



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **710** | Service: **DTV** | Call **WGIQ** | Channel: **30 (UHF)**
ID: | Sign:
File **0000027860**
Number:
FRN: **0001750314** | Date **04/25**
Submitted: **/2018**

Applicant Information

Applicant Name, Type, and Contact Information

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

Reimbursement Contact Information

Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

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

**Broadcaster
Information
and
Transition
Plan**

Question	Response
Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	No
Briefly describe transition plan	Replace transmitter, 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
Transmitter**

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	Sigma CD3130P1
	Year	2007
	Type	Inductive Output Tube
	IOT Power Type	Single
	Power Capacity	25 kW

**Primary
Transmitter**

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	TBD
	Transmitter Type	Inductive Output Tube
	IOT Power Type	Single
	Power capacity	25 kW
	Justification for New Transmitter	The manufacturer of the existing IOT transmitter advises that the transmitter cannot be re-tuned 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.

**Primary
Transmitter**

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	150 kVA
	Rigid Conduit and Wiring	Yes
	Size	3 inches
	Length	100.0 feet
	Other Electrical Service	No
	Description	N/A
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

**Primary
Transmitter**

Other Transmitter Cost Not Listed

Name	Description
Additional Interior RF System	Interior RF System Existing Transmitter to Interim Transmission line

Antennas

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

**Primary
Antenna**

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	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 Manufacturer and Type	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	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

**Primary
Antenna**

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	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	TBD
	Year	2018

	Justification for New Antenna	The existing primary antenna is a single channel slotted coaxial which cannot accommodate the assigned channel.
--	-------------------------------	---

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	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
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

**Primary
Antenna**

Other Antenna Cost Not Listed

Information not provided.

**Interim
Antenna**

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	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
	Type	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	TBD
	Year	2018

	Justification for New Antenna	An interim antenna is necessary to keep station on the air during primary antenna replacement and for the duration of the assigned phase. Station will attempt to lease if leasing is available at time of acquisition.
--	-------------------------------	---

**Interim
Antenna**

Other Antenna Costs

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	S
	Feed Line Size	6 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?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

**Interim
Antenna**

Other Antenna Cost Not Listed

Information not provided.

Transmission Line

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

**Primary
Transmission Line**

Existing Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	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	
	Type	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 **New Transmission Line**
Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	19 1/2 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	770 feet per run
	Justification for New Transmission Line	Sweep tests were performed for the assigned channel and the tests resulted in a recommendation to replace the line due to excessive VSWR.

Primary **Other Transmission Line Expenses Not Listed**
Transmission Line

Information not provided.

Interim
Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Type	Rigid
	Diameter	6 1/8 inches
	Segment Length	20'
	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.

Interim
Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

Tower Equipment And Rigging Costs

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

Primary Tower

Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	No
	Others Types of Users	Yes
	Is tower documented for structural analysis?	No
	Is tower compliant with Rev G?	No
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1036417
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	31° 43' 05.0" N-
	Longitude (NAD83)	085° 26' 03.0" W-
	Overall Structure Height	726.70 feet
	Support Structure Height	726.70 feet
	Ground Elevation Above Mean Sea Level (AMSL)	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

Tower Modification Costs

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for undocumented /poorly documented tower
Tower Reinforcements	Please select whether tower reinforcements are needed:	Major Reinforcements needed

Primary Tower

Tower Rigging Costs

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

**Primary
Tower**

Other Tower Expenses Not Listed
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	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 Services	Prepare and file Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	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.

Outside Professional Services Costs **Other Professional Services Expenses Not Listed**
None were provided.

Other Expenses

Section	Question	Response
AM Pattern Disturbance	Is an Impact Study needed?	No
	Is Remediation needed?	No
Facility Expenses	Name	N/A
	Other Distributed Transmission System Expenses Not listed	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
Permit and Filing Costs	Local Zoning	No
	Non-zoning permits	No
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	No
	FCC Special Temporary Authority Application	No
Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
	Does this relocation require Equipment Storage?	Yes
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD Notification of a Channel Change?	Yes

Other Expenses	Other Expenses Not Listed Information not provided.
-----------------------	---

Cost Information

Transmitters

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter TBD	\$786,950.00	\$1,071,051.00		\$1,258,620.37	
Single IOT system (25 kW)	\$578,000.00	\$865,551.00	The purchase price of a new transmitter is based on a Proposal from Comark for an MSDC IOT as recommended by the FCC. See attachment.	\$1,082,200.03	Delete item \$569,204.33. Final
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	\$65,578.49	Delete item \$33,304.69. Final
Additional Interior RF System	<i>\$140,000.00</i>	\$140,000.00	N/A	\$56,248.63	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	\$54,593.22	Delete item \$27,571.99. Final
Sub-total	\$786,950.00	\$1,071,051.00	N/A	\$1,258,620.37	N/A
Total for all systems	\$2,562,656.00	\$2,694,645.99	N/A	\$2,100,256.22	N/A

Components

Actual Information	
Description	File Name
Single IOT system (25 kW)	Component Description: Final
	Amount: \$512,995.70
	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
Switchgear - industrial 800 amp	Component Description: Transmitter Electrical installation WGIQ
	Amount: \$32,273.80
	Component Description: Electrical installation of transmitter WGIQ
	Amount: \$33,304.69
Additional Interior RF System	Component Description: Final
	Amount: \$56,248.63
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.

