



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **31590** | Service: **DTV** | Call **WCTV** | Channel: **20 (UHF)** |
ID: | Sign:
File **0000028726**
Number:
FRN: **0018223693** | Date **07/20**
Submitted: **/2020**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
GRAY TELEVISION LICENSEE, LLC	WCTV 1801	+1 (404) 504-9828	Robert. Folliard@gray.	Limited Liability
Doing Business As: KNOXVILLE TV LLC	HALSTEAD BLVD. Tallahassee, FL 32309 United States		tv	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
Samuel Hariton <i>Widely</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		WCTV will be changing the antenna, line and transmitter on the main broadcast site. WCTV will utilize the existing auxiliary site on a different tower as an interim site.

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	CDUK3100UPG3
	Year	2005
	Type	Inductive Output Tube
	IOT Power Type	Three
	Power Capacity	90.0 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-72
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	47.2 kW
	Justification for New Transmitter	This is an old Harris IOT Transmitter that will not be able to be retuned. See GatesAir memo 1/1 /2017.

**Primary
Transmitter**

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	Yes
	Power	300 kVA
	Rigid Conduit and Wiring	No
	Size	N/A

	Length	N/A
	Other Electrical Service	Yes
	Description	The new main 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.
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
------	-------------

HVAC	Undetermined tonnage and duct work required for plumbing new transmitter installation.
Primary Transmitter - Installation	Primary Transmitter - Installation
Building Renovations	Interior renovations required for installation of new transmitter.
Concrete Pads	Concrete pads required for new heat exchangers for the new transmitter.

**Interim
Transmitter**

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Interim
	Description of Use	N/A
	Change Type	Purchase
	Manufacturer	
	Model	UAXTE 12R44
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	7.2 kW
	Justification for New Transmitter	Necessary to power interim facility while new main antenna is installed.

**Interim
Transmitter**

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	Yes
	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 main 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.
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
Inside RF System	Is an additional interior RF system required to support this interim transmitter?	Yes

Interim 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?	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)	1000.0 kW

Manufacturer	
Model	TFU-30DSC-RO4
Year	2005

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?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Top 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)	750.0 kW
	Manufacturer	

Model	TFU-30GTH /VP-R04
Year	2019
Justification for New Antenna	The old antenna is an Side Mount and cannot be retuned and used as a top mount

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	
	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?	
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
Top Plate Adapter	Adapter for the top of the tower

**Interim
Antenna**

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	Yes
	Is antenna directional?	No
	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	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)	100.0 kW
	Manufacturer	
	Model	TLP24B CH20
	Year	2017

	Justification for New Antenna	Needed so that WCTV can continue to operate while the new main antenna, line and transmitter are installed.
--	-------------------------------	---

Interim Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Type	New
	Number of channels supported	4
	Frequencies of channels supported	RF channel
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	No
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	B
	Feed Line Size	3 1/8 inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	No
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

Enter a list of RF channel numbers.

RF Channel Number
17
20
30
33

**Interim
Antenna**

Other Antenna Cost Not Listed

Information not provided.

Transmission Line

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

Primary
Transmission Line

Existing Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	
	Type	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	19 1/2 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1970 feet per run

Primary
Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	19 1/2 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	78 feet per run
	Justification for New Transmission Line	Moving from a side mount to a top mount antenna, using the existing transmission line and buying 78 additional feet of it.

