



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **73136** | Service: **DTV** | Call **WJHG-TV** | Channel: **16 (UHF)**  
ID: | Sign:  
File **000028739**  
Number:  
FRN: **0018223693** | Date **09/15**  
Submitted: **/2018**

## Applicant Information

### Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
<b>GRAY TELEVISION LICENSEE, LLC</b>	WJHG 8195 FRONT BEACH ROAD PANAMA CITY, FL 32407 United States	+1 (850) 234-7777	robert.folliard@gray.tv	Limited Liability Company

## Reimbursement Contact Information

### Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

## Preparer Contact Information

### Preparer Contact Name and Information

Applicant	Address	Phone	Email
<b>Samuel Hariton</b> <i>Widely</i>	Samuel Hariton 4031 University Dr Suite 100 Fairfax, VA 22030 United States	+1 (339) 222-8107	sam.hariton@widelity.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.	Yes
Briefly describe transition plan	See attached narrative

**Transmitters**

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

**Primary Transmitter**

**Existing Transmitter Information**

Section	Question	Response
<b>Existing Transmitter Description</b>	Type of change	Retune Existing
	Use	Primary (Main)
	Ownership	Owned
	Owner	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
<b>Existing Transmitter Manufacturer and Type</b>	Manufacturer	GatesAir
	Model	Maxiva ULXT-80AT UHV
	Year	2014

Type	Solid State
Solid State Cooling	Liquid Cooled
Solid State Power capacity	54.8 kW

**Primary Transmitter Retuning Transmitter Costs**

Section	Question	Response
<b>New IOT Tubes</b>	Number of Tubes (including accessories) needed	N/A
<b>New Mask Filter</b>	Power	Other
	Other Power	50 kW
<b>New Exciter</b>	Is a new exciter needed?	No

**Primary Transmitter Other Transmitter Costs**

Section	Question	Response
<b>Electrical Service</b>	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	No
	Description	N/A
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A

	Other Size	N/A
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
<b>Channel 14 Costs</b>	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

**Primary Transmitter**

**Other Transmitter Cost Not Listed**

Information not provided.

**Interim Transmitter**

**New Transmitter Costs**

Section	Question	Response
<b>New Transmitter</b>	Use	Interim
	Description of Use	N/A
	Change Type	Purchase
	Manufacturer	
	Model	ULXTE-12
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	6.46 kW

Justification for New Transmitter	Interim transmitter installed at the alternate transmitter site needed to continue broadcasting through the transition period
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**Interim Transmitter**      **Other Transmitter Costs**

Section	Question	Response
<b>Electrical Service</b>	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	Yes
	Description	The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.

<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
<b>Channel 14 Costs</b>	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A
<b>Inside RF System</b>	Is an additional interior RF system required to support this interim transmitter?	No

**Interim Transmitter**

**Other Transmitter Cost Not Listed**

<b>Name</b>	<b>Description</b>
<b>Generator Repairs</b>	It needs to be repaired
<b>Concrete Slab</b>	10'x10' Slab
<b>Monitoring</b>	Monitoring for Interim transmitter
<b>Microwave Radios</b>	STL Extension to alternate transmitter site
<b>Microwave Components</b>	Microwave Dishes, Line, etc.

**Antennas**

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

**Primary  
Antenna**

**Existing Antenna Information**

Section	Question	Response
<b>Existing Antenna Description</b>	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
<b>Existing Antenna Manufacturer and Type</b>	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	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) .....	1000.0 kW



Manufacturer	
Model	TFU-28JSC /VP-R 4C140 D18
Year	2014

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**Primary  
Antenna**

**New Antenna Costs**

Section	Question	Response
<b>New Antenna Description</b>	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
<b>New Antenna Manufacturer and Types</b>	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) .....	1000.0 kW
Manufacturer		

Model	TFU-28JSC /VP-R C140
Year	2017
Justification for New Antenna	The existing antenna is for channel 18 only and will not work for the designated re-pack channel 16.

