

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID: File	31590 00000	Service: DTV 28726	Call Sign:	WCTV	Channel: 20 (UHF)
Number:					
FRN: 00	18223693	Date	06/02		
		Submitted:	/2020		

Applicant Name, Type, and Contact Information

Applicant Information

Applicant	Address	Phone	Email	Applicant Type
GRAY TELEVISION LICENSEE, LLC Doing Business As: WCTV-TV	WCTV 4370 Peachtree Road, NE ATLANTA, GA 30319 United States	+1 (404) 504-9828	allfcclms@gray. tv	Limited Liability Company

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer	Preparer Contac	t Name and Inform	nation	
Contact Information	Applicant	Address	Phone	Email
	Samuel Hariton Widelity	Samuel Hariton 4031 University Dr Suite 100 Fairfax, VA 22030 United States	+1 (339) 222-8107	sam.hariton@widelity.com

Broadcaster	Question	Response
Information and Transition Plan	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	Existing Transmitter Information				
Transmitter	Section	Question	Response		
	Existing Transmitter Description	Type of change	Purchase New		
	Description	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 TypeManufacturerModelYearType	Manufacturer			
		Model	CDUK3100UPG3		
		Year	2005		
		Туре	Inductive Output Tube		
		IOT Power Type	Three		
		Power Capacity	90.0 kW		

Existing Transmitter Information

Primary	New Transmitter Costs				
Transmitter	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.		

Other Transmitter Costs

Primary

Transmitter Section Response Question Service Entrance (3 phases 800A 208V) **Electrical Service** 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 reconfiguratio of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrica contractors.
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
Improvement	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
	Building Renovations	Interior renovations required for installation of new transmitter.

Concrete Pads	Concrete pads required for new heat exchangers for the new transmitter.
HVAC	Undetermined tonnage and duct work required for plumbing new transmitter installation.

Interim	New Transmitter Costs			
Transmitter	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	Other Transmitter Costs			
Transmitter	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
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
Improvement	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 Other Transmitter Cost Not Listed

Transmitter Information not provided.

Antennas Section		Question	Response
Antenna Rela	ated Expenses	Do you have antenna related expenses?	Yes

Primary	Existing Antenna Information			
Antenna	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	
		Туре	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	New Antenna Costs			
Antenna	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	
		Туре	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		
			1	

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

Other Antenna Costs

Primary Antenna

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	
	Туре	
	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	Yes
	transmission line and antenna?	

Primary Antenna	Other Antenna Cost Not Listed		
	Name	Description	
	Top Plate Adapter	Adapter for the top of the tower	

Interim	New Antenna Costs			
Antenna	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	
		Туре	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	

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

Other Antenna Costs

Interim Antenna

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Туре	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?	В
	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		

InterimOther Antenna Cost Not ListedAntennaInformation not provided.

Transmissior	n Seffien	Question	Response
	Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

Primary	Existing Transmission Line			
Transmissio	n 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	Manufacturer		
Line Manuf Type	Line Manufacturer and Type	Туре	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	New Transmission Line		
Transmissio	n 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?	Yes
		Туре	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.

Other Transmission Line Expenses Not Listed Transmission

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

Other Transmission Line Expenses Not Listed Transmission

Tower	Section	Question	Response
Equipment And Rigging Costs	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	Type of change	Modify Existing	
	Description	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 (<u>NAD83</u> (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

Tower			
	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 Modification Costs

Auxiliary Tower Rigging Costs

Tower

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

Other Tower Expenses Not Listed

Auxiliary Tower

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

Primary	Existing Tower				
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		

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 Modification Costs

Tower

Tower

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

Primary 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	Prepare and file Form FCC Construction Permit Application	Yes
	Services	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	Other Professional Services Expenses Not Listed	
Professional	Services Costs	Description

Attorney Fees - Other Matters	Legal Services

Other	Section	Question	Response
Expenses	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 Not Listed