Primary
Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

Interim
Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Type	Flexible Air
	Diameter	3 inches
	Segment Length	N/A
	Other Segment Length	
	Number of parallel runs	1
	Length	870 feet per run
	Justification for New Transmission Line	Installing interim antenna

Interim
Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

**Tower
Equipment
And
Rigging
Costs**

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

**Auxiliary
Tower**

Add Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Auxiliary (Backup)
	Description of Use	Backup Tower
	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)	Yes
	Others Types of Users	No
	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	1031203
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	30° 34' 28.0" N-
	Longitude (NAD83)	084° 12' 09.0" W-
	Overall Structure Height	898.94 feet
	Support Structure Height	833.32 feet
	Ground Elevation Above Mean Sea Level (AMSL)	144.36 feet
	Structure Type	GTOWER - Guyed

		Structure Used for Communication Purposes
	Tower Owner	Gray Television Group, Inc.
	Date Constructed	01/01/1973

**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
3032	WVUP-CD	DTV

Auxiliary 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

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

Name	Description
Structural Load Study	Structural engineering tower load study for poorly documented tower

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)	Yes
	Others Types of Users	No
	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	1019981
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	30° 40' 14.0" N-
	Longitude (NAD83)	083° 56' 26.0" W-
	Overall Structure Height	1999.98 feet
	Support Structure Height	1925.83 feet
	Ground Elevation Above Mean Sea Level (AMSL)	221.78 feet
	Structure Type	TOWER - Free Standing or Guyed Structure
	Tower Owner	Gray Television

	Group, Inc.
Date Constructed	01/01/1987

**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
93356	WKVH	FM
21801	WFSU-TV	DTV

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

Name	Description
Structural Load Study	

**Outside
Professional**

Section	Question	Response
Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	595
	Explanation	Strategic Support
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	Yes
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	Yes
	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
Attorney and Other Outside Consulting Services	Prepare and file Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes

	Prepare request for Special Temporary Authority	No
	Quantity	N/A
	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	No
	Address transition timing and coordination issues w/ other stations and wireless providers	No
RF Field Engineering Services	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
Attorney Fees - Other Matters	Legal Services

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	Yes
	FCC Special Temporary Authority Application	Yes
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

Name	Description
Site Security	Security for site while equipment is being stored for sites.
Tree Removal	Removing trees for tag line for tower 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
Interim Transmitter UAXTE 12R44	\$423,863.04	\$449,428.84		\$261,713.01	
UHF inside RF system including switching	\$147,500.00	\$150,500.00	State and local taxes	\$0.00	N/A
Other Electrical Service: The new main 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>\$5,375.00</i>	\$5,375.00	Electrical work required for installation of transmitter	\$5,125.00	N/A
Service entrance 3 phase/800 amp/208 volt	\$14,400.00	\$36,965.80	per ASCO SPD Quote and Weston Trawick Quote	\$0.00	N/A
UHF - Air Cooled Solid State Transmitter 7.2 kW	<i>\$256,588.04</i>	\$256,588.04	see Estimated Cost Justification WCTV-180-	\$256,588.01	N/A

			New Interim Transmitter v0		
Primary Transmitter ULXTE-72	\$3,178,862.03	\$2,912,539.88		\$1,353,828.39	
Concrete Pads	\$2,150.00	\$2,150.00	N/A	N/A	N/A
Building Renovations	\$43,750.57	\$43,750.57	see Estimated Cost Justification WCTV-110- Building renovations New 1st Primary Transmitter v0	\$37,824.19	N/A
Primary Transmitter - Installation	\$446.38	\$446.38	Please see WCTV Primary Transmitter Installation Cover Letter	\$446.38	N/A
HVAC	\$76,502.60	\$76,502.60	John D Jones AC Heating & Refrigeration proposal 400127 and Weston Trawick proposals dated Aug 24, 2018 and Nov 19, 2019 (\$52,700 + \$16,977 + \$6,825.60)	\$29,725.60	N/A
Other Electrical Service: The new main transmitter will require	\$48,712.50	\$48,712.50	see Estimated Cost Justification WCTV-110- Electrical	\$42,354.37	N/A

reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.			Service New 1st Primary Transmitter v1		
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	\$1,473,000.00	\$1,234,314.85	Per GatesAir Quote Q-81345	(\$254,022.13)	N/A
Transformer 3 phase/480v - 300 KVA	\$36,800.00	\$9,163.00	GatesAir Quote Q-81345	\$0.00	N/A
UHF - Liquid Cooled Solid State Transmitter 76 kW	\$1,497,499.98	\$1,497,499.98	***System Notice: Estimate adjusted and locked because line has been superseded. ***	\$1,497,499.98	N/A
Sub-total	\$3,602,725.07	\$3,361,968.72	N/A	\$1,615,541.40	N/A
Total for all systems	\$5,740,566.68	\$5,540,326.79	N/A	\$2,324,428.72	N/A