**Primary Antenna**

**Other Antenna Costs**

Section	Question	Response
<b>Combiner for Shared Antenna</b>	Do you need a Combiner for a Shared Antenna?	No
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
<b>Elbow Complex</b>	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
<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes

<b>Pattern Scatter Analysis</b>	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
<b>Sweep Test</b>	Do you require the sweep testing of transmission line and antenna?	Yes

**Primary  
Antenna**

**Other Antenna Cost Not Listed**

<b>Name</b>	<b>Description</b>
<b>Sweep Test Primary Chan 18 Antenna</b>	Sweep test of existing channel 18 antenna to determine if it can be used for new repack channel

**Interim  
Antenna**

**New Antenna Costs**

Section	Question	Response
<b>New Antenna Description</b>	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
<b>New Antenna Manufacturer and Type</b>	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)	72.0 kW
	Manufacturer	
	Model	TVP16B
	Year	2017

	Justification for New Antenna          Interim antenna needed to continue broadcasting through the transition period
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**Interim Antenna**

**Other Antenna Costs**

Section	Question	Response
<b>Elbow Complex</b>	Do you require the separate purchase of the Elbow Complex?	No
	Broadband or Single Channel?	N/A
	Feed Line Size	N/A
<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for an antenna?	Yes
<b>Pattern Scatter Analysis</b>	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
<b>Sweep Test</b>	Do you require the sweep testing of transmission line and antenna?	Yes

**Interim Antenna**

**Other Antenna Cost Not Listed**

Name	Description
<b>Sweep Test Existing Antenna and Line</b>	Sweep test of existing antenna/line at auxiliary site to determine viability on new repack channel

**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
<b>Existing Transmission Line Description</b>	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
<b>Existing Transmission Line Manufacturer and Type</b>	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	1400 feet per run



**Primary Transmission Line**      **New Transmission Line**

Section	Question	Response
<b>New Transmission Line Costs</b>	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	1400 feet per run
	Justification for New Transmission Line	Sweep on existing line measured 490.460 MHz. Channel 16 needs to be within the range of 482 MHz and 488 MHz, line must be replaced.

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

Information not provided.

**Interim  
Transmission  
Line**

**New Transmission Line**

Section	Question	Response
<b>New Transmission Line Costs</b>	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Type	Flexible Air
	Diameter	3 inches
	Segment Length	N/A
	Other Segment Length	
	Number of parallel runs	1
	Length	825 feet per run
	Justification for New Transmission Line	Performed Line Sweep on existing 4" Rigid Line and it measured 490 MHz. The range for Channel 16 is 482 MHz - 488 MHz.

**Interim  
Transmission  
Line**

**Other Transmission Line Expenses Not Listed**

Name	Description
<b>Sweep Existing Transmission Line</b>	Sweep test of existing transmission line to determine if it is suitable for use

**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	Leased
	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)	Yes
	Others Types of Users	Yes
	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	Yes
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1043251
Coordinates (NAD83 ( North American Datum of 1983))	Latitude (NAD83)	30° 21' 09.0" N-
	Longitude (NAD83)	085° 23' 28.0" W-
	Overall Structure Height	1465.53 feet
	Support Structure Height	1403.20 feet
	Ground Elevation Above Mean Sea Level (AMSL)	78.74 feet

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Nexstar Broadcasting, Inc.
Date Constructed	08/01/1990

**FM, AM or TV radio broadcasters. Facility ID's, Call Signs and Services of other broadcast stations with whom the tower is shared**

Facility ID	Call Sign	Service
42372	WPFM	FM
66398	WMBB	DTV

**Other Types of Users**

Users
Verizon

**Primary Tower**

**Tower Modification Costs**

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

**Primary Tower**

**Tower Rigging Costs**

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

**Primary Tower**

**Other Tower Expenses Not Listed**

<b>Name</b>	<b>Description</b>
<b>Microwave Installation</b>	Installation of Microwave Gear on towers

**Auxiliary Tower**

**Add Tower**

Section	Question	Response
<b>Existing Tower Description</b>	Type of change	Modify Existing
	Tower Use	Auxiliary (Backup)
	Description of Use	Alternate Tower Site
	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
<b>Existing Tower Structure Registration</b>	Do you have a tower registration number?	No
	ASR Number	
<b>Coordinates (NAD83 ( North American Datum of 1983))</b>	Latitude (NAD83)	30° 26' 00.1" N-
	Longitude (NAD83)	085° 24' 51.0" W-
	Overall Structure Height	1499.98 feet
	Support Structure Height	1499.98 feet
	Ground Elevation Above Mean Sea Level (AMSL)	138.12 feet
	Structure Type	TOWER - Free Standing or Guyed Structure