Transformer 3 phase/480v
- 150 KVA

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

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
Interim Antenna TBD	\$426,440.00	\$328,034.99		\$205,869.98	
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	Delete item \$102,934.99 file name ending ...EQ APT.pdf
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	\$189,500.00	\$180,000.00	N/A	\$102,934.99	N/A
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	N/A	\$0.00	N/A

Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$22,000.00	N/A	\$0.00	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$11,700.00	N/A	\$0.00	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$0.00	N/A
Primary Antenna TBD	\$227,440.00	\$225,100.00		\$489,121.12	
UHF - High Power, Side Mount, basic slot antenna, 702 kW input, directional,, horizontally polarized	\$180,000.00	\$180,000.00	N/A	\$484,046.12	This invoice item includes the side mount brackets, elbow complex, and sweep that are listed in other components that will not be invoiced separately.

Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	N/A	\$0.00	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$22,000.00	N/A	\$0.00	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$11,700.00	N/A	\$0.00	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$5,075.00	Sweep measurements and report for existing antenna and line. This report confirmed the existing line can be used.
Sub-total	\$653,880.00	\$553,134.99	N/A	\$694,991.10	N/A
Total for all systems	\$2,562,656.00	\$2,694,645.99	N/A	\$2,100,256.22	N/A

Components

Actual Information	
Description	File Name
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	Component Description: Interim Antenna System. See WGIQ Supporting Documentation for invoice 202775 attached. Amount: \$102,934.99
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	Component Description: Final Amount: \$102,934.99
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Component Description: The price of the pattern scatter analysis is included in Line 2: Interim Antenna System. This closes out this component. Amount: N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	Component Description: The price of the side mount brackets are included in Line 2: Interim Antenna System. This closes out this component. Amount: N/A

Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Component Description: The price of the elbow complex is included in Line 2: Interim Antenna System. This closes out this component. Amount: N/A
Sweep test of existing antenna	Component Description: The price of the sweep is included in Line 2: Interim Antenna System. This closes out this component. Amount: N/A
UHF - High Power, Side Mount, basic slot antenna, 702 kW input, directional,, horizontally polarized	Component Description: Amount: Final \$239,485.56 Component Description: Main-Primary Antenna System. See WGIQ Supporting Documentation for invoice 202775 attached. Amount: \$244,560.56
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Component Description: The price of the pattern scatter analysis is included in Line 1: Interim Antenna System. This closes out this component. Amount: N/A

Side mount brackets for high power antennas (if not included in antenna base cost)	<table> <tr> <td data-bbox="708 98 1114 488"> Component Description: </td><td data-bbox="1114 98 1428 488"> The price of the side mount brackets are included in Line 1: Main-Primary Antenna System. This closes out this component. </td></tr> <tr> <td data-bbox="708 488 1114 589"> Amount: </td><td data-bbox="1114 488 1428 589"> N/A </td></tr> </table>	Component Description:	The price of the side mount brackets are included in Line 1: Main-Primary Antenna System. This closes out this component.	Amount:	N/A
Component Description:	The price of the side mount brackets are included in Line 1: Main-Primary Antenna System. This closes out this component.				
Amount:	N/A				
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	<table> <tr> <td data-bbox="708 589 1114 943"> Component Description: </td><td data-bbox="1114 589 1428 943"> The price of the elbow complex is included in Line 1: Main-Primary Antenna System. This closes out this component. </td></tr> <tr> <td data-bbox="708 943 1114 1034"> Amount: </td><td data-bbox="1114 943 1428 1034"> N/A </td></tr> </table>	Component Description:	The price of the elbow complex is included in Line 1: Main-Primary Antenna System. This closes out this component.	Amount:	N/A
Component Description:	The price of the elbow complex is included in Line 1: Main-Primary Antenna System. This closes out this component.				
Amount:	N/A				

Sweep test of existing antenna	<table><tr><td data-bbox="707 100 1114 481">Component Description:</td><td data-bbox="1145 100 1428 481">Sweep measurements and report for existing antenna and line. This report confirmed the existing line can be used.</td></tr><tr><td data-bbox="707 481 1114 593">Amount:</td><td data-bbox="1145 481 1428 593">\$5,075.00</td></tr><tr><td data-bbox="707 593 1114 1108">Component Description:</td><td data-bbox="1145 593 1428 1108">The price of the sweep for the new antenna is included in Line 1: Main-Primary Antenna System. This closes out this component. See WGIQ Supporting Documentation for invoice 202775 attached.</td></tr><tr><td data-bbox="707 1108 1114 1191">Amount:</td><td data-bbox="1145 1108 1428 1191">N/A</td></tr></table>	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:	The price of the sweep for the new antenna is included in Line 1: Main-Primary Antenna System. This closes out this component. See WGIQ Supporting Documentation for invoice 202775 attached.	Amount:	N/A
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:	The price of the sweep for the new antenna is included in Line 1: Main-Primary Antenna System. This closes out this component. See WGIQ Supporting Documentation for invoice 202775 attached.								
Amount:	N/A								