Components

Actual Information	
Description	File Name
UHF inside RF system including switching	Information not provided.
Other Electrical Service: The new main 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.	<div> <div>Component Description:</div> <div>Electrical Engineering Services</div> <div>Amount:</div> <div>\$5,125.00</div> </div>
Service entrance 3 phase /800 amp/208 volt	Information not provided.
UHF - Air Cooled Solid State Transmitter 7.2 kW	<div> <div>Component Description:</div> <div>Transmitter, Mask Filter System. Rf Accessories, Installation and Proof</div> <div>Amount:</div> <div>\$166,015.29</div> </div> <div> <div>Component Description:</div> <div>A. Transmitter</div> <div>Amount:</div> <div>\$68,799.27</div> </div> <div> <div>Component Description:</div> <div>Transmitter</div> <div>Amount:</div> <div>\$21,773.45</div> </div>
Concrete Pads	Information not provided.
Building Renovations	<div> <div>Component Description:</div> <div>2'X4' #2310 Radar</div> <div>Amount:</div> <div>\$297.13</div> </div> <div> <div>Component Description:</div> <div>2x4 120V LED Troffer w/ Prismatic LE</div> <div>Amount:</div> <div>\$295.02</div> </div> <div> <div>Component Description:</div> <div>RADAR S0 EDGE CELING</div> <div>Amount:</div> <div>\$686.99</div> </div> <div> <div>Component Description:</div> <div>Main Beam</div> <div>Amount:</div> <div>\$35.11</div> </div>

	Component Description:	398095 WCTV Metcalf Transmitter
	Amount:	\$12,716.25
	Component Description:	Contract Billing
	Amount:	\$23,313.13
	Component Description:	No longer seeking reimbursement // 2'x4' #2310 Radar Sq Edge Ceiling 64SF
	Amount:	N/A
	Component Description:	Removing reimbursement request // Radar SO Edge
Primary Transmitter - Installation	Amount:	N/A
	Component Description:	No longer seeking reimbursement // 9 /16 x3-1/4 PFJ WM713 Base
	Amount:	N/A
	Component Description:	9/16 X3-1/4 PFJ
	Amount:	\$83.93
	Component Description:	Radar SO Edge
	Amount:	\$396.63
	Component Description:	Service Fee
	Amount:	\$158.69

	Component Description: Service Fee Amount: \$287.69
HVAC	Component Description: Contract Billing Amount: \$16,977.00 Component Description: Materials, Crew Hours Labor Amount: \$6,825.60 Component Description: Mercalf Buildings Install Amount: \$22,900.00
Other Electrical Service: The new main 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.	Component Description: WCTV-110- Electrical Service New 1st Primary Transmitter Amount: \$12,716.25 Component Description: Electrical Engineer Amount: \$6,325.00 Component Description: WCTV-110- Electrical Service New 1st Primary Transmitter Amount: \$23,313.12
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	Component Description: Credit Memo Amount: (\$254,022.13)
Transformer 3 phase/480v - 300 KVA	Information not provided.
UHF - Liquid Cooled Solid	

State Transmitter 76 kW

Component Description:

Transmitter, Mask
Filter System, RF
Accessories, Install
& Proof

Amount:

\$1,497,499.98

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 TLP24B CH20	\$203,370.00	\$185,476.80		\$116,344.80	
Elbow complex, broadband, at antenna input, per 3 1/8. feedline (if needed)	\$9,340.00	\$8,624.00	Quote JEHQ1317	N/A	N/A
New combiner, cost per channel (without antenna)	\$84,200.00	\$132,617.80	Please see attached WCTV Combiner - DTVPros Quote JEHQ1704 and Gray PO 1944 which includes taxes and freight.	\$94,227.20	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$3,200.00	N/A
UHF - Lower Power Side Mount, One Station antenna . medium power (50-	\$103,100.00	\$37,835.00	per DTVPros quote JEHQ1672	\$18,917.60	N/A

200 kW),
elliptically
or
circularly
polarized

Primary Antenna TFU-30GTH /VP-R04	\$328,082.00	\$271,507.26		\$191,514.26	
Sweep test of existing antenna	\$6,730.00	\$9,868.26	see Estimated Cost Justification WCTV-210-Sweep test New Primary Antenna v0	\$8,538.26	N/A
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	\$289,500.00	\$227,143.00	JEHQ1267-04	\$157,120.00	N/A
Top Plate Adapter	\$19,552.00	\$19,552.00	JEHQ1267-04	\$15,641.60	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$14,944.00	JEHQ1267-04	\$10,214.40	N/A
Sub-total	\$531,452.00	\$456,984.06	N/A	\$307,859.06	N/A
Total for all systems	\$5,740,566.68	\$5,540,326.79	N/A	\$2,324,428.72	N/A

Components

Actual Information	
Description	File Name
Elbow complex, broadband, at antenna input, per 3 1/8. feedline (if needed)	Information not provided.
New combiner, cost per channel (without antenna)	Component Description: RF System 4 Channel Amount: \$94,227.20
Sweep test of existing antenna	Component Description: WCTV-280-Sweep test New Interim Antenna Amount: \$3,200.00
UHF - Lower Power Side Mount, One Station antenna . medium power (50-200 kW), elliptically or circularly polarized	Component Description: UHF - LOW POWER SIDE MOUNT Amount: \$18,917.60
Sweep test of existing antenna	Component Description: WCTV-210-Sweep test New Primary Antenna Amount: \$1,600.00 Component Description: WCTV-210-Sweep test New Primary Antenna Amount: \$1,920.00 Component Description: Engineering field services to assess transmitter Amount: \$3,418.26

	Component Description: WCTV-210-Sweep test New Primary Antenna Amount: \$1,600.00
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	Component Description: UHF- HIGH POWER TOP MOUNT Amount: \$49,100.00 Component Description: UHF- HIGH POWER TOP MOUNT Amount: \$49,100.00 Component Description: UHF-High Power Top Mount (200-1000KW) Amount: \$58,920.00
Top Plate Adapter	Component Description: WCTV-210-Top plate adapter New Primary Antenna Amount: \$4,888.00 Component Description: WCTV-210-Top plate adapter New Primary Antenna Amount: \$5,865.60 Component Description: WCTV-210-Top plate adapter New Primary Antenna Amount: \$4,888.00
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	

Component Description:	WCTV-210-Elbow complex New Primary Antenna
Amount:	\$3,192.00

Component Description:	WCTV-210-Elbow complex New Primary Antenna
Amount:	\$3,830.40

Component Description:	WCTV-210-Elbow complex New Primary Antenna
Amount:	\$3,192.00

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	\$51,330.00	\$37,835.20		\$18,519.17	
Flexible Air Transmission Line - dielectric, 3"	\$51,330.00	\$37,835.20	per DTVPros quote JEHQ1672	\$18,519.17	N/A
Primary Transmission Line	\$15,756.00	\$14,966.00		\$10,103.91	
Rigid Transmission Line - copper, 6 1/8"	\$15,756.00	\$14,966.00	JEHQ1267-04	\$10,103.91	N/A
Sub-total	\$67,086.00	\$52,801.20	N/A	\$28,623.08	N/A
Total for all systems	\$5,740,566.68	\$5,540,326.79	N/A	\$2,324,428.72	N/A