Tower Owner	Gray Television Group, Inc.
Date Constructed	01/01/1962

### Other Types of Users

#### Users

US Customs

### Auxiliary Tower

#### Tower Modification Costs

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

### Auxiliary Tower

#### Tower Rigging Costs

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

### Auxiliary Tower

#### Other Tower Expenses Not Listed

Information not provided.

**Outside Professional Services Costs**

Section	Question	Response
<b>Outside Project Management Services</b>	Do you require outside project management services?	Yes
	Number of Hours	900
	Explanation	Strategic Support
<b>Outside RF consulting Engineering Services</b>	Perform engineering study for new channel assignment and antenna development	Yes
	Prepare engineering section of Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
<b>Attorney and Other Outside Consulting Services</b>	Prepare and file Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes



	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	No
	FAA Consultation (including preparation of FAA Form 7460)	Yes
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
<b>RF Field Engineering Services</b>	Comprehensive coverage verification via field study	No
	RF exposure measurements	No
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

**Outside Professional Services Costs**

**Other Professional Services Expenses Not Listed**

Name	Description
<b>RF Engineer-Microwave Link</b>	Develop technical parameters for new 13 GHz duplex microwave system and commercial frequency coordination

**Other Expenses**

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

**Other  
Expenses**

**Other Expenses Not Listed**

<b>Name</b>	<b>Description</b>
<b>Antenna Storage Cost</b>	Antenna storage cost at Dielectric prior to shipment to station
<b>Emergency Road Repair</b>	Immediate repairs to access road to reach out to final facility to complete repack work

**Cost Information**

**Transmitters**

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Interim Transmitter ULXTE-12</b>	<b>\$420,333.26</b>	<b>\$449,198.36</b>		<b>\$399,610.95</b>	
Microwave Components	<i>\$21,636.96</i>	\$21,636.96	N/A	N/A	N/A
Microwave Radios	<i>\$114,301.10</i>	\$114,301.10	N/A	\$96,767.79	N/A
Monitoring	<i>\$5,975.00</i>	\$5,975.00	N/A	N/A	N/A
Concrete Slab	<i>\$1,712.00</i>	\$1,712.00	N/A	\$1,600.00	N/A
Generator Repairs	<i>\$1,208.20</i>	\$1,208.20	N/A	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 4.9 . 6.5 kW	\$273,500.00	\$302,365.10	Quote: GA-00022137	\$299,453.16	N/A
Other Electrical Service: The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.	<i>\$2,000.00</i>	\$2,000.00	N/A	\$1,790.00	N/A

<b>Primary Transmitter Maxiva ULXT-80AT UHV</b>	<b>\$189,071.09</b>	<b>\$115,053.34</b>		<b>\$78,496.22</b>	
UHF and VHF - minor banding issues	\$105,200.00	\$31,182.25	GA-00021465	\$21,930.51	N/A
Other 50 kW mask filter	<i>\$83,871.09</i>	\$83,871.09	Includes shipping and state and local taxes	\$56,565.71	N/A
<b>Sub-total</b>	<b>\$609,404.35</b>	<b>\$564,251.70</b>	<b>N/A</b>	<b>\$478,107.17</b>	<b>N/A</b>
<b>Total for all systems</b>	<b>\$2,946,379.27</b>	<b>\$2,520,539.34</b>	<b>N/A</b>	<b>\$937,728.12</b>	<b>N/A</b>

## Components

Actual Information	
Description	File Name
Microwave Components	Information not provided.
Microwave Radios	<p><b>Component Description:</b> 13GHz IPLink HS STL, TSL IPLi GHz high RF output hot standby duplex IP microwave terminal w/ data throughout licensable to 360 Mbps full duplex.</p> <p><b>Amount:</b> \$96,767.79</p>
Monitoring	Information not provided.
Concrete Slab	<p><b>Component Description:</b> Construct 10X10 equipment pad.</p> <p><b>Amount:</b> \$1,600.00</p>
Generator Repairs	Information not provided.

