



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **4688** | Service: **DTV** | Call **WHSV-TV** | Channel: **20 (UHF)** |  
ID: | Sign:  
File **0000036132**  
Number:  
FRN: **0018223693** | Date **10/25**  
Submitted: **/2019**

## Applicant Information

### Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
<b>GRAY TELEVISION LICENSEE, LLC</b>	WHSV-TV 50 NORTH MAIN STREET HARRISONBURG, VA 22802 United States	+1 (540) 433-9191	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, Inc.</i>	Samuel Hariton 4031 University Dr Suite 100 Fairfax, VA 22030 United States	+1 (339) 222-8107	sam.hariton@widely.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	See attached narrative.

**Transmitters**

Section	Question	Response
Transmitter Related Expenses	Do you have transmitter related expenses?	Yes

**Primary  
Transmitter**

**Existing Transmitter Information**

Section	Question	Response
<b>Existing Transmitter Description</b>	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
<b>Existing Transmitter Manufacturer and Type</b>	Manufacturer	
	Model	Ultimate /Optimum Dual Drive 5K
	Year	2002
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	5 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	MPTV-Parallax U8
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	13 kW
	Justification for New Transmitter	Existing transmitter cannot be retuned, therefore need a new transmitter.

**Primary  
Transmitter**

**Other Transmitter Costs**

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A

	Other Electrical Service	Yes
	Description	Bringing electrical service to the new site for the new transmitter because existing service at new site is insufficient.
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	Yes
	Type	Heating and Cooling
	Size	20 tons
	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.

**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?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	Yes
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)	65.0 kW

Manufacturer	
Model	ALP1212- HSOC-49
Year	2002

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?	Yes
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	Broadband Panel
	Number of Stations Supported	1
	Number of Panels/Bays	12
	Lower Limit	470.00 MHz
	Upper Limit	608.00 MHz
	Design power capacity in use	100.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power) .....	271.0 kW
	Manufacturer	

Model	ETU6U4-ESP2C-20
Year	2018
Justification for New Antenna	Existing antenna cannot be retuned and will be used on the existing channel during transition. Antenna provides directional pattern to protect quiet zone Green Bank, WV.

## 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?	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 a high power antenna?	No
<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**

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
<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	Flexible Air
	Diameter	1 5/8 inches
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	485 feet per run

**Primary** **New Transmission Line**  
**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?	Yes
	Type	Flexible Air
	Diameter	3 inches
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	95 feet per run
	Justification for New Transmission Line	Relocating to a new site, require new line because the existing line will be used with existing antenna during the transition.

**Primary** **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	Construct New
	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?	No
	One or more FM, AM or TV radio broadcaster(s)	N/A
	Others Types of Users	N/A
	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	No
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1017951
Coordinates (NAD83 ( North American Datum of 1983))	Latitude (NAD83)	38° 36' 05.0" N-
	Longitude (NAD83)	078° 37' 56.0" W-
	Overall Structure Height	336.94 feet
	Support Structure Height	299.87 feet
	Ground Elevation Above Mean Sea Level (AMSL)	2956.00 feet

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Gray Television Group, Inc.
Date Constructed	12/01/1973

**Primary  
Tower**

**Tower Construction Costs**

Section	Question	Response
<b>Construct New Tower</b>	Use	Primary (Main)
	Description of Use	N/A
	Is this a request for upgraded equipment?	No
	Height	100.00 feet
	Justification for New Tower	Must change transmitter site to new location per Green Bank (NRAO), new site requires new tower.

**Primary  
Tower**

**Tower Rigging Costs**

Section	Question	Response
<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**

Information not provided.

**Outside  
Professional**

Section	Question	Response
<b>Services Costs 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	No
	Quantity	N/A
	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	No
	Quantity	N/A
	NEPA Section 106 environmental review	Yes
	Environmental Assessment	Yes
	ASR Modification	Yes
	FAA Consultation (including preparation of FAA Form 7460)	Yes
	Negotiation of Lease and other Matter for Shared Locations	Yes
	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	Yes
	Number of Days	10
	Justification	Adjacent to NRAO site, need to address quiet zone issues.