Components

Actual Information	
Description	File Name
Flexible Air Transmission Line - dielectric, 3"	<div>Component Description: WCTV-380-New Interim Transmission Line</div> <div>Amount: \$18,519.17</div>
Rigid Transmission Line - copper, 6 1/8"	

Component Description:	WCTV-310-New Primary Transmission Line
Amount:	\$3,157.47

Component Description:	WCTV-310-New Primary Transmission Line
Amount:	\$3,788.97

Component Description:	WCTV-310-New Primary Transmission Line
Amount:	\$3,157.47

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	\$684,000.00	\$792,000.00		\$243,176.00	
Structural Load Study	<i>\$26,200.00</i>	\$26,200.00	Estimated Cost Justification WCTV-410-Structural Analysis Existing Primary Tower V0	\$26,200.00	N/A
Major tower reinforcement /modifications	\$421,000.00	\$430,000.00	State and local taxes	\$125,151.00	N/A
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$10,500.00	Hodge Invoice 19G000400.1	\$10,500.00	N/A
Tall Tower (greater than 500')	\$210,500.00	\$325,300.00	see Justifying Quote WCTV GTI America Q19-06-008 main antenna install	\$81,325.00	N/A
Auxiliary Tower	\$666,300.00	\$660,900.00		\$15,900.00	

GTOWER

Structural Load Study	\$8,500.00	\$8,500.00	see Estimated Cost Justification WCTV-450-Structural Analysis Existing Auxiliary Tower v0	\$8,500.00	N/A
Major tower reinforcement /modifications	\$421,000.00	\$430,000.00	State and local taxes	\$0.00	N/A
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$7,400.00	Hodge Invoice 19G000300.1	\$7,400.00	N/A
Tall Tower (greater than 500')	\$210,500.00	\$215,000.00	Please see Q19-06-037-3 WCTV WVUP Tallahassee combined antenna install	\$0.00	N/A
Sub-total	\$1,350,300.00	\$1,452,900.00	N/A	\$259,076.00	N/A
Total for all systems	\$5,740,566.68	\$5,540,326.79	N/A	\$2,324,428.72	N/A

Components

Actual Information	
Description	File Name
Structural Load Study	

	Component Description: Engineering Evaluation	
	Amount: \$7,875.00	
	Component Description: Engineer Evaluation	
	Amount: \$7,875.00	
	Component Description: Engineering Evaluation, Appurtence Mapping, Corrosion Risk Analysis	
	Amount: \$5,225.00	
	Component Description: Engineering Evaluation	
	Amount: \$5,225.00	
	Component Description: Please deny this invoice	
	Amount: N/A	
Major tower reinforcement /modifications	Component Description: POLE SOCKET / Guide Flange WCTV - ADDED PER CHANGE ORDER	
	Amount: \$125,151.00	
Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	Component Description: WCTV-410-Tower Mapping	
	Amount: \$5,250.00	

	<p>Component Description: WCTV-410-Tower Mapping-</p> <p>Amount: \$5,250.00</p>
	<p>Component Description: Please deny this invoice</p> <p>Amount: N/A</p>
Tall Tower (greater than 500')	<p>Component Description: 25% Tower Equipment and Rigging</p> <p>Amount: \$81,325.00</p> <p>Component Description: N/A</p> <p>Amount: N/A</p>
Structural Load Study	<p>Component Description: WCTV-450-Structural Analysis Existing Auxiliary Tower</p> <p>Amount: \$4,250.00</p> <p>Component Description: 50% deposit - Engineering Evaluation, Appurtenance Mapping & Corrosion Risk Analysis</p> <p>Amount: \$4,250.00</p>
Major tower reinforcement /modifications	Information not provided.
Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	<p>Component Description: Engineering Evaluation</p> <p>Amount: \$3,700.00</p>