<p>UHF - Liquid Cooled Solid State Transmitter 4.9 . 6.5 kW</p>	<p><b>Component Description:</b> Installation of roof structure over equipment tower site.</p> <p><b>Amount:</b> \$1,795.00</p>
	<p><b>Component Description:</b> ULXTE-12 Transmitter</p> <p><b>Amount:</b> \$208,360.71</p>
	<p><b>Component Description:</b> UXLTE-12 Transmitter</p> <p><b>Amount:</b> \$89,297.45</p>
<p>Other Electrical Service: The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.</p>	<p><b>Component Description:</b> Transmitter - demo circuite no longer in use/ Wiring for transmitter</p> <p><b>Amount:</b> \$1,790.00</p>
<p>UHF and VHF - minor banding issues</p>	<p><b>Component Description:</b> Transmitter UXLTD-80 Retuning</p> <p><b>Amount:</b> \$21,930.51</p>
<p>Other 50 kW mask filter</p>	<p><b>Component Description:</b> New Mask Filter for Existing Primary Transmitter</p> <p><b>Amount:</b> \$56,565.71</p>

**Cost Information**

**Antennas**

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Interim Antenna TVP16B</b>	<b>\$124,130.00</b>	<b>\$89,980.85</b>		<b>\$20,059.60</b>	
UHF - Lower Power Side Mount, One station antenna - medium power (50-200 kW), horizontally polarized	\$89,400.00	\$75,099.65	N/A	\$12,117.44	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$3,520.00	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$3,631.20	N/A	\$1,997.16	N/A
Sweep Test Existing Antenna and Line	<i>\$4,850.00</i>	\$4,850.00	See attached quote	\$2,425.00	N/A
<b>Primary Antenna TFU-28JSC /VP-R C140</b>	<b>\$298,484.92</b>	<b>\$262,704.92</b>		<b>\$148,991.58</b>	

Sweep Test Primary Chan 18 Antenna	<i>\$8,200.00</i>	\$8,200.00	See attached invoice.	\$4,100.00	N/A
UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, directional,, elliptically or circularly polarized	<i>\$248,104.92</i>	\$248,104.92	N/A	\$141,051.58	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$3,840.00	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$0.00	Included in antenna cost	N/A	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$0.00	Included in antenna cost	\$0.00	N/A
<b>Sub-total</b>	\$422,614.92	\$352,685.77	N/A	\$169,051.18	N/A
<b>Total for all systems</b>	\$2,946,379.27	\$2,520,539.34	N/A	\$937,728.12	N/A

## Components



Actual Information	
Description	File Name
UHF - Lower Power Side Mount, One station antenna - medium power (50-200 kW), horizontally polarized	<b>Component Description:</b> Interim Antenna <b>Amount:</b> \$6,609.51
	<b>Component Description:</b> 25% payment on Interim Antenna <b>Amount:</b> \$5,507.93
Sweep test of existing antenna	<b>Component Description:</b> Sweep Test Auxiliary Antenna <b>Amount:</b> \$1,600.00
	<b>Component Description:</b> Sweep test Aux. Antenna <b>Amount:</b> \$1,920.00
Side mount brackets for high power antennas (if not included in antenna base cost)	<b>Component Description:</b> Site mount bracket <b>Amount:</b> \$1,089.36
	<b>Component Description:</b> Side Mount Brackets for Lower Power Antenna <b>Amount:</b> \$907.80
Sweep Test Existing Antenna and Line	<b>Component Description:</b> Sweep Test of Existing Auxiliary Transmission Line <b>Amount:</b> \$2,425.00

