

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility	4685	Service: DTV	Call	WTAP-TV	Channel: 35 (UHF)
ID:			Sign:		
File	000002	8742			
Number:					
FRN: 00	18223693	Date	06/03		
		Submitted:	/2019		

Applicant Name, Type, and Contact Information

Applicant Information

Applicant	Address	Phone	Email	Applicant Type
GRAY TELEVISION	WTAP-TV	+1	robert.	Limited
LICENSEE, LLC	ONE	(304)	folliard@gray.	Liability
Doing Business As: GRAY	TELEVISION	485-	tv	Company
TELEVISION LICENSEE,	PLAZA	4588		
LLC	PARKERSBURG,			
	WV 26101			
	United States			

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer	Preparer Contac	ct Name and Inform	t Name and Information		
Contact Information	Applicant	Address	Phone	Email	
mormation	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.	Yes
	Briefly describe transition plan	The facility will be replacing the existing main transmitter, antenna, and transmission line and building an interim tower for the new interim transmitter, antenna, and transmission line.

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		
		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	CD3100P1		
		Year	2001		
		Туре	Inductive Output Tube		
		IOT Power Type	Single		
		Power Capacity	30 kW		

Existing Transmitter Information

Primary	New Transmitter Costs				
Transmitter	r Section	Question	Response		
	New Transmitter	Use	Primary (Main)		
		Change Type	Purchase New		
		Is this a request for upgraded equipment?	Yes		
		Manufacturer			
		Model	ULXTE-50		
		Transmitter Type	Solid State		
		Solid State Cooling	Liquid Cooled		
		Solid State Power capacity	31.7 kW		
		Justification for New Transmitter	Transmitter cannot be retuned.		

Primary Other Transmitter Costs

Transmitter	Section	Question	Response
	Electrical Service	Service Entrance (3 phases 800A 208V)	No
		Switchgear (industrial 800 amp)	No
		Transformer (480V)	No
		Power	N/A
		Rigid Conduit and Wiring	No
		Size	N/A
		Length	N/A
		Other Electrical Service	Yes
			1

	Description	The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.
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	
	Transmitter building work	Necessary building work for new mask filter.	
	Remote Control System	Remote control system for new transmitter.	

	Generator Relocation	Relocation of existing generator system to
		facilitate reconfiguration of transmitter building.
-		

Interim	New Transmitter Costs			
Transmitter	Section	Question	Response	
	New Transmitter	Use	Interim	
		Description of Use	N/A	
		Change Type	Purchase	
	-	Manufacturer		
		Model	ULXTE-60	
		Transmitter Type	Solid State	
		Solid State Cooling	Liquid Cooled	
		Solid State Power capacity	31.7 kW	
		Justification for New Transmitter	Interim transmitter needed to continue broadcasting through transition period.	

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

	Description	The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.
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?	No

Interim Transmitter	Other Transmitter Cost Not Listed		
	Name	Description	
	Remote Control System	Remote control system for interim transmitter	

Antennas Section		Question	Response
Antenna Rela	ated 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	Elliptical	
		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)	315.0 kW	

Manufacturer	
Model	ATW20H3- ESO-49 TRASAR
Year	2011

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?	No	
		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	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)	242.0 kW	
		Manufacturer		
			1	

Model	TFU-18JSC /VP-R-04
Year	2020
Justification for New Antenna	Existing antenna cannot be retuned.

Primary Antenna	Other Antenna Costs			
	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	Upper and lower frequency	
		Frequency	506.0 MHz - 602.0 MHz	
		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?	Single Channel	
		Feed Line Size	6 1/8 inches inches	
	Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes	
	Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No	

Sweep	Test
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Primary Other Antenna Cost Not Listed

Antenna Information not provided.

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?	No	
		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	Broadband Panel	
		Number of Stations Supported	1	
		Number of Panels/Bays	16	
		Lower Limit	596.00 MHz	
		Upper Limit	686.00 MHz	
		Design power capacity in use	100.0 %	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	330.0 kW	
		Manufacturer		
		Model	SBB- 16C170	
		Year	2017	

So that the
station may
operate on
either
channel
during the
transition.