**Outside Professional Services Costs**      **Other Professional Services Expenses Not Listed**

Services not provided.

## Other Expenses

Section	Question	Response
<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	Yes
	Non-zoning permits	Yes
	BLM or NFS Coordination	Yes
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	Yes
	FCC Special Temporary Authority Application	No
<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?	No
	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**

Name	Description
Microwave Equipment	Microwave equipment required to delivery station's signal to new transmitter site.

## 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>Primary Transmitter MPTV-Parallax U8</b>	<b>\$702,471.97</b>	<b>\$627,537.07</b>		<b>\$590,506.57</b>	
20 Ton system	\$115,500.00	\$33,775.00	Riddleberger Brothers Invoice #113133	\$33,775.00	N/A
Other Electrical Service: Bringing electrical service to the new site for the new transmitter because existing service at new site is insufficient.	<b>\$54,271.97</b>	\$54,271.97	See electrical company estimate; GenServ LLC Quote #1326 also TTM invoice 70501 for network cabling	\$54,271.97	per invoices received
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	\$494,500.00	\$503,190.10	See manufacturer's quote.	\$502,459.60	N/A
<b>Sub-total</b>	<b>\$702,471.97</b>	<b>\$627,537.07</b>	N/A	<b>\$590,506.57</b>	N/A
<b>Total for all systems</b>	<b>\$1,905,081.71</b>	<b>\$1,496,791.37</b>	N/A	<b>\$1,218,703.60</b>	N/A

## Components

Actual Information	
Description	File Name
20 Ton system	<b>Component Description:</b> Replace Two (2) 3-ton Units with Two (2) 5-ton Bard Units <b>Amount:</b> \$33,775.00
Other Electrical Service: Bringing electrical service to the new site for the new transmitter because existing service at new site is insufficient.	<b>Component Description:</b> One Kohler Generator M #125REOZJG <b>Amount:</b> \$54,216.86
	<b>Component Description:</b> CAT 5 OUTDOOR, 5NF4 <b>Amount:</b> \$55.11
Switchgear - industrial 800 amp	Information not provided.

UHF - Liquid Cooled Solid  
State Transmitter 8.2 - 13  
kW

<b>Component Description:</b>	Primary Transmitter System, WHSV PRLX U8 D20
<b>Amount:</b>	\$178,757.60

<b>Component Description:</b>	Invalid invoice
<b>Amount:</b>	N/A

<b>Component Description:</b>	Hardware
<b>Amount:</b>	\$730.50

<b>Component Description:</b>	Transmitter
<b>Amount:</b>	\$298,165.20

<b>Component Description:</b>	System, WHSV PRLX U8 D20
<b>Amount:</b>	\$25,536.80

**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>Primary Antenna ETU6U4- ESP2C-20</b>	<b>\$423,230.00</b>	<b>\$74,642.13</b>		<b>\$62,972.70</b>	
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$6,400.00	N/A
UHF - Lower Power Side Mount, One station antenna -- 200-500 kW, elliptically or circularly polarized	\$227,000.00	\$42,978.69	Per DTVPros Quote JEHQ1431- 01 - the previously reimbursed amount of \$25,263.44 has been removed from the previously approved amount of \$68,242.13	\$31,309.26	N/A
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	\$189,500.00	\$25,263.44	***System Notice: Estimate adjusted and locked because line has been superseded. ***Per Quote JEHQ1431- 01	\$25,263.44	Please deny 174a
<b>Sub-total</b>	<b>\$423,230.00</b>	<b>\$74,642.13</b>	N/A	<b>\$62,972.70</b>	N/A

<b>Total for all systems</b>	\$1,905,081.71	\$1,496,791.37	N/A	\$1,218,703.60	N/A
------------------------------	----------------	----------------	-----	----------------	-----