Sweep Test Primary Chan 18 Antenna	<b>Component Description:</b>	Sweep test of existing primary antenna system
	<b>Amount:</b>	\$4,100.00
UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, directional,, elliptically or circularly polarized	<b>Component Description:</b>	Elbow Complex, New Primary Antenna
	<b>Amount:</b>	\$3,192.00
	<b>Component Description:</b>	Primary Antenna Elbow Complex
	<b>Amount:</b>	\$4,468.80
	<b>Component Description:</b>	Primary Antenna Side-Mount Brackets
	<b>Amount:</b>	\$6,132.00
	<b>Component Description:</b>	New Primary Antenna, Side Mount Brackets
	<b>Amount:</b>	\$4,380.00
	<b>Component Description:</b>	Primary Antenna - UHF - High Power Side mount
	<b>Amount:</b>	\$71,679.29
	<b>Component Description:</b>	UHF High Power side mount
	<b>Amount:</b>	\$51,199.49

<p>Sweep test of existing antenna</p>	<p><b>Component Description:</b> Sweep Test of New Primary Antenna</p> <p><b>Amount:</b> \$2,240.00</p> <p><b>Component Description:</b> New Primary Antenna, Sweep Test</p> <p><b>Amount:</b> \$1,600.00</p>
<p>Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)</p>	<p>Information not provided.</p>
<p>Side mount brackets for high power antennas (if not included in antenna base cost)</p>	<p>Information not provided.</p>

**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
<b>Interim Transmission Line</b>	<b>\$61,725.00</b>	<b>\$47,902.66</b>		<b>\$19,168.96</b>	
Flexible Air Transmission Line - dielectric, 3"	\$48,675.00	\$34,852.66	See vendor quote JEHQ1257-01	\$19,168.96	N/A
Sweep Existing Transmission Line	<i>\$13,050.00</i>	\$13,050.00	See vendor invoice	N/A	N/A
<b>Primary Transmission Line</b>	<b>\$282,800.00</b>	<b>\$263,955.76</b>		<b>\$121,887.86</b>	
Rigid Transmission Line - copper, 6 1/8"	\$282,800.00	\$263,955.76	N/A	\$121,887.86	N/A
<b>Sub-total</b>	<b>\$344,525.00</b>	<b>\$311,858.42</b>	N/A	<b>\$141,056.82</b>	N/A
<b>Total for all systems</b>	<b>\$2,946,379.27</b>	<b>\$2,520,539.34</b>	N/A	<b>\$937,728.12</b>	N/A

**Components**

Actual Information	
Description	File Name

Flexible Air Transmission Line - dielectric, 3"	<p><b>Component Description:</b> New Auxiliary Transmission Line</p> <p><b>Amount:</b> \$8,713.16</p>
<p><b>Component Description:</b> Aux. Transmission Line</p> <p><b>Amount:</b> \$10,455.80</p>	
Sweep Existing Transmission Line	Information not provided.
Rigid Transmission Line - copper, 6 1/8"	<p><b>Component Description:</b> New Primary Transmission Line</p> <p><b>Amount:</b> \$50,786.61</p>
<p><b>Component Description:</b> Primary Transmission Line</p> <p><b>Amount:</b> \$71,101.25</p>	

**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
<b>Primary Tower TOWER</b>	<b>\$670,300.00</b>	<b>\$579,880.00</b>		<b>\$42,325.00</b>	
Major tower reinforcement /modifications	\$421,000.00	\$400,000.00	N/A	\$0.00	N/A
Tall Tower (greater than 500')	\$210,500.00	\$146,180.00	N/A	\$34,825.00	N/A
Structural engineering tower load study for well documented tower	\$12,600.00	\$7,500.00	N/A	\$7,500.00	N/A
Microwave Installation	<i>\$26,200.00</i>	\$26,200.00	N/A	N/A	N/A
<b>Auxiliary Tower TOWER</b>	<b>\$644,100.00</b>	<b>\$474,800.00</b>		<b>\$54,956.25</b>	
Tall Tower (greater than 500')	\$210,500.00	\$59,800.00	N/A	\$41,706.25	N/A
Major tower reinforcement /modifications	\$421,000.00	\$400,000.00	N/A	\$0.00	N/A
Structural engineering tower load study for well documented tower	\$12,600.00	\$15,000.00	2017-Gray-WJHG-AUX-0406-N plus invoice for \$1,750 for feasibility analysis	\$13,250.00	N/A

<b>Sub-total</b>	\$1,314,400.00	\$1,054,680.00	N/A	\$97,281.25	N/A
<b>Total for all systems</b>	\$2,946,379.27	\$2,520,539.34	N/A	\$937,728.12	N/A

