

Federal Communications Commission

### (REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility <b>710</b> ID: File <b>000002</b>	Service: <b>DTV</b> 27860	Call Sign:	WGIQ	Channel: <b>30 (UHF)</b>
Number:				
FRN: 0001750314	Date	10/04		
	Submitted:	/2018		

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

### Applicant Information

tion	Applicant	Address	Phone	Email	Applicant Type
	ALABAMA EDUCATIONAL TELEVISION COMMISSION Doing Business As: ALABAMA EDUCATIONAL TELEVISION COMMISSION	Windell L. Wood 2112 11TH AVENUE SOUTH SUITE 400 BIRMINGHAM, AL 35205 United States	+1 (800) 239- 5233	wwood@aptv. org	Government Entity

#### Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

## Preparer Preparer Contact Name and Information

Contact Information	Applicant	Address	Phone	Email
	Robert Gehman Consulting Engineer 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	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, antenna and transmission 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	Sigma CD3130P1		
		Year	2007		
		Туре	Inductive Output Tube		
		IOT Power Type	Single		
		Power Capacity	25 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?	Yes		
		Manufacturer			
		Model	ULXTE-20		
		Transmitter Type	Solid State		
		Solid State Cooling	Liquid Cooled		
		Solid State Power capacity	12.9 kW		
		Justification for New Transmitter	The manufacturer of the existing IOT transmitter advises that the transmitter cannot be retuned to the assigned channel. The purchase price of a new transmitter is based on a Proposal from Comark for an MSDC IOT as suggested by the FCC. See attachment.		

Oration		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	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				
	HVAC Service	Switchgear (industrial 800 amp)Transformer (480V)PowerRigid Conduit and WiringSizeLengthOther Electrical ServiceDescriptionHVAC ServiceTypeSizeCother SizeOther SizeSizeSizeSizeSizeSizeSizeSizeSizeSizeOther Size <t< th=""></t<>				

Primary	Other Transmitter Cost Not Listed		
Transmitter	Name	Description	
	Additional Interior RF System	Interior RF system to enable installation of new Transmitter	

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

Primary	Existing Antenna Information				
Antenna	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?	Yes		
		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	Slotted Coaxial		
		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	N/A		
		ERP: (Effective Radiated Power)	952.0 kW		

Manufacturer	
Model	TFU- 36DSC-R- P310BNT DC
Year	2007

tenna	Section	Question	Response
	New Antenna	Use	Primary (Mair
	Description	Description of Use	N/A
		Change Type	Purchase Nev
		Is this a request for upgraded equipment?	Yes
		Ownership	Owned
		Owner	N/A
		Is antenna shared?	No
		Is antenna directional?	Yes
		Will antenna be located on or in close proximity to an antenna farm?	No
	New Antenna	Class	Full Power
	Manufacturer and Type	s Mounting	Side Mount
		Antenna position in stack	Not in Stack
		Polarization	Elliptical
		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)	702.0 kW
		Manufacturer	
		Model	TFU-29JSC /VP- RP310BNT

Year	2018
Justification for New Antenna	The existing primary antenna is a single channel slotted coaxial which cannot accommodate the assigned channel. The proposed antenna includes vertical polarization making it an Upgrade

Primary Antenna	Other Antenna Costs			
	Section	Question	Response	
	Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No	
		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?	Yes	
		Broadband or Single Channel?	Single Channel	
		Feed Line Size	6 1/8 inches inches	

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?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Primary	Other Antenna Cost Not Listed	
Antenna	Name	Description
	Sweep Line	Sweep of existing transmission line

Interim	New Antenna Costs			
Antenna	Section	Question	Response	
	New Antenna Description	Use	Interim	
		Description of Use	N/A	
		Change Type		
		Ownership	Owned	
		Owner	N/A	
		Is antenna shared?	No	
		Is antenna directional?	Yes	
		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)	450.0 kW	
		Manufacturer		
		Model	TUA-P2-9 /18M-1-S	
		Year	2018	
			1	

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?	Yes
	Broadband or Single Channel?	S
	Feed Line Size	3 1/8 inches
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?	No
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

nissio	n 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	Dielectric	
	Туре	Rigid	
		Diameter	6 1/8 inches
		Other Diameter	N/A
		Segment Length	20 inches
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	770 feet per run

# Primary Other Transmission Line Expenses Not Listed

Transmission loime tion not provided.