**Components**

Actual Information	
Description	File Name
Sweep test of existing antenna	<b>Component Description:</b> Sweep Test New Primary Antenna
	<b>Amount:</b> \$1,920.00
	<b>Component Description:</b> WHSV-210- Primary Antenna - Sweep Test
	<b>Amount:</b> \$1,280.00
	<b>Component Description:</b> Sweep Test New Primary Antenna
	<b>Amount:</b> \$1,600.00
	<b>Component Description:</b> Sweep Test New Primary Antenna
	<b>Amount:</b> \$1,600.00

UHF - Lower Power Side Mount, One station antenna -- 200-500 kW, elliptically or circularly polarized	<div> <b>Component Description:</b> Proposal B18-1373         </div> <div> <b>Amount:</b> \$3,545.00         </div>
	<div> <b>Component Description:</b> New Primary Antenna         </div> <div> <b>Amount:</b> \$15,158.07         </div>
	<div> <b>Component Description:</b> UHF-High power broadband side mount, Field engineer, etc.         </div> <div> <b>Amount:</b> \$12,606.19         </div>
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	<div> <b>Component Description:</b> UHF- High Power Broadband Side Mount         </div> <div> <b>Amount:</b> \$12,631.72         </div>
	<div> <b>Component Description:</b> Primary antenna; UHF-High Power broadband side mount (200-1000KW)         </div> <div> <b>Amount:</b> \$12,631.72         </div>
	<div> <b>Component Description:</b> Please deny this invoice         </div> <div> <b>Amount:</b> N/A         </div>

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
Primary Transmission Line	\$5,605.00	\$9,837.43		\$9,837.43	
Flexible Air Transmission Line - dielectric, 3"	\$5,605.00	\$9,837.43	See dealer's quote.	\$9,837.43	z
Sub-total	\$5,605.00	\$9,837.43	N/A	\$9,837.43	N/A
Total for all systems	\$1,905,081.71	\$1,496,791.37	N/A	\$1,218,703.60	N/A

Components

Actual Information	
Description	File Name

Flexible Air Transmission  
Line - dielectric, 3"

**Component Description:** New Primary  
Transmission Line  
**Amount:** \$1,697.57

**Component Description:** WHSV-310-  
Primary  
Transmission Line  
- 3" Flexible Air  
Dielectric  
**Amount:** \$2,810.56

**Component Description:** New Primary  
Transmission Line  
**Amount:** \$1,414.65

**Component Description:** Provide One  
ASCO 300  
Transfer Switch  
**Amount:** \$2,500.00

**Component Description:** New Primary  
Transmission Line  
**Amount:** \$1,414.65

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	\$0.00	\$0.00		\$0.00	
Primary Tower	\$348,559.74	\$344,359.74		\$277,079.73	
New tower	\$264,359.74	\$264,359.74	see Estimated Cost Justification WHSV-480-Construct New Tower v1	\$264,359.73	N/A
Short Tower (less than 500')	\$84,200.00	\$80,000.00	N/A	\$12,720.00	N/A
Sub-total	\$348,559.74	\$344,359.74	N/A	\$277,079.73	N/A
Total for all systems	\$1,905,081.71	\$1,496,791.37	N/A	\$1,218,703.60	N/A

Components

Actual Information	
Description	File Name
New tower	<div><div>Component Description:</div><div>Reimburse construction costs - Dominion Energy Virginia - Elliott's Knob</div><div>Amount:</div><div>\$1,531.48</div></div>

<b>Component Description:</b>	Underground conduit for shelter
<b>Amount:</b>	\$16,970.00

<b>Component Description:</b>	Trx #300245; Line #1
<b>Amount:</b>	\$61,132.66

<b>Component Description:</b>	Materials
<b>Amount:</b>	\$45,063.00

<b>Component Description:</b>	1/3 Completion of FND
<b>Amount:</b>	\$61,132.66

<b>Component Description:</b>	Removal vegetation /Ant Mounts REPACK
<b>Amount:</b>	\$12,900.00

<b>Component Description:</b>	Install new 400amp service for tower site, customer installing conduit.
<b>Amount:</b>	\$222.26

<b>Component Description:</b>	Tower analysis
<b>Amount:</b>	\$2,800.00

<b>Component Description:</b>	Shenandoah Tower construction
<b>Amount:</b>	\$61,132.67

