



(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 **10/18**
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?	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 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	No
	Size	N/A
	Length	N/A
	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 to enable installation of new Transmitter

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?	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 Manufacturer and Types	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	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	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
	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 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
Antenna**

Other Antenna Cost Not Listed

Name		Description
Sweep Line		Sweep of existing transmission line

**Interim
Antenna**

New Antenna Costs

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
	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	TUA-P2-9 /18M-1-S
	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.
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**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	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
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	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
	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

Other Transmission Line Expenses Not Listed

Transmission Line

Information not provided.

Interim

New Transmission Line

Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Type	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.

Interim	Other Transmission Line Expenses Not Listed
Transmission Line	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 Services Costs**

Section	Question	Response
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**
 Services 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.
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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 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
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 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.	\$512,955.70	Cost was obtained via sealed bids administered by the State of Alabama

Switchgear - industrial 800 amp	\$38,200.00	\$32,273.80	N/A	\$32,273.80	Delete item \$33,304.69. Final
Single IOT system (25 kW)	\$578,000.00	\$512,955.70	***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 by the FCC. See attachment.	\$0.00	Delete item \$569,204.33. Final
Sub-total	\$1,192,498.63	\$1,141,455.06	N/A	\$628,499.36	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
Additional Interior RF System	<p>Component Description: Transmitter - Interior RF System</p> <p>Amount: \$56,248.63</p>

Transformer 3 phase/480v - 150 KVA	<table> <tr> <td data-bbox="707 174 1015 210">Component Description:</td><td data-bbox="1147 174 1374 327">The freight for this item is in Other Expenses category for WGIQ</td></tr> <tr> <td data-bbox="707 338 815 367">Amount:</td><td data-bbox="1147 338 1281 367">\$27,021.23</td></tr> <tr> <td data-bbox="707 477 1015 512">Component Description:</td><td data-bbox="1147 477 1353 629">Electrical connection of transmitter heat exchanger WGIQ</td></tr> <tr> <td data-bbox="707 638 815 667">Amount:</td><td data-bbox="1147 638 1281 667">\$27,571.99</td></tr> </table>	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
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								
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	<table> <tr> <td data-bbox="707 806 1015 842">Component Description:</td><td data-bbox="1147 806 1374 958">Solid State Liquid Cooled Transmitter and Electrical Transformer</td></tr> <tr> <td data-bbox="707 969 815 999">Amount:</td><td data-bbox="1147 969 1297 999">\$512,955.70</td></tr> </table>	Component Description:	Solid State Liquid Cooled Transmitter and Electrical Transformer	Amount:	\$512,955.70				
Component Description:	Solid State Liquid Cooled Transmitter and Electrical Transformer								
Amount:	\$512,955.70								
Switchgear - industrial 800 amp	<table> <tr> <td data-bbox="707 1137 1015 1173">Component Description:</td><td data-bbox="1147 1137 1353 1249">Transmitter Electrical installation WGIQ</td></tr> <tr> <td data-bbox="707 1261 815 1290">Amount:</td><td data-bbox="1147 1261 1281 1290">\$32,273.80</td></tr> <tr> <td data-bbox="707 1400 1015 1435">Component Description:</td><td data-bbox="1147 1400 1353 1512">Electrical installation of transmitter WGIQ</td></tr> <tr> <td data-bbox="707 1523 815 1552">Amount:</td><td data-bbox="1147 1523 1281 1552">\$33,304.69</td></tr> </table>	Component Description:	Transmitter Electrical installation WGIQ	Amount:	\$32,273.80	Component Description:	Electrical installation of transmitter WGIQ	Amount:	\$33,304.69
Component Description:	Transmitter Electrical installation WGIQ								
Amount:	\$32,273.80								
Component Description:	Electrical installation of transmitter WGIQ								
Amount:	\$33,304.69								

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

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 TUA-P2-9 /18M-1-S	\$416,480.00	\$205,869.98		\$102,934.99	
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
Sweep test of existing antenna	\$6,730.00	\$4,977.78	Sweep of interim antenna system	\$4,977.78	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
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

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	
Sweep Line	\$4,977.78	\$4,977.78	Sweep of Existing Line	\$4,977.78	N/A
Sweep test of existing antenna	\$6,730.00	\$5,075.00	Sweep of new antenna	\$5,075.00	Sweep measurements and report for existing antenna and line. This report confirmed the existing line can be used.
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
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

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
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
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	<div> Component Description: Interim Antenna Amount: \$79,644.44 </div> <div> Component Description: Interim antenna for WGIQ Amount: \$102,934.99 </div>

