or rigging costs changes?	No

Outside Professional Services Costs

Section	Question	Response
Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	204
	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	No
	Quantity	N/A
	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting Services	Prepare and file Form FCC Construction Permit Application	Yes
	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	No
	FAA Consultation (including preparation of FAA Form 7460)	No

	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	No
	RF exposure measurements	No
	Additional Field Engineering Service	Yes
	Number of Days	13
	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	
Name	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
	Information not provided.

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 TBD	\$321,450.00	\$310,500.00		\$0.00	
High VHF - Air Cooled Solid State Transmitter 1.1 . 4.4 kW	\$152,500.00	\$145,000.00	N/A	N/A	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N/A
Transformer 3 phase/480v - 150 KVA	\$25,550.00	\$24,300.00	N/A	N/A	N/A
3" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$4,900.00	N/A	N/A	N/A
Standby Exciter and Switch	<i>\$25,000.00</i>	\$25,000.00	N/A	N/A	N/A
Additional Interior RF System	<i>\$75,000.00</i>	\$75,000.00	N/A	N/A	N/A
Sub-total	\$321,450.00	\$310,500.00	N/A	\$0.00	N/A
Total for all systems	\$510,142.00	\$463,400.00	N/A	\$34,830.74	N/A

Components

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	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Antenna TAB- 12H	\$34,330.00	\$33,800.00		\$0.00	
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
Elbow complex, single channel, at antenna input, per 3 1 /8. feedline (if needed)	\$7,600.00	\$7,400.00	N/A	N/A	N/A
Rigging	<i>\$20,000.00</i>	\$20,000.00	N/A	N/A	N/A
Sub-total	\$34,330.00	\$33,800.00	N/A	\$0.00	N/A
Total for all systems	\$510,142.00	\$463,400.00	N/A	\$34,830.74	N/A

Components

Information not provided.

Cost Information **Transmission Line**
Information not provided.

Cost Information **Tower Equipment and Rigging Costs**
Information not provided.

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	\$120,812.00	\$86,100.00		\$34,830.74	
Other Legal Services	<i>\$10,000.00</i>	\$10,000.00	N/A	\$1,088.00	N/A
Additional Field Engineering Service, 13 Days	<i>\$26,000.00</i>	\$26,000.00	N/A	\$4,405.68	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	\$32,232.00	\$3,000.00	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.	\$1,800.00	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
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$2,750.00	N/A	\$2,750.00	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

Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	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
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
Other Engineering Services	\$27,600.00	\$27,600.00	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.	\$20,237.56	N/A

Sub-total	\$120,812.00	\$86,100.00	N/A	\$34,830.74	N/A
Total for all systems	\$510,142.00	\$463,400.00	N/A	\$34,830.74	N/A

Components

Actual Information Description	File Name
Other Legal Services	<p>Component Description: GSB 670598 v190516pmv1</p> <p>Amount: \$120.00</p> <p>Component Description: GMP 31016 v190926jgv2</p> <p>Amount: \$35.00</p> <p>Component Description: GSB 710370 v190605pmv1</p> <p>Amount: \$46.50</p> <p>Component Description: GSB 710996 v190605pmv1</p> <p>Amount: \$46.50</p> <p>Component Description: GSB 667584 v190516pmv1</p> <p>Amount: \$150.00</p> <p>Component Description: GSB 662020 v190515pmv1</p> <p>Amount: \$600.00</p>

	Component Description: Amount:	WMAE GSB inv #664826 DTV Repack legal services UL20180823jgv1 \$90.00
	Component Description: Amount:	WMAE GSB inv #662020 DTV Repack legal services UL20180823jgv1 \$600.00
	Component Description: Amount:	GSB 664826 v190516pmv1 \$90.00
	Component Description: Amount:	WMAE GSB inv #670598 DTV Repack legal services UL20180823jgv1 \$120.00
	Component Description: Amount:	WMAE GSB inv #667584 DTV Repack legal services UL20180823jgv1 \$150.00
Additional Field Engineering Service, 13 Days	Component Description: Amount:	KGA inv #139-285 On site survey split evenly between WMAB WMAE WMAW UL20180814jgv1 \$4,405.68

Prepare and or review reimbursement form	<table><tr><td data-bbox="687 87 1114 425">Component Description:</td><td data-bbox="1114 87 1428 425">WMAE KGA inv #139-284 Prepare and or review 399 UL20180813jgv1</td></tr><tr><td data-bbox="687 425 1114 470">Amount:</td><td data-bbox="1114 425 1428 470">\$2,500.00</td></tr></table>	Component Description:	WMAE KGA inv #139-284 Prepare and or review 399 UL20180813jgv1	Amount:	\$2,500.00
Component Description:	WMAE KGA inv #139-284 Prepare and or review 399 UL20180813jgv1				
Amount:	\$2,500.00				

Project management of the transition	Component Description: KGA 139-318 v190715jgv1 Amount: \$300.00
	Component Description: KGA 139-303 v190703jgv1 Amount: \$300.00
	Component Description: KGA 139-306 v190716jgv1 Amount: \$300.00
	Component Description: WMAE KGA inv #139-296 2018Q1 387 UL20180810jgv1 Amount: \$150.00
	Component Description: WMAE KGA inv #139-287 2017Q3 387 UL20180810jgv1 Amount: \$300.00
	Component Description: KGA 193-303 v190716jgv1 Amount: \$300.00
Address transition timing and coordination issues w/ other stations and wireless	Component Description: WMAE KGA inv #139-290 2017Q4 387 UL20180809jgv1 Amount: \$150.00
	Information not provided.

Perform engineering study for new channel assignment and antenna development	<p>Component Description: WMAE KGA inv #139-283 New channel assignment UL20180809jgv1</p> <p>Amount: \$2,750.00</p>
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	<p>Component Description: WMAE KGA inv #139-283 CP App UL20180809jgv1</p> <p>Amount: \$2,000.00</p>
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	<p>Component Description: WMAE GSB inv #662020 DTV Repack legal services CP App UL20180823jgv1</p> <p>Amount: \$49.50</p> <p>Component Description: GSB 662020 v190515pmv1</p> <p>Amount: \$49.50</p>
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.

Other Engineering Services

Component Description: KGA 139-312
v190605pmv1
Amount: \$425.00

Component Description: KGA 139-321
v190909jgv1
Amount: \$4,953.14

Component Description: KGA 139-315
v190625jgv1
Amount: \$4,953.14

Component Description: KGA 139-327
v190909jgv1
Amount: \$4,953.14

Component Description: KGA 139-324
v190909jgv1
Amount: \$4,953.14

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	\$33,550.00	\$33,000.00		\$0.00	
MVPD Notification of Channel Change	\$2,000.00	\$2,000.00	N/A	N/A	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	N/A	N/A
Equipment Delivery and Handling Charges	\$10,000.00	\$10,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$5,000.00	\$5,000.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
Sub-total	\$33,550.00	\$33,000.00	N/A	\$0.00	N/A
Total for all systems	\$510,142.00	\$463,400.00	N/A	\$34,830.74	N/A

Components

Information not provided.

Cost Information	Grand Total		
		Predetermined Cost Estimate	Estimated Cost
			Actual Cost
	Total for all systems	\$510,142.00	\$463,400.00
			\$34,830.74

Reimbursement Status	Question	Response
	The facility has ceased operating on its pre-auction channel.	No
	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

Attachments