	<b>Component Description:</b>	Perform structural inspection in accordance with TIA 222G and document location of all tower appurtenances
	<b>Amount:</b>	\$1,475.00
Short Tower (less than 500')	<b>Component Description:</b>	Trx #300244; Line #1
	<b>Amount:</b>	\$12,720.00

## 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>\$212,430.00</b>	<b>\$235,575.00</b>		<b>\$150,293.36</b>	
Additional Field Engineering Service, 10 Days	<i>\$20,000.00</i>	\$20,000.00	N/A	N/A	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	N/A	N/A
ASR modification (prepare FCC Form 854)	\$2,105.00	\$2,000.00	N/A	N/A	N/A
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	\$10,520.00	\$10,000.00	N/A	\$9,831.16	N/A
NEPA Section 106 environmental review, if needed	\$6,310.00	\$6,000.00	N/A	\$1,174.00	N/A

Attorney Fees - Negotiation of lease and other matters for shared locations	\$4,210.00	\$4,000.00	N/A	\$1,865.66	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	\$589.50	N/A
Project management of the transition	\$142,200.00	\$135,000.00	N/A	\$93,509.54	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	\$0.00	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$35,500.00	Quiet zone Chesapeake RF Consultants invoice	\$31,937.50	z
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$7,325.00	Quiet zone; Chesapeake RF Consultants, LLC Invoice #10267	\$7,325.00	N/A

Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	\$0.00	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$4,061.00	N/A
<b>Sub-total</b>	\$212,430.00	\$235,575.00	N/A	\$150,293.36	N/A
<b>Total for all systems</b>	\$1,905,081.71	\$1,496,791.37	N/A	\$1,218,703.60	N/A

## Components

Actual Information	
Description	File Name
Additional Field Engineering Service, 10 Days	Information not provided.
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	Information not provided.
ASR modification (prepare FCC Form 854)	Information not provided.
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	<div> <b>Component Description:</b> Elliot Knob Biological Assessment </div> <div> <b>Amount:</b> \$9,831.16 </div>

