

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID:	710	Service: DTV	Call Sign:	WGIQ	Channel: 30 (UHF)
File Number:	00000	27860			
FRN: 00	01750314	Date	11/02		
		Submitted:	/2018		

Applicant Name, Type, and Contact Information

Applicant Information

ALABAMA EDUCATIONAL TELEVISION COMMISSIONWindell L.+1wwood@aptv.Government orgDoing Business As:2112 11TH239-ALABAMA EDUCATIONAL TELEVISION COMMISSIONAVENUE5233SUITE 400 BIRMINGHAM, AL 35205 United StatesSUTE	ion	Applicant	Address	Phone	Email	Applicant Type
		TELEVISION COMMISSION Doing Business As: ALABAMA EDUCATIONAL	Wood 2112 11TH AVENUE SOUTH SUITE 400 BIRMINGHAM, AL 35205	(800) 239-	•	

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 Transmitter	Other Transmitter Cost Not Listed			
	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					
Tower	Section	Question	Response			
	Existing Tower Description	Type of change	Modify Existing			
		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?Yes				
		Description of Use	N/A			
		Ownership	Owned			
		Is this tower consider Complex?	Modify Existing Primary (Main) N/A NA Owned 2000 No 200 No 20 No 20 NO			
			Yes			
			No			
		Others Types of Users	Yes			
		Is tower documented for structural analysis?	No			
		Is tower compliant with Rev G?	No			
	Existing Tower Structure	Do you have a tower registration number?	Yes			
	Registration	ASR Number	1036417			
	Coordinates (NAD83 (North American Datum of	Latitude (NAD83)				
1983))	1983))	Type of changeModify ExistingTower UsePrimary (Main)Description of UseN/AOwnershipOwnedIs this tower consider Complex?NoIs 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-Overall Structure Height726.70 feSupport Structure Height726.70 fe				
		Overall Structure Height	726.70 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

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
	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	157 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. 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	N/A N/A N/A	
		Non-zoning permits	No	
		BLM or NFS Coordination	No	
		FCC Construction Permit Minor Change	No	
		Is an Impact Study needed?NoIs Remediation needed?NoIs Remediation needed?NoNameN/AOther Distributed Transmission System Expenses Not listedN/ANameN/ANameN/AIs Notification of a Medical Facility required as a result of DTV broadcasting?YesLocal ZoningNoNon-zoning permitsNoBLM or NFS CoordinationNoFCC Construction Permit Minor ChangeNoFCC License to Cover ApplicationNoFCC Special Temporary Authority ApplicationNoDoes this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?YesDoes this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?Yes		
			No	
	Other Miscellaneous Expenses	Disposal Costs (for equipment and other	Yes	
		Delivery or Handling Charges not otherwise	Yes	
			N/Ated Transmission System listedN/AM/AN/Aof a Medical Facility required DTV broadcasting?YesDTV broadcasting?NoermitsNoCoordinationNoction Permit Minor Change to Cover ApplicationNoTemporary Authority 	
		Development and Airing of an Announcement regarding an upcoming	Yes	
			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		\$628,499.36	
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
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

Total for all systems	\$3,121,459.08	\$2,375,605.96	N/A	\$1,221,158.13	N/A
Sub-total	\$1,192,498.63	\$1,141,455.06	N/A	\$628,499.36	N/A
			attachment.		
			See		
			by the FCC.		
			recommended		
			MSDC IOT as		
			Comark for an		
			Proposal from		
			based on a		
			transmitter is		
			price of a new		
			purchase		
			superseded. ***The		
			because line has been		
			because line		
			adjusted and locked		
kW)					Filldi
			Estimate		Final
Single IOT system (25	\$578,000.00	\$512,955.70	***System Notice:	\$0.00	Delete item \$569,204.33
		•			
			\$865,551.00.		
			25 kW IOT at		
			comparison is the Comark		
			cost for		
			of Alabama. The baseline		
			by the State		
			administered		
			bids		
			on sealed		
			Cost based		
8.2 - 13 kW			\$3,194.76.		of Alabam
Transmitter			Transformer		by the State
Solid State			and Electrical		administere
Cooled			\$509,760.94		sealed bids
Liquid			Transmitter		obtained vi
			T		- I- 4 - 1

Components

Actual Information	
Description	File Name

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

Single IOT system (25 kW)		
	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
	Component Description:	Final
	Amount:	\$512,955.70

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		\$102,934.99	
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. ***	\$0.00	N/A
Primary Antenna TFU-29JSC /VP- RP310BNT	\$483,654.45	\$484,046.12		\$218,072.97	
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 measuremen and report fo existing antenna and line. This report confirmed the existing line can be used

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	\$170,523.52	N/A
Sweep Line	\$4,977.78	\$4,977.78	Sweep of Existing Line	\$4,977.78	N/A
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. ***	\$0.00	This invoice item includes the side mount brackets, elbow complex, and sweep that are listed in other components that will not be invoiced separately.
Sub-total	\$900,134.45	\$689,916.10	N/A	\$321,007.96	N/A
Total for all systems	\$3,121,459.08	\$2,375,605.96	N/A	\$1,221,158.13	N/A