Interim	New Transmission Line			
Transmissio	n Section	Question	Response	
	New Transmission Line	Use	Interim	
	Costs	Description of Use	N/A	
		Change Type	Purchase New	
		Туре	Flexible Air	
		Diameter	4 inches	
		Segment Length	N/A	
		Other Segment Length		
		Number of parallel runs	1	
		Length	710 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

marv	Existing	Tower
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Primary	Existing Tower	ing Tower				
Tower	Section	Question	ResponseModify ExistingPrimary (Main)N/AOwnedOwnedYesNoYesNoYes103641731° 43' 05.0" N-085° 26' 03.0" W-726.70 feet			
	Existing Tower Description	Type of change				
		Tower Use				
		Description of Use	N/A			
		Ownership	Owned			
		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)       No         Others Types of Users       Yes         Is tower compliant with Rev G?       No         Is tower compliant with Rev G?       No         ASR Number       1036417         Latitude (NAD83)       31° 43°         Overall Structure Height       726.70 fm				
			Yes			
		Type of changeModify ExistingTower UsePrimary (Main)Description of UseN/AOwnershipOwnedIs this tower consider Complex?NoIs this tower currently shared with any other stations?YesOne or more FM, AM or TV radio 				
		Others Types of Users	Yes			
		Others Types of Users       Yes         Is tower documented for structural analysis?       No				
		Is tower compliant with Rev G?	Modify         Existing         Primary         (Main)         N/A         Owned         No         Yes         No         Yes         No         Yes         1036417         31° 43'         05.0" N-         085° 26'         03.0" W-         726.70 feet			
	Existing Tower Structure	Do you have a tower registration number?	Yes			
	Registration	ASR Number	Modify Existing         Modify Existing         Primary (Main)         N/A         NvA         Owned         No         Yes         No         Yes         No         Yes         1036417         31° 43' 05.0" N-         085° 26' 03.0" W-         726.70 feet         726.70 feet			
	Coordinates (NAD83 ( North American Datum of	Latitude (NAD83)				
	1983))	Is tower compliant with Rev G?NoDo you have a tower registration number?YesASR Number1036417Latitude (NAD83)31° 43' 05.0" N-Longitude (NAD83)085° 26' 03.0" W-Overall Structure Height726.70 fe				
		Type of changeModify ExistingTower UsePrimary (Main)Description of UseN/AOwnershipOwnedIs this tower consider Complex?NoIs this tower currently shared with any other stations?YesOne or more FM, AM or TV radio broadcaster(s)NoOthers Types of UsersYesIs tower documented for structural analysis?NoIs tower compliant with Rev G?NoDo you have a tower registration number?YesASR Number1036417Latitude (NAD83)31° 43' 05.0° N-Corerall Structure Height726.70 feetSupport Structure Height726.70 feetGround Elevation Above Mean Sea Level586.94 feet				
		Support Structure Height	726.70 feet			
			586.94 feet			

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Alabama Educational Television Commission
Date Constructed	01/01/1992

### Other Types of Users

Users

WBIQ microwave

# Primary Tower Modification Costs

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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 Section

ower	Section	Question	Response
	Tower Rigging Costs	Complex Tower	N/A
	Helicopter Services Required	Are helicopter services required?	No

# Other Tower Expenses Not Listed Primary Tower

Information not provided.

Outside Professional	Section	Question	Response
	I Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	157
		Explanation	It will be necessary to schedule and coordinate multiple vendors, complete progress reports, and update Schedule 399. Station does not have available personnel or personnel trained in project management for such complex projects.
	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	Yes
	Quantity	1
	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	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 Professional Services roostsided.