Interim	Other Antenna Costs		
Antenna	Section	Question	Response
	Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
		Broadband or Single Channel?	В
		Feed Line Size	4 1/16 inches
	Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	Yes
	Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
	Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Interim Other Antenna Cost Not Listed

Antenna Informati

Information 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 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	Manufacturer		
	Line Manufacturer and Type	Туре	Rigid	
		Diameter	6 1/8 inches	
		Other Diameter	N/A	
		Segment Length	19 3/4 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	528 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?	No
		Туре	Rigid
		Diameter	6 1/8 inches
		Other Diameter	N/A
		Segment Length	20 inches
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	620 feet per run
		Justification for New Transmission Line	Segment lengths do not match up with the new channel.

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	Rigid
		Diameter	4 1/16 inches
		Segment Length	Broadband
		Other Segment Length	
		Number of parallel runs	1
		Length	300 feet per run
		Justification for New Transmission Line	Interim transmission line needed so that the station may continue broadcasting during the transition period.

Interim Other Transmission Line Expenses Not Listed

Transmission hometion not provided.

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

Primary	Existing Tower

Primary Tower	Section	Question	Response
	Existing Tower Description	Type of change	Modify Existing
		Tower Use	Primary (Main)
		Description of Use	N/A
		Ownership	Owned
		Is this tower consider Complex?	No
		Is this tower currently shared with any other stations?	Yes
		One or more FM, AM or TV radio broadcaster(s)	No
		Others Types of Users	Yes
		Is tower documented for structural analysis?	Yes
		Is tower compliant with Rev G?	Yes
	Existing Tower Structure	Do you have a tower registration number?	Yes
	Registration	ASR Number	1239800
	Coordinates (NAD83 (North American Datum of	Latitude (NAD83)	39° 20' 59.8" N-
	1983))	Longitude (NAD83)	081° 33' 55.4" W-
		Overall Structure Height	462.92 feet
		Support Structure Height	459.97 feet
		Ground Elevation Above Mean Sea Level (AMSL)	970.13 feet

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Gray Television Group, Inc.
Date Constructed	11/21/2003

Other Types of Users

Users

Coast Guard

Ohio Marc

T-Mobile

WA CO Sheriff

WIYE-LD 130392

WOVA-LD 125125

Warren Vol Fire

Wood Co Sherrif

Wood EMG

Primary Tower Modification Costs

Tower

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

Tower Rigging Costs

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

Primary Tower

Primary Tower

Other Tower Expenses Not Listed			
Name	Description		
Level II corrosion	Level II corrosion testing		
Move Equipment	Remove and install existing main and aux equipment		
Replace Main Antenna	Remove existing main antenna and install new main antenna.		
Anode Grounding System	Anode grounding system based upon corrosion testing		

Interim Tower	Tower Construction Costs				
	Section	Question	Response		
	Construct New Tower	Use	Interim		
		Description of Use	N/A		
		Height	240.00 feet		
		Justification for New Tower	Existing tower cannot take the weight of any more equipment.		

Interim Tower Rigging Costs

Tower

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

Interim

Tower

Other Tower Expenses Not Listed

Name	Description
Ice Bridge	Additional ice bridge for heat exchangers. 15'x20'
Interim Antenna Installation	Installation of interim antenna and associated transmission line

Outside	Section	Question	Response
Professional	Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	900
-		Explanation	Strategic Support and antenna RF consultant for selection of feed line antennas.
	Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	Yes
		Prepare engineering section of Form FCC Construction Permit Application	Yes
		For Auxiliary Facility	No
		For Main Facility	Yes
		Prepare engineering section of Form FCC License to Cover Application	Yes
		For Auxiliary Facility	No
		For Main Facility	Yes
		Prepare request for Special Temporary Authority	Yes
		Quantity	2
		Do you have Distributed Transmission System engineering services?	N/A
		Critical Facility	N/A
		Terrain-Shielded Facility	N/A
	Attorney and Other Outside Consulting Services	Prepare and file Form FCC Construction Permit Application	Yes
		For Auxiliary Facility	No
		For Main Facility	Yes

	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	2
	NEPA Section 106 environmental review	Yes
	Environmental Assessment	Yes
	ASR Modification	Yes
	FAA Consultation (including preparation of FAA Form 7460)	Yes
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
RF Field Engineering Services	Comprehensive coverage verification via field study	No
	RF exposure measurements	No
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

Outside Other Professional Services Expenses Not Listed Professional Services roopstsided.