Components

Actual Information	
Description	File Name

Side mount brackets for high power antennas (if not included in antenna base cost)	Component Description:	Side mount Brackets for Interi
	Amount:	Antenna \$17,033.33
	Component Description:	Side mount brackets for Interir
	Amount:	Antenna \$17,033.33
Elbow complex, single channel, at antenna input, per 3 1/8. feedline (if	Component Description: Amount:	Elbow Complex \$1,279.44
needed)		
Sweep test of existing antenna	Component Description:	Sweep of New Interim Antenna
	Amount:	\$4,977.78
	Component Description:	The price of the sweep is included in Line 2: Interim Antenna System. This closes out thi
	Amount:	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:	Interim antenna fo WGIQ
	Amount:	\$102,934.99
UHF - Lower Power Side Mount, One station - 200-	Component Description:	Final
500 kW, horizontally polarized	Amount:	\$102,934.99

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,	Component Description:	Elbow complex for
per 6 1/8. feedline (if		new primary
needed)		antenna
	Amount:	\$14,941.11
Sweep test of existing		
antenna	Component Description:	Sweep
		measurements a
		report for existing
		antenna and line.
		This report
		confirmed the
		existing line can l
		used.
	Amount:	\$5,075.00
	Component Description:	Added in error
	Amount:	N/A
UHF - High Power, Side		
Mount, basic slot antenna,	Component Description:	Above cost is for
702 kW input, directional,,		Baseline Antenna
elliptically or circularly polarized		with Horizontal
polalizeu		polarization solel
		for reimbursemer
		purposes. See
		attached file
		named WGIQ TS
		Invoice 202775 Email clarificatior
		of Primary Anten
		costs.pdf

Sweep Line	Component Description: Amount:	Sweep for new primary antenna \$4,977.78
UHF - High Power, Side Mount, basic slot antenna, 702 kW input, directional,, horizontally polarized	Component Description:	Main-Primary Antenna System. See WGIQ Supporting Documentation for invoice 202775 attached.
	Amount:	\$244,560.56
	Component Description: Amount:	Final \$239,485.56

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	\$1,221,158.13	N/A

Components

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

Rigid Transmission Line -		
copper, 6 1/8"	Component Description:	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).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower TOWER	\$657,800.00	\$338,406.02	Sustinuation	\$198,537.61	Sustinuation
Major tower reinforcement /modifications	\$421,000.00	\$184,537.61	N/A	\$184,537.61	N/A
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
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	\$198,537.61	N/A
Total for all systems	\$3,121,459.08	\$2,375,605.96	N/A	\$1,221,158.13	N/A

Components

Actual Information Description	File Name	
Major tower reinforcement /modifications	Component Description:	FCC Tower Modifications WGIQ
	Amount:	\$74,920.65
	Component Description:	Actual Additional Tower Modifications
	Amount:	WGIQ \$109,616.96
Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	Component Description:	Mapping, Maintenance & condition assessment and structural analysis
	Amount:	\$6,000.00
	Component Description: Amount:	Geotechnical Investigation \$3,250.00
	Component Description:	Structural Reanalysis
	Amount:	\$750.00
	Component Description:	Structural Design Drawings \$4,000.00
Tall Tower (greater than 500')	Information not provided.	ψτ,000.00

Outside Professional Services

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$91,516.00	\$88,300.00		\$12,000.00	
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.
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

Total for all systems	\$3,121,459.08	\$2,375,605.96	N/A	\$1,221,158.13	N/A
Sub-total	\$91,516.00	\$88,300.00	N/A	\$12,000.00	N/A
Project management of the transition	\$24,806.00	\$23,550.00	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 399
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	\$7,000.00	N/A	\$2,000.00	RF Allocation study for new channel assignment and antenna development
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 399
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A		N/A

Components

Actual Information Description	File Name	
Additional Field Engineering Service, 18 Days	Component Description:	Bid Spec Post Transition WGIQ- TV. Technical specifications for bidding transmitter and antenna systems. \$5,000.00
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:	FCC Form FCC Construction Perm application

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
	Amount:	Reimbursement - WGIQ \$2,500.00
Project management of the transition	Information not provided.	

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
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
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
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	\$1,221,158.13	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.	
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. N/A
DTV Medical Facility Notification	Information not provided.	

Equipment Delivery and		
Handling Charges	Component Description:	Transmitter deliver
	Amount:	\$12,871.28
	Component Description:	Interim Antenna and Line delivery
	Amount:	\$4,123.93
	Component Description:	Primary Antenna
	component Description.	delivery
	Amount:	\$7,184.56
	Component Description:	Transmitter Heat
	• •	Exchanger
	Amount:	Electrical delivery \$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 cos
		of the electrical component. See
		WGIQ Supporting
		Documentation for invoice 202775
		attached.
	Amount:	\$25,002.77
	Component Description:	Transmitter
		Electrical delivery
	Amount:	\$1,030.89

Cost Information	Grand Total			
		Predetermined Cost Estimate	Estimated Cost	Actual Cost
	Total for all systems	\$3,121,459.08	\$2,375,605.96	\$1,221,158.13

Reimbursem	entestatus	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.	
		 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. 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).
- 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 11/02/2018

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).	
		 The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 	
		2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.	
		3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.	

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

	 The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested. 	
an au name	are, under penalty of perjury, that I am thorized representative of the above- d applicant for the Authorization(s) fied above.	Robert Gehman Consulting Engineer
		11/02/2018

Attachments