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

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
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Component Description: Amount:	Elbow complex for new primary antenna \$14,941.11
Side mount brackets for high power antennas (if not included in antenna base cost)	Component Description: Amount:	Side mount brackets for new primary antenna \$22,555.56
UHF - High Power, Side Mount, basic slot antenna, 702 kW input, directional,, elliptically or circularly polarized	Component Description: Amount:	Above cost is for Baseline Antenna with Horizontal polarization solely for reimbursement purposes. See attached file named WGIQ TSG Invoice 202775 Email clarification of Primary Antenna costs.pdf \$170,523.52

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

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	\$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

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	\$338,406.02		\$198,537.61	
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	\$184,537.61	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	\$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
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: Structural Design Drawings Amount: \$4,000.00
	Component Description: Geotechnical Investigation Amount: \$3,250.00
	Component Description: Structural Reanalysis Amount: \$750.00
Major tower reinforcement /modifications	Component Description: FCC Tower Modifications WGIQ Amount: \$74,920.65
	Component Description: Actual Additional Tower Modifications WGIQ Amount: \$109,616.96
Tall Tower (greater than 500')	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	<i>\$36,000.00</i>	\$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
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	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
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 395
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
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	\$1,221,158.13	N/A

Components

Actual Information	
Description	File Name
Additional Field Engineering Service, 18 Days	<p>Component Description: Bid Spec Post Transition WGIQ-TV. Technical specifications for bidding transmitter and antenna systems.</p> <p>Amount: \$5,000.00</p>
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.
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.
Project management of the transition	Information not provided.
Prepare and or review reimbursement form	<p>Component Description: Prepare FCC Form 399 for Reimbursement - WGIQ</p> <p>Amount: \$2,500.00</p>
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.

Perform engineering study for new channel assignment and antenna development	<p>Component Description:</p> <p>Engineering Study for New Channel Assignment and antenna development</p> <p>Amount:</p> <p>\$2,000.00</p>
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	<p>Component Description:</p> <p>FCC Form FCC Construction Permit application</p> <p>Amount:</p> <p>\$2,500.00</p>
Prepare request for Special Temporary Authorization	Information not provided.
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit 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	\$83,550.00	\$83,000.00		\$26,584.42	
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
Equipment Storage	<i>\$10,000.00</i>	\$10,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	<i>\$35,000.00</i>	\$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)	<i>\$25,000.00</i>	\$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 systems	\$3,121,459.08	\$2,375,605.96	N/A	\$1,221,158.13	N/A
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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: 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

Component Description: Transmitter Heat Exchanger
Electrical delivery

Amount: \$550.76

Component Description: Primary Antenna delivery

Amount: \$7,184.56

Component Description: Transmitter
Electrical delivery

Amount: \$1,030.89

Component Description: Interim Antenna and Line delivery

Amount: \$4,123.93

Component Description: Transmitter delivery

Amount: \$12,871.28

<p>Disposal Costs (for equipment and other waste, net of any salvage value)</p>	<table> <tr> <td data-bbox="708 98 1107 600"> <p>Component Description:</p> </td><td data-bbox="1107 98 1426 600"> <p>The price of Disposal associated with the transmitter project is included Line 3: Main/Primary Transmitter. See WGIQ Supporting Documentation for invoice 202775 attached.</p> </td></tr> <tr> <td data-bbox="708 600 1107 734"> <p>Amount:</p> </td><td data-bbox="1107 600 1426 734"> <p>N/A</p> </td></tr> <tr> <td data-bbox="708 734 1107 965"> <p>Component Description:</p> </td><td data-bbox="1107 734 1426 965"> <p>Transmitter installation disposal WGIQ</p> </td></tr> <tr> <td data-bbox="708 965 1107 1075"> <p>Amount:</p> </td><td data-bbox="1107 965 1426 1075"> <p>\$823.00</p> </td></tr> </table>	<p>Component Description:</p>	<p>The price of Disposal associated with the transmitter project is included Line 3: Main/Primary Transmitter. See WGIQ Supporting Documentation for invoice 202775 attached.</p>	<p>Amount:</p>	<p>N/A</p>	<p>Component Description:</p>	<p>Transmitter installation disposal WGIQ</p>	<p>Amount:</p>	<p>\$823.00</p>
<p>Component Description:</p>	<p>The price of Disposal associated with the transmitter project is included Line 3: Main/Primary Transmitter. See WGIQ Supporting Documentation for invoice 202775 attached.</p>								
<p>Amount:</p>	<p>N/A</p>								
<p>Component Description:</p>	<p>Transmitter installation disposal WGIQ</p>								
<p>Amount:</p>	<p>\$823.00</p>								
<p>DTV Medical Facility Notification</p>	<p>Information not provided.</p>								

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

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	<p>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.</p>	
		<ol style="list-style-type: none"> 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.

<p>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.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p>Robert Gehman <i>Consulting Engineer</i></p> <p>10/18/2018</p>

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).	
		<ol style="list-style-type: none"> 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.

<p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>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.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p>Robert Gehman <i>Consulting Engineer</i></p> <p>10/18/2018</p>

Attachments