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		
		FCC Construction Permit Minor Change	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 ULXTE-20	\$1,192,498.63	\$1,141,455.06		\$1,141,455.06	
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$27,021.23	Electrical installation. Based on a sealed bid administered by the State of Alabama	\$27,021.23	Delete item \$27,571.99. Final
Switchgear - industrial 800 amp	\$38,200.00	\$32,273.80	N/A	\$32,273.80	Delete item \$33,304.69. Final
Additional Interior RF System	\$56,248.63	\$56,248.63	***System Notice: Estimate adjusted and locked because line has been superseded.	\$56,248.63	N/A

UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW Single IOT system (25 kW)	\$494,500.00	\$512,955.70	Total cost of Transmitter \$509,760.94 and Electrical Transformer \$3,194.76. Cost based on sealed bids administered by the State of Alabama. The baseline cost for comparison is the Comark 25 kW IOT at \$865,551.00. ****System Notice: Estimate adjusted and locked because line has been superseded. ****The purchase price of a new transmitter is based on a Proposal from Comark for an MSDC IOT as recommended	\$512,955.70	Cost was obtained via sealed bids administered by the State of Alabama Delete item \$569,204.33. Final
Sub-total Total for all systems	\$1,192,498.63 \$3,121,459.08	\$1,141,455.06 \$2,375,605.96	recommended by the FCC. See attachment. N/A N/A	\$1,141,455.06 \$1,918,484.36	N/A N/A

### Components

Actual Information		
Description	File Name	

Transformer 3 phase/480v - 150 KVA	Common and Deceminations	The freight for this
	Component Description:	The freight for this item is in Other Expenses category
		for WGIQ
	Amount:	\$27,021.23
	Component Description:	Electrical
		connection of
		transmitter heat exchanger WGIQ
	Amount:	\$27,571.99
Switchgear - industrial 800		
amp	<b>Component Description:</b>	Transmitter
		Electrical
	Amount:	installation WGIQ
	Amount.	\$32,273.80
	Component Description:	Electrical
		installation of
	Amount:	transmitter WGIQ \$33,304.69
		<i></i>
Additional Interior RF System		
	Component Description:	Transmitter - Interior RF System
	Amount:	\$56,248.63
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13		
kW	Component Description:	Solid State Liquid
		Cooled Transmitter and Electrical
		Transformer
	Amount:	\$512,955.70

Single IOT system (25 kW)		
	Component Description:	Final
	Amount:	\$512,955.70
	Component Description:	Main/Primary
		Transmitter Option
		3 Solid State
		Liquid. No
		response received
		bid request for IOT.
		See WGIQ
		Supporting
		Documentation for
		invoice 202775
		attached.
	Amount:	\$569,204.33

### 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 TUA-P2-9 /18M-1-S	\$416,480.00	\$205,869.98		\$205,869.98	
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$17,033.33	N/A	\$17,033.33	N/A
Elbow complex, single channel, at antenna input, per 3 1/8. feedline (if needed)	\$7,600.00	\$1,279.44	N/A	\$1,279.44	N/A
Sweep test of existing antenna	\$6,730.00	\$4,977.78	Sweep of interim antenna system	\$4,977.78	N/A
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	\$189,500.00	\$79,644.44	N/A	\$79,644.44	N/A

UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	\$189,500.00	\$102,934.99	***System Notice: Estimate adjusted and locked because line has been superseded. ***	\$102,934.99	N/A
Primary Antenna TFU-29JSC /VP- RP310BNT	\$483,654.45	\$484,046.12		\$484,046.12	
Sweep Line	\$4,977.78	\$4,977.78	Sweep of Existing Line	\$4,977.78	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$22,555.56	Sealed bids administered by State of Alabama	\$22,555.56	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$14,941.11	Sealed bids administered by the State of Alabama	\$14,941.11	N/A
Sweep test of existing antenna	\$6,730.00	\$5,075.00	Sweep of new antenna	\$5,075.00	Sweep measuremer and report fo existing antenna an line. This report confirmed th existing line can be use

UHF - High Power, Side Mount, basic slot antenna, 702 kW input, directional,, horizontally polarized	\$239,485.56	\$239,485.56	***System Notice: Estimate adjusted and locked because line has been superseded. ***	\$239,485.56	This invoice item includes the side mount brackets, elbow complex, and sweep that are listed in other components that will not be invoiced separately.
UHF - High Power, Side Mount, basic slot antenna, 702 kW input, directional,, elliptically or circularly polarized	\$197,011.11	\$197,011.11	Upgrade Primary Elliptical Polarized Antenna	\$197,011.11	N/A
Sub-total	\$900,134.45	\$689,916.10	N/A	\$689,916.10	N/A
Total for all systems	\$3,121,459.08	\$2,375,605.96	N/A	\$1,918,484.36	N/A

### Components

Actual Information Description	File Name	
Side mount brackets for high power antennas (if not included in antenna base cost)	Component Description: Amount:	Side mount brackets for Interim Antenna \$17,033.33
	Component Description:	Side mount Brackets for Interim
	Amount:	Antenna \$17,033.33