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		

Transmitters

Cost Information

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

Description Interim Transmitter	Predetermined Cost Estimate \$423,863.04	Estimated Cost \$449,428.84	Estimated Cost Justification	Actual Cost \$239,939.56	Actual Cost Justification
UAXTE 12R44 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.	\$5,375.00	\$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	\$256,588.04	\$256,588.04	see Estimated Cost Justification WCTV-180- New Interim Transmitter v0	\$234,814.56	N/A
UHF inside RF system including	\$147,500.00	\$150,500.00	State and local taxes	\$0.00	N/A

Primary Transmitter ULXTE-72	\$3,178,415.65	\$2,912,093.50		\$1,370,359.01	
Concrete Pads	\$2,150.00	\$2,150.00	N/A	N/A	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.	\$48,712.50	\$48,712.50	see Estimated Cost Justification WCTV-110- Electrical Service New 1st Primary Transmitter v1	\$42,354.37	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 35 - 50 kW	\$1,473,000.00	\$1,234,314.85	Per GatesAir Quote Q- 81345	(\$254,022.13)	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 +	\$46,702.60	N/A

			\$16,977 + \$6,825.60)		
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
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	\$3,602,278.69	\$3,361,522.34	N/A	\$1,610,298.57	N/A
Total for all systems	\$5,739,750.30	\$5,508,936.21	N/A	\$2,321,534.29	N/A

Components

Actual Information Description	File Name	
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: Amount:	Electrical Engineering Services \$5,125.00
Service entrance 3 phase /800 amp/208 volt	Information not provided.	
UHF - Air Cooled Solid State Transmitter 7.2 kW		

	Component Description: Amount:	Transmitter, Mask Filter System. Rf Accessories, Installation and Proof \$166,015.29
	Component Description: Amount:	A. Transmitter \$68,799.27
UHF inside RF system including switching	Information not provided.	
Concrete Pads	Information not provided.	
Other Electrical Service: The new main transmitter will require reconfiguration of the electrical service on site. The electrical work	Component Description:	WCTV-110- Electrical Service New 1st Primary
cost has been estimated based on verbal guidance from local electrical contractors.	Amount:	Transmitter \$12,716.25
	Component Description: Amount:	Electrical Enginee \$6,325.00
	Component Description:	WCTV-110- Electrical Service New 1st Primary
	Amount:	Transmitter \$23,313.12
Transformer 3 phase/480v - 300 KVA	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	Component Description: Amount:	Credit Memo (\$254,022.13)
HVAC		
HVAC		

	Component Description: Amount:	Mercalf Buildings Install \$22,900.00
	Component Description: Amount:	Materials, Crew Hours Labor \$6,825.60
	Component Description: Amount:	Contract Billing \$16,977.00
Building Renovations	Component Description: Amount:	2'X4' #2310 Radar \$297.13
	Component Description: Amount:	RADAR S0 EDGE CELING \$686.99
	Component Description: Amount:	Main Beam \$35.11
	Component Description: Amount:	398095 WCTV Metcalf Transmitter \$12,716.25
	Component Description: Amount:	2x4 120V LED Troffer w/ Prismatic LE \$295.02
	Component Description: Amount:	Radar SO Edge \$396.63

	Component Description: Amount:	No longer seeking reimbursement // 2'x4' #2310 Radar Sq Edge Ceiling 64SF N/A
	Component Description: Amount:	Contract Billing \$23,313.13
	Component Description:	Removing reimbursement request // Radar SO Edge
	Amount:	N/A
	Component Description: Amount:	9/16 X3-1/4 PFJ \$83.93
	Component Description:	No longer seeking reimbursement // 9 /16 x3-1/4 PFJ WM713 Base
	Amount:	N/A
UHF - Liquid Cooled Solid State Transmitter 76 kW	Component Description:	Transmitter, Mask Filter System, RF Accessories, Install
	Amount:	& Proof \$1,497,499.98
	1	

Antennas

Cost Information

	Predetermined	Estimated	Estimated Cost		Actual Cost
Description	Cost Estimate	Cost	Justification	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		\$194,432.66	
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	Ν
Top Plate Adapter	\$19,552.00	\$19,552.00	JEHQ1267- 04	\$18,560.00	٦
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	٦
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	٢
Sub-total	\$531,452.00	\$456,984.06	N/A	\$310,777.46	1
Total for all systems	\$5,739,750.30	\$5,508,936.21	N/A	\$2,321,534.29	٢