Cost
Information

Transmission Line

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	\$143,420.00	\$136,320.00		\$69,057.56	
Rigid Transmission Line - copper, 6 1/8"	\$143,420.00	\$136,320.00	N/A	\$69,057.56	N/A
Primary Transmission Line	\$155,540.00	\$147,840.00		\$0.00	
Rigid Transmission Line - copper, 6 1/8"	\$155,540.00	\$147,840.00	N/A	\$0.00	N/A
Sub-total	\$298,960.00	\$284,160.00	N/A	\$69,057.56	N/A
Total for all systems	\$2,562,656.00	\$2,694,645.99	N/A	\$2,100,256.22	N/A

Components

Actual Information	
Description	File Name

Rigid Transmission Line - copper, 6 1/8"	Component Description: Delete item \$34,528.78 with file name ending ...EQ APT.pdf Amount: \$34,528.78 Component Description: Interim transmission line. See WGIQ Supporting Documentation for invoice 202775 attached. Amount: \$34,528.78
Rigid Transmission Line - copper, 6 1/8"	Component Description: WGIQ determined by a sweep that the existing transmission line can be used on the new channel. There are no costs except for the sweep included in the Antennas Category. This closes out this component. See Supporting Documentation. Amount: N/A

Cost
Information

Tower Equipment and Rigging Costs

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower TOWER	\$657,800.00	\$625,000.00		\$14,000.00	
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$25,000.00	N/A	\$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	\$200,000.00	N/A	N/A	N/A
Major tower reinforcement /modifications	\$421,000.00	\$400,000.00	N/A	N/A	N/A
Sub-total	\$657,800.00	\$625,000.00	N/A	\$14,000.00	N/A
Total for all systems	\$2,562,656.00	\$2,694,645.99	N/A	\$2,100,256.22	N/A

Components

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

Cost
Information

Outside Professional Services

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$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
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 399

Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	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 395
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 request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	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
Sub-total	\$91,516.00	\$88,300.00	N/A	\$12,000.00	N/A

Total for all systems	\$2,562,656.00	\$2,694,645.99	N/A	\$2,100,256.22	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. Amount: \$5,000.00
Attorney Fees - Prepare and File 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 Permit application Amount: \$2,500.00
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.
Project management of the transition	Information not provided.

Prepare and or review reimbursement form	Component Description: Prepare FCC Form 399 for Reimbursement - WGIQ Amount: \$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
Prepare request for Special Temporary Authorization	Information not provided.
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.

Cost Information

Other Expenses

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$73,550.00	\$73,000.00		\$51,587.19	
MVPD Notification of Channel Change	<i>\$2,000.00</i>	\$2,000.00	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
Disposal Costs (for equipment and other waste, net of any salvage value)	<i>\$25,000.00</i>	\$25,000.00	N/A	\$823.00	N/A
Equipment Delivery and Handling Charges	<i>\$25,000.00</i>	\$25,000.00	N/A	\$50,764.19	Delete item \$25,077.77
Equipment Storage	<i>\$10,000.00</i>	\$10,000.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
Sub-total	\$73,550.00	\$73,000.00	N/A	\$51,587.19	N/A
Total for all systems	\$2,562,656.00	\$2,694,645.99	N/A	\$2,100,256.22	N/A

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.
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

Equipment Delivery and Handling Charges	Component Description: Transmitter Heat Exchanger Amount: Electrical delivery \$550.76
	Component Description: Transmitter Amount: Electrical delivery \$1,030.89
	Component Description: Transmitter delivery Amount: \$12,871.28
	Component Description: Interim Antenna and Line delivery Amount: \$4,123.93
	Component Description: Primary Antenna delivery Amount: \$7,184.56
	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. Amount: \$25,002.77
Equipment Storage	Information not provided.
DTV Medical Facility Notification	Information not provided.

Cost Information	Grand Total			
		Predetermined Cost Estimate	Estimated Cost	Actual Cost
	Total for all systems	\$2,562,656.00	\$2,694,645.99	\$2,100,256.22

Reimbursement Status	Question	Response
	The facility has ceased operating on its pre-auction channel.	No
	Construction of final facilities or all necessary modifications are complete.	No
	All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out procedures with the Fund Administrator.	No

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.	
		1. The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.	

4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.	
I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.	Robert Gehman <i>Consulting Engineer</i> 04/25/2018

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 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 AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).	
		1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 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) .
6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission. 9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.	
I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.	Robert Gehman <i>Consulting Engineer</i> 04/25/2018

Attachments