Elbow complex, single channel, at antenna input, per 3 1/8. feedline (if needed)	Component Description: Amount:	Elbow Complex \$1,279.44
Sweep test of existing antenna	Component Description: Amount:	Sweep of New Interim Antenna \$4,977.78
	Component Description: Amount:	The price of the sweep is included in Line 2: Interim Antenna System. This closes out this component. N/A
UHF - Lower Power Side Mount, One station - 200- 500 kW, horizontally polarized	Component Description: Amount:	Interim Antenna \$79,644.44
	Component Description: Amount:	Interim antenna for WGIQ \$102,934.99
UHF - Lower Power Side Mount, One station - 200- 500 kW, horizontally polarized	Component Description: Amount:	Final \$102,934.99
Sweep Line	Component Description: Amount:	Sweep for new primary antenna \$4,977.78
Side mount brackets for high power antennas (if not included in antenna base cost)	Component Description:	Side mount brackets for new primary antenna
	Amount:	\$22,555.56

Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Component Description:	Elbow complex for new primary antenna
	Amount:	\$14,941.11
Sweep test of existing		
antenna	Component Description:	Sweep measurements and report for existing antenna and line. This report confirmed the
		existing line can be used.
	Amount:	\$5,075.00
	Component Description: Amount:	Added in error N/A
UHF - High Power, Side Mount, basic slot antenna, 702 kW input, directional,,	Component Description:	Final
horizontally polarized	Amount:	\$239,485.56
	Component Description:	Main-Primary Antenna System. See WGIQ Supporting Documentation for invoice 202775 attached.
	Amount:	\$244,560.56
UHF - High Power, Side Mount, basic slot antenna,	Component Description:	New Primary
702 kW input, directional,, elliptically or circularly polarized	component Description.	Antenna with elliptical polarization
polarized	Amount:	\$197,011.11

### **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	\$195,960.00	\$34,528.78		\$34,528.78	
Flexible Air Transmission Line - dielectric, 4"	\$52,540.00	\$0.00	N/A	N/A	N/A
Rigid Transmission Line - copper, 6 1/8"	\$143,420.00	\$34,528.78	***System Notice: Estimate adjusted and locked because line has been superseded.	\$34,528.78	N/A
Primary Transmission Line	\$0.00	\$0.00		\$0.00	
Sub-total	\$195,960.00	\$34,528.78	N/A	\$34,528.78	N/A
Total for all systems	\$3,121,459.08	\$2,375,605.96	N/A	\$1,918,484.36	N/A

### Components

Actual Information Description	File Name
Flexible Air Transmission Line - dielectric, 4"	Information not provided.

Rigid Transmission Line -		
copper, 6 1/8"	<b>Component Description:</b>	Interim
		Transmission Line
	Amount:	\$34,528.78
	Component Description:	Interim
		transmission line.
		See WGIQ
		Supporting
		Documentation for
		invoice 202775
		attached.
	Amount:	\$34,528.78

### **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).

			Estimated		
	Predetermined	Estimated	Cost		Actual Cost
Description	Cost Estimate	Cost	Justification	Actual Cost	Justification
Primary Tower TOWER	\$657,800.00	\$338,406.02		\$14,000.00	
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$14,000.00	N/A	\$14,000.00	Professional services associated with mapping, assessment of the tower, a structural analysis that failed, geotechnical investigation with structural reanalysis, and structural design drawings to solicit bids to modify the tower
Major tower reinforcement /modifications	\$421,000.00	\$184,537.61	N/A	N/A	N/A
Tall Tower (greater than 500')	\$210,500.00	\$139,868.41	N/A	\$0.00	N/A
Sub-total	\$657,800.00	\$338,406.02	N/A	\$14,000.00	N/A
Total for all systems	\$3,121,459.08	\$2,375,605.96	N/A	\$1,918,484.36	N/A

Components

Actual Information Description	File Name	
Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary	Component Description:	Mapping, Maintenance & condition
for tower load study	Amount:	assessment and structural analysis \$6,000.00
	Component Description:	Structural Reanalysis
	Amount:	\$750.00
	Component Description:	Structural Design Drawings
	Amount:	\$4,000.00
	Component Description: Amount:	Geotechnical Investigation \$3,250.00
Major tower reinforcement /modifications	Information not provided.	
Tall Tower (greater than 500')	Information not provided.	