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: Amount:	RF System 4 Channel \$94,227.20
Sweep test of existing antenna	Component Description: Amount:	WCTV-280- Sweep test New Interim Antenna \$3,200.00
UHF - Lower Power Side Mount, One Station antenna . medium power (50-200 kW), elliptically or circularly polarized	Component Description: Amount:	UHF - LOW POWER SIDE MOUNT \$18,917.60
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Component Description: Amount:	WCTV-210-Elbow complex New Primary Antenna \$3,192.00
	Component Description: Amount:	WCTV-210-Elbow complex New Primary Antenna \$3,830.40
	Component Description: Amount:	WCTV-210-Elbow complex New Primary Antenna \$3,192.00

	Component Description:	WCTV-210-Top plate adapter New Primary Antenna
	Amount:	\$5,800.00
	Component Description: Amount:	WCTV-210-Top plate adapter New Primary Antenna \$5,800.00
	Component Description:	WCTV-210-Top
	Amount:	plate adapter New Primary Antenna \$6,960.00
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
Sweep test of existing antenna		
antenna	Component Description:	WCTV-210- Sweep test New Primary Antenna
	Amount:	\$1,600.00

Component Description: Amount:	WCTV-210- Sweep test New Primary Antenna \$1,920.00
Component Description: Amount:	Engineering field services to assess transmitter \$3,418.26
Component Description:	WCTV-210- Sweep test New Primary Antenna
Amount:	\$1,600.00

Transmission Line

Cost Information

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	\$5,739,750.30	\$5,508,936.21	N/A	\$2,321,534.29	N/A

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

Component Description: Amount:	WCTV-310-New Primary Transmission Line \$3,157.47
Component Description:	WCTV-310-New Primary
Amount:	Transmission Line \$3,788.97
Component Description:	WCTV-310-New Primary
Amount:	Transmission Line \$3,157.47

Tower Equipment and Rigging Costs

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Auxiliary Tower GTOWER	\$666,300.00	\$660,900.00		\$15,900.00	
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
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	State and local taxes	\$0.00	N/A
Major tower reinforcement /modifications	\$421,000.00	\$430,000.00	State and local taxes	\$0.00	N/A
Primary Tower TOWER	\$684,000.00	\$792,000.00		\$243,176.00	
Tall Tower (greater than 500')	\$210,500.00	\$325,300.00	see Justifying Quote	\$81,325.00	N/A

			WCTV GTI America Q19-06- 008 main antenna install		
Structural Load Study	\$26,200.00	\$26,200.00	Estimated Cost Justification WCTV-410- Structural Analysis Existing Primary Tower V0	\$26,200.00	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
Major tower reinforcement /modifications	\$421,000.00	\$430,000.00	State and local taxes	\$125,151.00	N/A
Sub-total	\$1,350,300.00	\$1,452,900.00	N/A	\$259,076.00	N/A
Total for all systems	\$5,739,750.30	\$5,508,936.21	N/A	\$2,321,534.29	N/A

Actual Information Description	File Name
Structural Load Study	

	Component Description: Amount:	WCTV-450- Structural Analysi Existing Auxiliary Tower \$4,250.00
	Component Description:	50% deposit - Engineering Evaluation, Appurtenance Mapping & Corrosion Risk Analysis
	Amount:	\$4,250.00
Tower mapping for an undocumented/poorly documented tower and	Component Description:	Engineering Evaluation
preparation of documentation necessary for tower load study	Amount:	\$3,700.00
	Component Description:	WCTV-450-Towe Mapping \$3,700.00
	Anount.	<i>\$</i> 0,700.00
Tall Tower (greater than 500')	Information not provided.	
Major tower reinforcement /modifications	Information not provided.	
Tall Tower (greater than 500')	Component Description:	25% Tower Equipment and
	Amount:	Rigging \$81,325.00
	Component Description: Amount:	N/A N/A
Structural Load Study		