## Components

<b>Actual Information Description</b>	<b>File Name</b>
Major tower reinforcement /modifications	Information not provided.
Tall Tower (greater than 500')	<p><b>Component Description:</b> Rig tower to 1361' for side mount antenna work</p> <p><b>Amount:</b> \$34,825.00</p>
Structural engineering tower load study for well documented tower	<p><b>Component Description:</b> Tower Mapping</p> <p><b>Amount:</b> \$3,750.00</p> <p><b>Component Description:</b> Structural engineering Tower Load study</p> <p><b>Amount:</b> \$3,750.00</p>
Microwave Installation	Information not provided.
Tall Tower (greater than 500')	<p><b>Component Description:</b> Tower rigging for interim antenna site</p> <p><b>Amount:</b> \$41,706.25</p>

<p>Major tower reinforcement /modifications</p>	<p><b>Component Description:</b> Supply of new Dialight high intensity LED lighting system to replace existing red lights on tower</p> <p><b>Amount:</b> \$118,750.00</p>
<p>Structural engineering tower load study for well documented tower</p>	<p><b>Component Description:</b> Structural Analysis of Auxiliary Tower</p> <p><b>Amount:</b> \$6,625.00</p> <p><b>Component Description:</b> Structural engineering Tower Load study</p> <p><b>Amount:</b> \$1,750.00</p> <p><b>Component Description:</b> Structural engineering Tower Load study</p> <p><b>Amount:</b> \$1,750.00</p> <p><b>Component Description:</b> Tower Mapping</p> <p><b>Amount:</b> \$6,625.00</p>



**Cost Information**

**Outside Professional Services**

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Outside Professional Services</b>	<b>\$177,515.00</b>	<b>\$168,250.00</b>		<b>\$52,231.70</b>	
RF Engineer-Microwave Link	<i>\$2,500.00</i>	\$2,500.00	Estimate based upon anticipated billing by RF Engineer and commercial frequency coordination and PCN	\$2,170.00	N/A
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	\$2,105.00	\$2,000.00	N/A	\$612.50	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	N/A	N/A

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$1,350.00	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$1,675.00	N/A
Project management of the transition	\$142,200.00	\$135,000.00	N/A	\$46,424.20	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A

Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	N/A
<b>Sub-total</b>	\$177,515.00	\$168,250.00	N/A	\$52,231.70	N/A
<b>Total for all systems</b>	\$2,946,379.27	\$2,520,539.34	N/A	\$937,728.12	N/A

### Components

Actual Information	
Description	File Name
RF Engineer-Microwave Link	<p><b>Component Description:</b> Develop technical parameters for new 13 GHz duplex microwave link between Highway 20 and Scotts Ferry Rd towers, engage frequency coordinator to identify frequency pair and issue PCN letters</p> <p><b>Amount:</b> \$1,545.00</p> <p><b>Component Description:</b> Upon conclusion of PCN period for new 13 GHz duplex microwave link between Hwy 20 and Scotts Ferry Rd towers, complete technical portions of FCC app.</p> <p><b>Amount:</b> \$625.00</p>

<p>FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase</p>	<p><b>Component Description:</b> Prepare and submit FAA Form 7460-1</p> <p><b>Amount:</b> \$425.00</p> <p><b>Component Description:</b> Processing form 7460-1 to request lighting change and notify reduction in overall height.</p> <p><b>Amount:</b> \$187.50</p>
<p>Attorney Fees - Prepare and File request for Special Temporary Authorization</p>	<p>Information not provided.</p>
<p>Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application</p>	<p>Information not provided.</p>
<p>Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application</p>	<p>Information not provided.</p>
<p>Prepare request for Special Temporary Authorization</p>	<p>Information not provided.</p>
<p>Prepare engineering section of FCC Form 2100 (main), License to Cover Application</p>	<p>Information not provided.</p>
<p>Prepare engineering section of FCC Form 2100 (main), Construction Permit Application</p>	<p><b>Component Description:</b> Develop final ERP and parameters for initial CP application</p> <p><b>Amount:</b> \$1,350.00</p>