NEPA Section 106 environmental review, if needed	<table> <tr> <td data-bbox="702 174 1018 208"><b>Component Description:</b></td><td data-bbox="1147 174 1369 282">NEPA Section 106 Environmental Review</td></tr> <tr> <td data-bbox="702 297 815 331"><b>Amount:</b></td><td data-bbox="1147 297 1244 331">\$829.00</td></tr> <tr> <td data-bbox="702 439 1018 472"><b>Component Description:</b></td><td data-bbox="1147 439 1342 703">Research and analyze applicability of Forest Service letter to need for environmental review.</td></tr> <tr> <td data-bbox="702 719 815 752"><b>Amount:</b></td><td data-bbox="1147 719 1244 752">\$345.00</td></tr> </table>	<b>Component Description:</b>	NEPA Section 106 Environmental Review	<b>Amount:</b>	\$829.00	<b>Component Description:</b>	Research and analyze applicability of Forest Service letter to need for environmental review.	<b>Amount:</b>	\$345.00												
<b>Component Description:</b>	NEPA Section 106 Environmental Review																				
<b>Amount:</b>	\$829.00																				
<b>Component Description:</b>	Research and analyze applicability of Forest Service letter to need for environmental review.																				
<b>Amount:</b>	\$345.00																				
Attorney Fees - Negotiation of lease and other matters for shared locations	<table> <tr> <td data-bbox="702 887 1018 920"><b>Component Description:</b></td><td data-bbox="1147 887 1318 920">Legal services</td></tr> <tr> <td data-bbox="702 927 815 960"><b>Amount:</b></td><td data-bbox="1147 927 1244 960">\$123.00</td></tr> <tr> <td data-bbox="702 1068 1018 1102"><b>Component Description:</b></td><td data-bbox="1147 1068 1342 1135">For Professional Services</td></tr> <tr> <td data-bbox="702 1151 815 1184"><b>Amount:</b></td><td data-bbox="1147 1151 1244 1184">\$370.00</td></tr> <tr> <td data-bbox="702 1292 1018 1326"><b>Component Description:</b></td><td data-bbox="1147 1292 1342 1359">Prepare pro hac vice motion</td></tr> <tr> <td data-bbox="702 1366 815 1400"><b>Amount:</b></td><td data-bbox="1147 1366 1244 1400">\$291.37</td></tr> <tr> <td data-bbox="702 1507 1018 1541"><b>Component Description:</b></td><td data-bbox="1147 1507 1374 1659">Professional Services Rendered through December 31, 2018</td></tr> <tr> <td data-bbox="702 1666 815 1700"><b>Amount:</b></td><td data-bbox="1147 1666 1244 1700">\$384.29</td></tr> <tr> <td data-bbox="702 1807 1018 1841"><b>Component Description:</b></td><td data-bbox="1147 1807 1358 1915">Total professional services, total Disbursements</td></tr> <tr> <td data-bbox="702 1921 815 1955"><b>Amount:</b></td><td data-bbox="1147 1921 1244 1955">\$697.00</td></tr> </table>	<b>Component Description:</b>	Legal services	<b>Amount:</b>	\$123.00	<b>Component Description:</b>	For Professional Services	<b>Amount:</b>	\$370.00	<b>Component Description:</b>	Prepare pro hac vice motion	<b>Amount:</b>	\$291.37	<b>Component Description:</b>	Professional Services Rendered through December 31, 2018	<b>Amount:</b>	\$384.29	<b>Component Description:</b>	Total professional services, total Disbursements	<b>Amount:</b>	\$697.00
<b>Component Description:</b>	Legal services																				
<b>Amount:</b>	\$123.00																				
<b>Component Description:</b>	For Professional Services																				
<b>Amount:</b>	\$370.00																				
<b>Component Description:</b>	Prepare pro hac vice motion																				
<b>Amount:</b>	\$291.37																				
<b>Component Description:</b>	Professional Services Rendered through December 31, 2018																				
<b>Amount:</b>	\$384.29																				
<b>Component Description:</b>	Total professional services, total Disbursements																				
<b>Amount:</b>	\$697.00																				

Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	<div> <b>Component Description:</b> Professional services: Complete and file WHSV Repack construction permit application. Call re: WHSV quiet zone concerns; email with FCC staff re: same </div> <div> <b>Amount:</b> \$589.50 </div>
Project management of the transition	<div> <b>Component Description:</b> Project Management </div> <div> <b>Amount:</b> \$5,090.60 </div>
	<div> <b>Component Description:</b> Project Management </div> <div> <b>Amount:</b> \$733.30 </div>
	<div> <b>Component Description:</b> Project Management </div> <div> <b>Amount:</b> \$951.45 </div>
	<div> <b>Component Description:</b> Project Management </div> <div> <b>Amount:</b> \$487.80 </div>
	<div> <b>Component Description:</b> Project Management </div> <div> <b>Amount:</b> \$2,962.20 </div>
	<div> <b>Component Description:</b> Project Management </div> <div> <b>Amount:</b> \$4,946.30 </div>

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$3,545.70

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$2,367.65

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$7,014.40

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$4,100.40

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$6,234.80

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$4,977.10

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$2,231.90

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$1,916.50

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$3,737.70

<b>Component Description:</b>	Cost Reconciliation
<b>Amount:</b>	\$8,285.45

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$1,723.55

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$4,093.05

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$3,395.10

<b>Component Description:</b>	Professional Services
<b>Amount:</b>	\$236.44

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$1,795.60

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$4,749.40

<b>Component Description:</b>	Reference WHSV-510-Project Management Widelity, Inc. GRY-WHSV-TV-010
<b>Amount:</b>	\$1,822.50