	Component Description: Amount:	Engineering Evaluation \$7,875.00
	Component Description: Amount:	Engineer Evaluation \$7,875.00
	Component Description: Amount:	Engineering Evaluation, Appurtence Mapping, Corrosion Risk Analysis \$5,225.00
	Component Description: Amount:	Engineering Evaluation \$5,225.00
	Component Description: Amount:	Please deny this invoice N/A
Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	Component Description: Amount:	Please deny this invoice N/A
	Component Description: Amount:	WCTV-410-Tower Mapping \$5,250.00
	Component Description: Amount:	WCTV-410-Tower Mapping- \$5,250.00

/modifications		
	Component Description:	POLE SOCKET /
		Guide Flange
		WCTV - ADDED
		PER CHANGE
		ORDER
	Amount:	\$125,151.00

Outside Professional Services

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$122,744.00	\$127,044.00		\$105,825.85	
Attorney Fees - Other Matters	\$1,119.00	\$1,119.00	see Estimated Cost Justification WCTV-550- Attorney - Other Matters v0	\$1,119.00	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),	\$5,260.00	\$5,000.00	N/A	N/A	N/A

Construction Permit Application					
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/
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/
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$1,525.00	N/J
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$4,250.00	N/J
Prepare engineering section of	\$1,580.00	\$1,500.00	N/A	\$650.00	N//

FCC Form 2100 (main), License to Cover Application					
Project management of the transition	\$94,010.00	\$99,675.00	Per Widelity WCTV Strategic support quote 1-23- 19	\$98,281.85	N/A
Sub-total	\$122,744.00	\$127,044.00	N/A	\$105,825.85	N/A
Total for all systems	\$5,739,750.30	\$5,508,936.21	N/A	\$2,321,534.29	N/A

Actual Information Description	File Name	
Attorney Fees - Other Matters	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 Antenna, prepare and File Form 2100 Construction Permit or License Application	Information not provided.	
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.	
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	Component Description: Amount:	CP Application \$1,525.00
Perform engineering study for new channel assignment and antenna development	Component Description:	Consulting Engineer \$525.00
	Component Description: Amount:	WCTV-530-RF Eng Channel Stud \$1,200.00
	Component Description:	Consulting Engineer Regarding repack CH-20 main antenna/line configuration \$575.00
	Component Description:	Review system gain-loss and corresponding TPO required for repack Ch-20 main antenna, various discussions.
	Amount:	\$650.00

	Component Description: Amount:	Conduct channel study \$187.50
	Component Description:	Perform engineering study for new channel assignment
	Amount:	\$1,300.00
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Component Description:	Develop final configuration for main antenna
	Amount:	\$650.00
Project management of the transition	Component Description:	Project
	Amount:	Management \$2,573.35
	Component Description:	Project Management
	Amount:	\$4,254.50
	Component Description:	Project Management \$5,473.15
	Anount.	ψυ, π τυ.Ιυ
	Component Description:	Project Management
	Amount:	\$5,814.65
	Component Description:	Project Management
	Amount:	\$1,944.80

Component Description: Amount:	Project Management \$3,190.95
Component Description: Amount:	Project Management \$2,922.55
Component Description: Amount:	Project Management \$2,671.95
Component Description: Amount:	Project Management, \$6,520.90
Component Description: Amount:	Project Management \$2,890.75
Component Description: Amount:	Project Management \$5,323.75
Component Description: Amount:	Project Management \$4,124.40
Component Description: Amount:	Project Management \$2,078.85
Component Description: Amount:	Project Management \$2,551.30

Component Description: Amount:	Project management \$2,516.90
Component Description: Amount:	Project Management \$2,500.60
Component Description: Amount:	Project Management \$801.45
Component Description: Amount:	Project Management \$3,418.55
Component Description: Amount:	Project Management \$1,328.55
Component Description: Amount:	Project Management \$1,921.85
Component Description: Amount:	Project Management \$2,964.40
Component Description: Amount:	Transition Related Project Management Costs \$1,950.00
Component Description: Amount:	Project Management \$2,348.65