Perform engineering study for new channel assignment and antenna development	<b>Component Description:</b>	Perform engineering study for new channel assignment
	<b>Amount:</b>	\$687.50
	<b>Component Description:</b>	Perform engineering study for new channel assignment
	<b>Amount:</b>	\$800.00
	<b>Component Description:</b>	Review scope of work regarding modification work of Hwy 20 tower, discuss with J McKee.
	<b>Amount:</b>	\$187.50
Project management of the transition	<b>Component Description:</b>	Project Management
	<b>Amount:</b>	\$3,150.75
	<b>Component Description:</b>	Project Management
	<b>Amount:</b>	\$3,925.85
	<b>Component Description:</b>	Project Management
	<b>Amount:</b>	\$5,007.90
	<b>Component Description:</b>	Project Management
	<b>Amount:</b>	\$2,632.50

**Component Description:** Project  
Management  
**Amount:** \$2,556.05

**Component Description:** Project  
Management  
**Amount:** \$1,856.30

**Component Description:** Project  
management  
**Amount:** \$1,853.55

**Component Description:** Project  
Management  
**Amount:** \$28.20

**Component Description:** Project  
management  
**Amount:** \$2,442.65

**Component Description:** Project  
Management  
**Amount:** \$3,637.75

**Component Description:** Project  
Management  
**Amount:** \$4,079.35

**Component Description:** Project  
Management  
**Amount:** \$3,425.10

**Component Description:** Project  
Management  
**Amount:** \$868.30

	<p><b>Component Description:</b> Transition Related Project Management Costs</p> <p><b>Amount:</b> \$2,850.00</p>
	<p><b>Component Description:</b> Project Management</p> <p><b>Amount:</b> \$802.25</p>
	<p><b>Component Description:</b> Project management</p> <p><b>Amount:</b> \$2,471.90</p>
	<p><b>Component Description:</b> Project Management</p> <p><b>Amount:</b> \$988.95</p>
	<p><b>Component Description:</b> Project management</p> <p><b>Amount:</b> \$3,846.85</p>
Prepare and or review reimbursement form	Information not provided.
Address transition timing and coordination issues w/ other stations and wireless	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
<b>Other Expenses</b>	<b>\$77,920.00</b>	<b>\$68,813.45</b>		<b>\$0.00</b>	
Emergency Road Repair	<i>\$5,070.00</i>	\$5,070.00	Emergency road repair to reach out to final facility and complete repack work at the site location	N/A	N/A
Antenna Storage Cost	<i>\$19,540.00</i>	\$19,540.00	See WJHG storage quote from Dielectric	N/A	N/A
MVPD Notification of Channel Change	<i>\$1,070.00</i>	\$1,070.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	<i>\$10,000.00</i>	\$10,000.00	N/A	N/A	N/A
Equipment Storage	<i>\$6,650.00</i>	\$6,650.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	<i>\$2,400.00</i>	\$2,400.00	Main and alternate sites	N/A	N/A



FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 minor change CP application	\$1,110.00	\$1,070.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$2,498.45	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	<i>\$20,000.00</i>	\$20,000.00	For main and alternate sites	N/A	N/A
<b>Sub-total</b>	\$77,920.00	\$68,813.45	N/A	\$0.00	N/A
<b>Total for all systems</b>	\$2,946,379.27	\$2,520,539.34	N/A	\$937,728.12	N/A

## Components

Information not provided.

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

	<b>Predetermined Cost Estimate</b>	<b>Estimated Cost</b>	<b>Actual Cost</b>
<b>Total for all systems</b>	\$2,946,379.27	\$2,520,539.34	\$937,728.12

**Reimbursement Status**

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

Certification	Section	Question	Response
	<p><b>Submission of Estimated Expenses Statements</b></p>	<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"> <li>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.</li> <li>2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> <li>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.</li> </ol>	

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  
Folliard**  
*Assistant  
Secretary*

09/15/2018

Certification	Section	Question	Response
	<p><b>Submission of Actual Cost Documentation Statements</b></p>	<p>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).</p>	
		<ol style="list-style-type: none"> <li>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.</li> <li>2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.</li> <li>3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> </ol>	

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  
Folliard**  
*Assistant  
Secretary*

09/15/2018

## Attachments