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$5,042.95

	<b>Component Description:</b>	Project Management
	<b>Amount:</b>	\$1,668.10
	<b>Component Description:</b>	Project Management
	<b>Amount:</b>	\$2,022.90
	<b>Component Description:</b>	Project Management
	<b>Amount:</b>	\$802.25
	<b>Component Description:</b>	Project Management
	<b>Amount:</b>	\$1,861.40
	<b>Component Description:</b>	Project Management
	<b>Amount:</b>	\$28.20
	<b>Component Description:</b>	Project Management
	<b>Amount:</b>	\$1,856.30
	<b>Component Description:</b>	Project Management
	<b>Amount:</b>	\$1,328.55
	<b>Component Description:</b>	Project Management
	<b>Amount:</b>	\$1,500.00
Prepare and or review reimbursement form	Information not provided.	
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	

Perform engineering study  
for new channel  
assignment and antenna  
development

**Component Description:**

Develop final  
technical  
parameters for  
prospective  
displacement  
facilities - re: 4  
digital replacement  
translators  
  
**Amount:** \$5,662.50

**Component Description:**

Engineering Study  
for New Channel  
Assignment  
  
**Amount:** \$1,075.00

**Component Description:**

Engineering Study  
for New Channel  
Assignment  
  
**Amount:** \$325.00

**Component Description:**

Engineering Study  
for New Channel  
Assignment  
  
**Amount:** \$375.00

**Component Description:**

Engineering Study  
for New Channel  
Assignment  
  
**Amount:** \$1,812.50

**Component Description:**

Consulting  
Engineer - J.  
Davis. Participate  
in telephone  
conference call  
regarding buildout  
of WHSV-TV  
repack facility  
  
**Amount:** \$125.00

<b>Component Description:</b>	Engineering Study for New Channel Assignment
<b>Amount:</b>	\$4,687.50

<b>Component Description:</b>	Provide NRAO Quiet Zone interference office with tech specs; discuss with FCC staff the coverage extension into loss area that will be created
<b>Amount:</b>	\$2,775.00

<b>Component Description:</b>	Engineering Study for New Channel Assignment
<b>Amount:</b>	\$2,462.50

<b>Component Description:</b>	Prepare site location map; provide NRAO Quiet Zone interference office w/ specs of substitute directional antenna.
<b>Amount:</b>	\$2,125.00

<b>Component Description:</b>	Engineering Study for New Channel Assignment
<b>Amount:</b>	\$1,125.00

<b>Component Description:</b>	Engineering Study for New Channel Assignment
<b>Amount:</b>	\$250.00

<b>Component Description:</b>	Consulting Engineer - J. Davis - Hourly
<b>Amount:</b>	\$1,050.00

<b>Component Description:</b>	Engineering Study for New Channel Assignment
<b>Amount:</b>	\$437.50

<b>Component Description:</b>	Re: prospective digital replacement translators ar 4 sites, continued review of antenna vendor responses and discussions.
<b>Amount:</b>	\$375.00

<b>Component Description:</b>	Provide coverage contour map of WHSV-TV's repack facility and planned translators.
<b>Amount:</b>	\$587.50

<b>Component Description:</b>	Consulting Engineer - J. Davis - Hourly (@ \$250 /hr)
<b>Amount:</b>	\$250.00

<b>Component Description:</b>	Engineering Study for New Channel Assignment
<b>Amount:</b>	\$3,475.00

	<p><b>Component Description:</b> Engineering Study for New Channel Assignment</p> <p><b>Amount:</b> \$1,287.50</p>
	<p><b>Component Description:</b> Frequency study</p> <p><b>Amount:</b> \$1,425.00</p>
	<p><b>Component Description:</b> Consulting Engineer</p> <p><b>Amount:</b> \$250.00</p>
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	<p><b>Component Description:</b> RF Eng - Construction Permit Application (Main)</p> <p><b>Amount:</b> \$3,000.00</p>
	<p><b>Component Description:</b> Consulting Engineer</p> <p><b>Amount:</b> \$4,050.00</p>
	<p><b>Component Description:</b> RF Eng - Construction Permit Application (Main)</p> <p><b>Amount:</b> \$275.00</p>
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.