Component Description: Amount:	Project Management \$28.20
Component Description: Amount:	Project Management \$2,460.90
Component Description: Amount:	Project Management \$1,941.95
Component Description: Amount:	Project Management \$1,541.50
Component Description: Amount:	Project Management \$802.25
Component Description: Amount:	Project Management \$733.30
Component Description: Amount:	Project Management \$1,831.65
Component Description: Amount:	Project Management \$3,834.80
Component Description: Amount:	Project management \$2,435.15

Component Description: Amount:	Project Management \$1,690.60
Component Description: Amount:	Project Management \$1,706.25
Component Description: Amount:	Project Management \$1,773.60
Component Description: Amount:	Project Management \$2,641.95
Component Description: Amount:	Project Management \$2,772.95

Other Expenses

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$65,889.61	\$57,684.61		\$6,933.33	
Equipment Storage	\$12,000.00	\$12,000.00	N/A	N/A	N/A
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$1,110.00	per Estimated Cost Justification WCTV-610- STA FCC Filing Fees v0	\$1,110.00	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
Tree Removal	\$3,000.00	\$3,000.00	N/A	N/A	N/A
Site Security	\$12,000.00	\$12,000.00	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
Develop and air announcement of upcoming channel change	\$10,000.00	\$10,000.00	N/A	N/A	N/A
Equipment	\$14,000.00	\$14,000.00	N/A	\$3,013.72	N/A

Total for all systems	\$5,739,750.30	\$5,508,936.21	N/A	\$2,321,534.29	N/A
Sub-total	\$65,889.61	\$57,684.61	N/A	\$6,933.33	N/A
DTV Medical Facility Notification	\$11,550.00	\$2,440.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$809.61	\$809.61	Please See Estimated Cost Justification WCTV-610- Disposal Costs v1	\$809.61	N/A
Delivery and Handling Charges					

Actual Information Description	File Name	
Equipment Storage	Information not provided.	
FCC Filing Fees - Special Temporary Authorization request	Component Description: Amount:	WCTV-610-STA FCC Filing Fees- \$1,110.00
FCC Filing Fees - Form 2100 license to cover application	Information not provided.	
Tree Removal	Information not provided.	
Site Security	Information not provided.	
MVPD Notification of Channel Change	Component Description: Amount:	Total Professional Services \$2,000.00
Develop and air announcement of upcoming channel change	Information not provided.	

Equipment Delivery and Handling Charges		
rianding charges	Component Description:	Scissor Lift 19'
	A	Electric
	Amount:	\$646.10
	Component Description:	Scissor Lift 19'
		Electric-Rental
	Amount:	\$1,006.75
	Component Description: Amount:	Freight and driver \$1,360.87
Disposal Costs (for equipment and other waste,		
net of any salvage value)	Component Description: Amount:	setup fee - county \$158.36
	Component Description:	Const. and
	Amount:	Demolitio \$218.28
	Component Description:	Rent - 0 Hauls
	Amount:	\$117.00
	Component Description:	Rent - O Hauls
	Amount:	\$117.00
	Component Description:	Const. and
	Amount:	Demolitio \$198.97
	Amount.	\$130.3 <i>1</i>
DTV Medical Facility Notification	Information not provided.	

Cost	Grand Total			
Information		Predetermined Cost Estimate	Estimated Cost	Actual Cost
	Total for all systems	\$5,739,750.30	\$5,508,936.21	\$2,321,534.29

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

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 912(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.	
		 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).

- 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.
- 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 Robert an authorized representative of the above-Folliard, III named applicant for the Authorization(s) specified above. Assistant Secretary

06/02/2020

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 IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733). 1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct. 3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 4. The above-named entity acknowledges the submission of the information herein 	

creates no obligation on the part of the government to pay any amount.

- 5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster **Relocation Fund are** necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- 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

an au name	are, under penalty of perjury, that I am thorized representative of the above- d applicant for the Authorization(s) ïed above.	Robert Folliard , III Assistant Secretary 06/02/2020
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.	
	must be promptly refunded to the Commission.	

Attachments