	Component Description: Amount:	WCTV-450-Tower Mapping \$3,700.00
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	\$123,114.00	\$157,788.20		\$106,195.85	
Project management of the transition	\$94,010.00	\$130,049.20	The estimated cost has been adjusted to include all invoices submitted for reimbursement at this time.	\$98,281.85	N/A
Attorney Fees - Other Matters	<i>\$1,489.00</i>	\$1,489.00	see Estimated Cost Justification WCTV-550-Attorney - Other Matters v1 (1)	\$1,489.00	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 - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	\$4,210.00	\$4,000.00	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
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	\$1,580.00	\$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	\$650.00	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	\$2,105.00	\$2,000.00	N/A	N/A	N/A
Prepare engineering section of FCC Form	\$3,155.00	\$3,000.00	N/A	\$1,525.00	N/A

2100 (main),
Construction
Permit
Application

Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$4,250.00	N/A
Sub-total	\$123,114.00	\$157,788.20	N/A	\$106,195.85	N/A
Total for all systems	\$5,740,566.68	\$5,540,326.79	N/A	\$2,324,428.72	N/A

Components

Actual Information	
Description	File Name
Project management of the transition	Component Description: Project management
	Amount: \$2,516.90
	Component Description: Project Management
	Amount: \$1,706.25
	Component Description: Project Management
	Amount: \$4,254.50
	Component Description: Project Management
	Amount: \$2,460.90
	Component Description: Project Management
	Amount: \$5,814.65

Component Description:	Project Management
Amount:	\$1,944.80

Component Description:	Project Management
Amount:	\$3,190.95

Component Description:	Project Management
Amount:	\$2,922.55

Component Description:	Project Management
Amount:	\$2,671.95

Component Description:	Project Management,
Amount:	\$6,520.90

Component Description:	Project Management
Amount:	\$2,890.75

Component Description:	Project Management
Amount:	\$1,831.65

Component Description:	Project Management
Amount:	\$1,541.50

Component Description:	Project management
Amount:	\$2,435.15

Component Description:	Project Management
Amount:	\$1,921.85

Component Description:	Project Management
Amount:	\$5,473.15

Component Description:	Project Management
Amount:	\$1,328.55

Component Description:	Project Management
Amount:	\$2,078.85

Component Description:	Project Management
Amount:	\$4,124.40

Component Description:	Project Management
Amount:	\$28.20

Component Description:	Project Management
Amount:	\$1,773.60

Component Description:	Transition Related Project Management Costs
Amount:	\$1,950.00

Component Description:	Project Management
Amount:	\$2,772.95

Component Description:	Project Management
Amount:	\$2,551.30

Component Description:	Project Management
Amount:	\$3,834.80

Component Description:	Project Management
Amount:	\$733.30

Component Description:	Project Management
Amount:	\$801.45

Component Description:	Project Management
Amount:	\$2,348.65

Component Description:	Project Management
Amount:	\$2,573.35

Component Description:	Project Management
Amount:	\$802.25

Component Description:	Project Management
Amount:	\$2,500.60

Component Description:	Project Management
Amount:	\$5,323.75

	Component Description: Amount:	Project Management \$2,641.95
	Component Description: Amount:	Project Management \$1,690.60
	Component Description: Amount:	Project Management \$2,964.40
	Component Description: Amount:	Project Management \$1,941.95
	Component Description: Amount:	Project Management \$3,418.55
Attorney Fees - Other Matters	Component Description: Amount:	Total Professional Services \$370.00
	Component Description: Amount:	For Professional Services Rendered \$740.00
	Component Description: Amount:	Legal Services \$379.00
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	
Attorney Fees - Aux	Information not provided.	