Attorney Fees - Prepare  
and File FCC Form 2100  
(main), Construction Permit  
Application

**Component Description:**

Attorney Fees  
Prepare and File  
Construction  
Permit Application

**Amount:**

\$524.00

**Component Description:**

Prepare and File  
Construction  
Permit Application  
(Main)

**Amount:**

\$1,637.50

**Component Description:**

Prepare and File  
Construction  
Permit Application  
(Main)

**Amount:**

\$851.50

**Component Description:**

FCC Filing fees for  
modified CP and  
construction waiver  
request

**Amount:**

\$1,048.00

## 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>\$212,785.00</b>	<b>\$204,840.00</b>		<b>\$128,013.81</b>	
DTV Medical Facility Notification	\$11,550.00	\$3,227.50	N/A	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$712.50	Chesapeake RF Consultants Invoice #4869 and Wiley Rein, LLP, Invoice #1479797	\$712.50	N/A
Local Zoning	<i>\$2,000.00</i>	\$2,000.00	N/A	N/A	N/A
Non-zoning permits	<i>\$6,325.00</i>	\$6,325.00	N/A	\$6,325.00	N/A
BLM or NFS Coordination	<i>\$30,000.00</i>	\$30,000.00	NFS coordination.	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	<i>\$15,375.00</i>	\$15,375.00	N/A	\$8,975.00	N/A
Equipment Delivery and Handling Charges	<i>\$20,000.00</i>	\$20,000.00	N/A	\$8,276.40	N/A
Develop and air announcement of upcoming channel change	<i>\$5,000.00</i>	\$5,000.00	N/A	N/A	N/A

MVPD Notification of Channel Change	<b>\$2,000.00</b>	\$2,000.00	N/A	\$2,000.00	N/A
Microwave Equipment	<b>\$120,200.00</b>	\$120,200.00	STL link.	\$101,724.91	N/A
<b>Sub-total</b>	\$212,785.00	\$204,840.00	N/A	\$128,013.81	N/A
<b>Total for all systems</b>	\$1,905,081.71	\$1,496,791.37	N/A	\$1,218,703.60	N/A

## Components

Actual Information	
Description	File Name
DTV Medical Facility Notification	Information not provided.
FCC Filing Fees - Form 2100 license to cover application	<div> <b>Component Description:</b> WHSV-610-FCC Filing Fee - License to Cover  <b>Amount:</b> \$335.00 </div> <div> <b>Component Description:</b> Regarding repack Ch-20 buildout at Elliott Knob, preparation and review of engineering portions of FCC application for license to cover.  <b>Amount:</b> \$187.50 </div> <div> <b>Component Description:</b> Filing Fees- license to cover  <b>Amount:</b> \$190.00 </div>
Local Zoning	Information not provided.

Non-zoning permits	<b>Component Description:</b> <b>Amount:</b>	Permit drawings \$6,325.00
BLM or NFS Coordination	Information not provided.	
Disposal Costs (for equipment and other waste, net of any salvage value)	<b>Component Description:</b> <b>Amount:</b>	Disposal Costs \$8,975.00
Equipment Delivery and Handling Charges	<b>Component Description:</b>  <b>Amount:</b>	Equipment Delivery and Handling Charges \$8,276.40
Develop and air announcement of upcoming channel change	Information not provided.	
MVPD Notification of Channel Change	<b>Component Description:</b>  <b>Amount:</b>	Prepare MVPD notification letters (Repack) \$2,000.00
Microwave Equipment	<b>Component Description:</b>  <b>Amount:</b>	Antenna Mounts and Waveguide \$38,617.88
	<b>Component Description:</b>  <b>Amount:</b>	Microwave system on-site installation \$62,914.03
	<b>Component Description:</b>  <b>Amount:</b>	SW-16pt Netgear GIG SMRT GS716 \$193.00

Cost Information	Grand Total			
		Predetermined Cost Estimate	Estimated Cost	Actual Cost
	Total for all systems	\$1,905,081.71	\$1,496,791.37	\$1,218,703.60

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"> <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 , III**  
.  
*Assistant  
Secretary*

10/25/2019

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	<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.

<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><b>Robert Folliard , III</b> . <i>Assistant Secretary</i></p> <p>10/25/2019</p>

## Attachments