



(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 **09/05**  
Submitted: **/2019**

## Applicant Information Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
<b>MISSISSIPPI AUTHORITY FOR EDUCATIONAL TV</b>	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
<b>Robert Gehman</b> <i>ConsultingEngineer</i> <i>Kessler and Gehman</i> <i>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
<b>Transmitter Related Expenses</b>	Do you have transmitter related expenses?	Yes

**Primary  
Transmitter**

**Existing Transmitter Information**

<b>Section</b>	<b>Question</b>	<b>Response</b>
<b>Existing Transmitter Description</b>	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
<b>Existing Transmitter Manufacturer and Type</b>	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
<b>New Transmitter</b>	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
<b>Electrical Service</b>	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
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
<b>Channel 14 Costs</b>	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**

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

**Antennas**

Section	Question	Response
<b>Antenna Related Expenses</b>	Do you have antenna related expenses?	Yes

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

Section	Question	Response
<b>Existing Antenna Description</b>	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
<b>Existing Antenna Manufacturer and Type</b>	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
<b>Sweep Test of Existing Antenna</b>	Do you need a sweep test of existing antenna?	Yes

**Primary Antenna**

**Other Antenna Costs**

Section	Question	Response
<b>Combiner for Shared Antenna</b>	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
<b>Rigging</b>	Rigging to replace elbow complex which was found to be mismatched

<b>Transmission Line</b>	<b>Section</b>	<b>Question</b>	<b>Response</b>
	<b>Transmission Line Related Expenses</b>		Do you have transmission line related expenses?

<b>Tower Equipment And Rigging Costs</b>	<b>Section</b>	<b>Question</b>	<b>Response</b>
	<b>Tower Equipment or Rigging Costs Changes</b>		Do you have tower equipment or rigging costs changes?

<b>Outside Professional Services Costs</b>	<b>Section</b>	<b>Question</b>	<b>Response</b>	
	<b>Outside Project Management Services</b>		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.
<b>Outside RF consulting Engineering Services</b>		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
<b>Attorney and Other Outside Consulting Services</b>	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
<b>RF Field Engineering Services</b>	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 Services Costs**

**Other Professional Services Expenses Not Listed**

Name	Description
Other Legal Services	Other Legal Services related to the DTV Repack

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**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.

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**Other Expenses**

<b>Section</b>	<b>Question</b>	<b>Response</b>
<b>AM Pattern Disturbance</b>	Is an Impact Study needed?	No
	Is Remediation needed?	No
<b>Facility Expenses</b>	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
<b>Permit and Filing Costs</b>	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
<b>Other Miscellaneous Expenses</b>	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
<b>Primary Transmitter TBD</b>	<b>\$321,450.00</b>	<b>\$310,500.00</b>		<b>\$0.00</b>	
Additional Interior RF System	<i>\$75,000.00</i>	\$75,000.00	N/A	N/A	N/A
Standby Exciter and Switch	<i>\$25,000.00</i>	\$25,000.00	N/A	N/A	N/A
3" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$4,900.00	N/A	N/A	N/A
Transformer 3 phase/480v - 150 KVA	\$25,550.00	\$24,300.00	N/A	N/A	N/A
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
<b>Sub-total</b>	<b>\$321,450.00</b>	<b>\$310,500.00</b>	<b>N/A</b>	<b>\$0.00</b>	<b>N/A</b>
<b>Total for all systems</b>	<b>\$510,142.00</b>	<b>\$463,400.00</b>	<b>N/A</b>	<b>\$19,936.32</b>	<b>N/A</b>

**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
<b>Primary Antenna TAB-12H</b>	<b>\$34,330.00</b>	<b>\$33,800.00</b>		<b>\$0.00</b>	
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
<b>Sub-total</b>	<b>\$34,330.00</b>	<b>\$33,800.00</b>	<b>N/A</b>	<b>\$0.00</b>	<b>N/A</b>
<b>Total for all systems</b>	<b>\$510,142.00</b>	<b>\$463,400.00</b>	<b>N/A</b>	<b>\$19,936.32</b>	<b>N/A</b>

**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
<b>Outside Professional Services</b>	<b>\$120,812.00</b>	<b>\$86,100.00</b>		<b>\$19,936.32</b>	
Other Engineering Services	<i>\$27,600.00</i>	\$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.	\$5,378.14	N/A



Other Legal Services	<i>\$10,000.00</i>	\$10,000.00	N/A	\$1,053.00	N/A
Additional Field Engineering Service, 13 Days	<i>\$26,000.00</i>	\$26,000.00	N/A	\$4,405.68	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
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$2,750.00	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	\$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
<b>Sub-total</b>	\$120,812.00	\$86,100.00	N/A	\$19,936.32	N/A
<b>Total for all systems</b>	\$510,142.00	\$463,400.00	N/A	\$19,936.32	N/A