Antenna, prepare and File Form 2100 Construction Permit or License Application	
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	Information not provided.
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	<div> <div>Component Description:</div> <div>Develop final configuration for main antenna</div> <div>Amount:</div> <div>\$650.00</div> </div>
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Information not provided.
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	<div> <div>Component Description:</div> <div>CP Application</div> <div>Amount:</div> <div>\$1,525.00</div> </div>
Perform engineering study for new channel assignment and antenna development	<div> <div>Component Description:</div> <div>Consulting Engineer</div> <div>Amount:</div> <div>\$525.00</div> </div> <div> <div>Component Description:</div> <div>Consulting Engineer Regarding repack CH-20 main antenna/line configuration</div> <div>Amount:</div> <div>\$575.00</div> </div>

Component Description:	Review system gain-loss and corresponding TPO required for repack Ch-20 main antenna, various discussions.
Amount:	\$650.00

Component Description:	WCTV-530-RF Eng Channel Study
Amount:	\$1,200.00

Component Description:	Perform engineering study for new channel assignment
Amount:	\$1,300.00

Component Description:	Conduct channel study
Amount:	\$187.50

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	\$65,889.61	\$57,884.61		\$7,133.33	
Site Security	<i>\$12,000.00</i>	\$12,000.00	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>\$12,000.00</i>	\$12,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	<i>\$14,000.00</i>	\$14,000.00	N/A	\$3,013.72	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	<i>\$809.61</i>	\$809.61	Please See Estimated Cost Justification WCTV-610-Disposal Costs v1	\$809.61	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$1,310.00	per Estimated Cost Justification WCTV-610-STA FCC Filing Fees v1	\$1,310.00	N/A

Tree Removal	\$3,000.00	\$3,000.00	N/A	N/A	N/A
MVPD Notification of Channel Change	\$2,000.00	\$2,000.00	Please see Estimated Cost Justification WCTV-610- MVPD Notifications v0	\$2,000.00	N/A
DTV Medical Facility Notification	\$11,550.00	\$2,440.00	N/A	N/A	N/A
Sub-total	\$65,889.61	\$57,884.61	N/A	\$7,133.33	N/A
Total for all systems	\$5,740,566.68	\$5,540,326.79	N/A	\$2,324,428.72	N/A

Components

Actual Information	
Description	File Name
Site Security	Information not provided.
Develop and air announcement of upcoming channel change	Information not provided.
Equipment Storage	Information not provided.
Equipment Delivery and Handling Charges	<div> Component Description: Freight and driver Amount: \$1,360.87 </div> <div> Component Description: Scissor Lift 19' Electric Amount: \$646.10 </div> <div> Component Description: Scissor Lift 19' Electric-Rental Amount: \$1,006.75 </div>
Disposal Costs (for equipment and other waste,	

net of any salvage value)	Component Description: setup fee - county Amount: \$158.36	
	Component Description: Rent - 0 Hauls Amount: \$117.00	
	Component Description: Const. and Demolitio Amount: \$218.28	
	Component Description: Rent - O Hauls Amount: \$117.00	
	Component Description: Const. and Demolitio Amount: \$198.97	
FCC Filing Fees - Form 2100 license to cover application	Information not provided.	
FCC Filing Fees - Special Temporary Authorization request	Component Description: WCTV-610-STA Amount: FCC Filing Fees \$200.00	
	Component Description: WCTV-610-STA Amount: FCC Filing Fees- \$1,110.00	
Tree Removal	Information not provided.	
MVPD Notification of Channel Change	Component Description: Total Professional Services Amount: \$2,000.00	
DTV Medical Facility Notification	Information not provided.	

Cost Information	Grand Total		
		Predetermined Cost Estimate	Estimated Cost
			Actual Cost
	Total for all systems	\$5,740,566.68	\$5,540,326.79
			\$2,324,428.72

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.
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*

07/20/2020

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.
8. The above-named entity acknowledges that overpayments or payments in error

	<p>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 Folliard , III . <i>Assistant Secretary</i></p> <p>07/20/2020</p>

Attachments