## **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	\$91,516.00	\$88,300.00		\$12,000.00	
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	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	N/A	N/A
Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	N/A	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	\$2,500.00	Prep of Original Schedule 39
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$2,000.00	RF Allocation study for new channel assignment and antenna developmen
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	Preparation of Original FCC form 2100 Schedule 39
Project management of the transition	\$24,806.00	\$23,550.00	N/A	N/A	N/A
Additional Field Engineering Service, 18 Days	\$36,000.00	\$36,000.00	N/A	\$5,000.00	Technical Specifications for bidding the transmitter and antenna systems.
Sub-total	\$91,516.00	\$88,300.00	N/A	\$12,000.00	N/A
Total for all systems	\$3,121,459.08	\$2,375,605.96	N/A	\$1,918,484.36	N/A

# Components

Description	File Name	
Attorney Fees - Prepare and File request for Special Temporary Authorization	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	Information not provided.	
Prepare request for Special Temporary Authorization	Information not provided.	
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:	FCC Form FCC Construction Perm application \$2,500.00
Perform engineering study		
for new channel assignment and antenna development	Component Description:	Engineering Study for New Channel Assignment and antenna development
	Amount:	\$2,000.00
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	

Prepare and or review reimbursement form	Component Description:	Prepare FCC Form 399 for Reimbursement - WGIQ
	Amount:	\$2,500.00
Project management of the transition	Information not provided.	
Additional Field Engineering Service, 18 Days	Component Description:	Bid Spec Post Transition WGIQ- TV. Technical specifications for bidding transmitter
	Amount:	and antenna systems. \$5,000.00

## **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	\$83,550.00	\$83,000.00		\$26,584.42	
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	\$10,000.00	\$10,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	\$35,000.00	\$35,000.00	The freight charges are higher than were anticipated in the planning and estimating stages of the repack.	\$25,761.42	Delete item \$25,077.77
Disposal Costs (for equipment and other waste, net of any salvage value)	\$25,000.00	\$25,000.00	N/A	\$823.00	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
Sub-total	\$83,550.00	\$83,000.00	N/A	\$26,584.42	N/A

Total for all	\$3,121,459.08	\$2,375,605.96	N/A	\$1,918,484.36	N/A
systems					

## Components

Actual Information Description	File Name
MVPD Notification of Channel Change	Information not provided.
Develop and air announcement of upcoming channel change	Information not provided.
Equipment Storage	Information not provided.

Equipment Delivery and Handling Charges	Component Description: Amount:	Transmitter delivery \$12,871.28
	Component Description: Amount:	Primary Antenna delivery \$7,184.56
	Component Description: Amount:	Interim Antenna and Line delivery \$4,123.93
	Component Description:	Transmitter Heat Exchanger Electrical delivery
	Amount:	\$550.76
	Component Description:	This is the total cost of shipping the transmitter, main antenna and interim antenna and line. Shipping for electrical is included in the cost of the electrical component. See WGIQ Supporting Documentation for invoice 202775 attached. \$25,002.77
	Component Description:	Transmitter
	Amount:	Electrical delivery \$1,030.89

Disposal Costs (for equipment and other waste, net of any salvage value)	Component Description:	Transmitter installation disposal WGIQ
	Amount:	\$823.00
	Component Description:	The price of
		Disposal
		associated with the
		transmitter project
		is included Line 3:
		Main/Primary
		Transmitter. See
		WGIQ Supporting
		Documentation for
		invoice 202775
		attached.
	Amount:	N/A
DTV Medical Facility Notification	Information not provided.	

Cost Information	Grand Total			
		Predetermined Cost Estimate	Estimated Cost	Actual Cost
	Total for all systems	\$3,121,459.08	\$2,375,605.96	\$1,918,484.36

Reimbursem	entestiatus	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

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.	
		<ol> <li>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.</li> <li>The above-named</li> </ol>	
		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).
- 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.	Robert Gehman Consulting Engineer 10/04/2018

Certification	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).	
		<ol> <li>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.</li> </ol>	
		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.	<b>Robert</b> <b>Gehman</b> <i>Consulting</i> <i>Engineer</i>
		10/04/2018

## Attachments