## Components

Actual Information Description	File Name
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Other Engineering Services

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

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

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Other Legal Services

**Component Description:** GSB 710996  
v190605pmv1  
**Amount:** \$46.50

**Component Description:** GSB 664826  
v190516pmv1  
**Amount:** \$90.00

**Component Description:** GSB 662020  
v190515pmv1  
**Amount:** \$600.00

**Component Description:** WMAE GSB inv  
#664826 DTV  
Repack legal  
services  
UL20180823jgv1  
**Amount:** \$90.00

**Component Description:** GSB 667584  
v190516pmv1  
**Amount:** \$150.00

**Component Description:** GSB 710370  
v190605pmv1  
**Amount:** \$46.50

	<p><b>Component Description:</b> WMAE GSB inv #662020 DTV Repack legal services UL20180823jgv1</p> <p><b>Amount:</b> \$600.00</p> <p><b>Component Description:</b> GSB 670598 v190516pmv1</p> <p><b>Amount:</b> \$120.00</p> <p><b>Component Description:</b> WMAE GSB inv #667584 DTV Repack legal services UL20180823jgv1</p> <p><b>Amount:</b> \$150.00</p> <p><b>Component Description:</b> WMAE GSB inv #670598 DTV Repack legal services UL20180823jgv1</p> <p><b>Amount:</b> \$120.00</p>
<p>Additional Field Engineering Service, 13 Days</p>	<p><b>Component Description:</b> KGA inv #139-285 On site survey split evenly between WMAB WMAE WMAW UL20180814jgv1</p> <p><b>Amount:</b> \$4,405.68</p>
<p>Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application</p>	<p>Information not provided.</p>

<p>Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application</p>	<p><b>Component Description:</b> GSB 662020 v190515pmv1</p> <p><b>Amount:</b> \$49.50</p> <p><b>Component Description:</b> WMAE GSB inv #662020 DTV Repack legal services CP App UL20180823jgv1</p> <p><b>Amount:</b> \$49.50</p>
<p>Prepare engineering section of FCC Form 2100 (main), License to Cover Application</p>	<p>Information not provided.</p>
<p>Prepare engineering section of FCC Form 2100 (main), Construction Permit Application</p>	<p><b>Component Description:</b> WMAE KGA inv #139-283 CP App UL20180809jgv1</p> <p><b>Amount:</b> \$2,000.00</p>
<p>Perform engineering study for new channel assignment and antenna development</p>	<p><b>Component Description:</b> WMAE KGA inv #139-283 New channel assignment UL20180809jgv1</p> <p><b>Amount:</b> \$2,750.00</p>
<p>Address transition timing and coordination issues w/ other stations and wireless</p>	<p>Information not provided.</p>
<p>Prepare and or review reimbursement form</p>	<p><b>Component Description:</b> WMAE KGA inv #139-284 Prepare and or review 399 UL20180813jgv1</p> <p><b>Amount:</b> \$2,500.00</p>

Project management of the transition

**Component Description:** KGA 139-306  
v190716jgv1  
**Amount:** \$300.00

**Component Description:** KGA 139-303  
v190703jgv1  
**Amount:** \$300.00

**Component Description:** KGA 139-318  
v190715jgv1  
**Amount:** \$300.00

**Component Description:** WMAE KGA inv  
#139-296 2018Q1  
387  
UL20180810jgv1  
**Amount:** \$150.00

**Component Description:** WMAE KGA inv  
#139-290 2017Q4  
387  
UL20180809jgv1  
**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

**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
<b>Other Expenses</b>	<b>\$33,550.00</b>	<b>\$33,000.00</b>		<b>\$0.00</b>	
MVPD Notification of Channel Change	<i>\$2,000.00</i>	\$2,000.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	<i>\$5,000.00</i>	\$5,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	<i>\$10,000.00</i>	\$10,000.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	<i>\$0.00</i>	\$0.00	N/A	N/A	N/A
Equipment Storage	<i>\$5,000.00</i>	\$5,000.00	N/A	N/A	N/A
<b>Sub-total</b>	<b>\$33,550.00</b>	<b>\$33,000.00</b>	<b>N/A</b>	<b>\$0.00</b>	<b>N/A</b>
<b>Total for all systems</b>	<b>\$510,142.00</b>	<b>\$463,400.00</b>	<b>N/A</b>	<b>\$19,936.32</b>	<b>N/A</b>

**Components**

Information not provided.

**Cost Information** **Grand Total**

	<b>Predetermined Cost Estimate</b>	<b>Estimated Cost</b>	<b>Actual Cost</b>
<b>Total for all systems</b>	\$510,142.00	\$463,400.00	\$19,936.32

**Reimbursement Status**

<b>Question</b>	<b>Response</b>
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**