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	Yes
		BLM or NFS Coordination	No
		FCC Construction Permit Minor Change	Yes
		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?	No
		Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
		Does this relocation require MVPD Notification of a Channel Change?	Yes

Other Expenses Not Listed

Other Expenses	Other Expenses Not Listed			
	Name	Description		
	Fencing	Erect fence extension around relocated generator		

Transmitters

Cost Information

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

Description Interim	Predetermined Cost Estimate \$2,699,294.56	Estimated Cost \$1,950,273.59	Estimated Cost Justification	Actual Cost \$723,979.03	Actual Cost Justification
Transmitter ULXTE-60	∉∠,U JJ,∠J4.JO	φ1, 3 30,273.39		φι 23,919.U3	
UHF - Liquid Cooled Solid State Transmitter 31.7 kW	\$1,215,287.70	\$1,215,287.70	GatesAir Quote Q- 80474	N/A	N/A
Other Electrical Service: The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.	\$2,000.00	\$2,000.00	N/A	N/A	N/A
Remote Control System	\$9,006.86	\$9,006.86	N/A	N/A	N/A

UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	\$1,473,000.00	\$723,979.03	***System Notice: Estimate adjusted and locked because line has been superseded.	\$723,979.03	N/A
Primary Transmitter ULXTE-50	\$1,197,181.52	\$1,197,181.52		\$615,164.63	
UHF - Liquid Cooled Solid State Transmitter 31.7 kW	\$870,034.66	\$870,034.66	GA- 0002297r2	\$606,056.59	N/A
Other Electrical Service: The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.	\$287,500.00	\$287,500.00	N/A	\$9,108.04	N/A
Generator Relocation	\$14,700.00	\$14,700.00	N/A	N/A	N/A
				N/A	N/A
Remote Control System	\$9,046.86	\$9,046.86	N/A	N/A	
	\$9,046.86 \$15,900.00	\$9,046.86 \$15,900.00	N/A N/A	N/A	N/A

Total for all	\$6,951,991.33	\$5,794,003.72	N/A	\$1,760,351.89	N/A
systems					

Components

Actual Information Description	File Name	
UHF - Liquid Cooled Solid State Transmitter 31.7 kW	Information not provided.	
Other Electrical Service: The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.	Information not provided.	
Remote Control System	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	Component Description: Amount:	ULXTE-60 Transmitter \$723,979.03
UHF - Liquid Cooled Solid State Transmitter 31.7 kW	Component Description: Amount:	ULXTE-50 Transmitter \$606,056.59
Other Electrical Service: The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.	Component Description: Amount:	Provide 277/490V SVC to Customer \$9,108.04
Generator Relocation	Information not provided.	
Remote Control System	Information not provided.	
Transmitter building work	Information not provided.	

Antennas

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 Antenna SBB- 16C170	\$267,830.00	\$152,730.40		\$56,335.84	
UHF - Lower Power Side Mount, One station antenna 200-500 kW, elliptically or circularly polarized	\$227,000.00	\$113,742.40	See attached Quote	\$52,815.84	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$3,520.00	N/A
Elbow complex, broadband, at antenna input, per 4 1/16. feedline (if needed)	\$10,950.00	\$10,588.00	Includes state and local taxes	N/A	N/A

Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$22,000.00	N/A	N/A	N/A
Primary Antenna TFU-18JSC /VP-R-04	\$353,380.00	\$291,257.09		\$105,428.40	
UHF - Lower Power Side Mount, One station antenna 200-500 kW, elliptically or circularly polarized	\$227,000.00	\$187,520.00	See attached Quote	\$85,250.00	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$3,520.00	N/A
New combiner, cost per channel (without antenna)	\$84,200.00	\$67,049.09	N/A	N/A	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$12,768.00	JEHQ1288- 03	\$7,022.40	N/A

Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$17,520.00	N/A	\$9,636.00	N/A
Sub-total	\$621,210.00	\$443,987.49	N/A	\$161,764.24	N/A
Total for all systems	\$6,951,991.33	\$5,794,003.72	N/A	\$1,760,351.89	N/A

Components

Actual Information Description	File Name	
UHF - Lower Power Side Mount, One station antenna 200-500 kW, elliptically or circularly polarized	Component Description:	UHF - Broadband Panel, Side Mount Aux /Interim, Sweep - Repack, incl. Field Engineer \$28,808.64
	Component Description:	UHF - Broadband panel, side mount Aux/Interim SBB- 16C170 16 Bay Broadband UHF Side Mount Antenna \$24,007.20

Sweep test of existing antenna		
	Component Description: Amount:	Repack Sweep \$1,920.00
	Component Description: Amount:	Sweep \$1,600.00
Elbow complex, broadband, at antenna input, per 4 1/16. feedline (if needed)	Information not provided.	
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.	
UHF - Lower Power Side Mount, One station antenna 200-500 kW, elliptically or circularly polarized	Component Description:	UHF - High Power Side Mount TV Ant TFU 18JSC/VP-R- 04 WTAP
	Amount:	\$38,750.00
	Component Description: Amount:	New Primary Antenna \$46,500.00
Sweep test of existing		
antenna	Component Description:	Sweep test New Primary Antenna
	Amount:	\$1,920.00
	Component Description:	WTAP-210- Sweep test New Primary Antenna
	Amount:	\$1,600.00
New combiner, cost per channel (without antenna)	Information not provided.	

Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Component Description:	WTAP-210-Elbow complex New Primary Antenna \$3,192.00
	Component Description:	WTAP-210-Elbow
		complex New
	Amount:	Primary Antenna \$3,830.40
Side mount brackets for high power antennas (if not		
included in antenna base	Component Description:	WTAP-210-Side
cost)		mount brackets
		New Primary Antenna
	Amount:	\$4,380.00
	Component Description:	Side mount
		brackets New
		Primary Antenna
	Amount:	\$5,256.00

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	\$48,900.00	\$47,335.55		\$0.00	
Rigid Transmission Line - copper, 4 1 /16" broadband	\$48,900.00	\$47,335.55	JEHQ1307	N/A	N/A
Primary Transmission Line	\$125,240.00	\$100,536.15		\$99,789.41	
Rigid Transmission Line - copper, 6 1/8"	\$125,240.00	\$100,536.15	JEHQ1288- 03	\$99,789.41	N/A
Sub-total	\$174,140.00	\$147,871.70	N/A	\$99,789.41	N/A
Total for all systems	\$6,951,991.33	\$5,794,003.72	N/A	\$1,760,351.89	N/A

Actual Information Description	File Name
Rigid Transmission Line - copper, 4 1/16" broadband	Information not provided.

Rigid Transmission Line - copper, 6 1/8"	Component Description: Amount:	New Primary Transmission Line \$28,095.62
	Component Description:	WTAP-310-New
		Primary
		Transmission Line
	Amount:	\$23,412.99
	Component Description:	Rigid
		Transmission Line
		- Copper, Elbow,
		Dehydrator, etc.
	Amount:	\$30,175.50
	Component Description:	0018596501 6-50
		TO 4-50 Reducer
	Amount:	\$18,105.30

Tower Equipment and Rigging Costs

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
Primary Tower TOWER	\$1,435,228.00	\$1,245,572.41		\$68,823.75	
Structural engineering tower load study for well documented tower	\$12,600.00	\$19,815.00	Gates Air Quote Q- 76839 Includes state and local taxes; see invoice Hodge Structural Engineers 17G000508.	\$19,815.00	N/A
Replace Main Antenna	\$134,813.00	\$134,813.00	N/A	N/A	N/A
Move Equipment	\$130,215.00	\$130,215.00	GTIA Quote Q17-06- 030b1 dated 12/17 /18 (uploaded into LMS	\$32,553.75	N/A
Anode Grounding System	\$15,000.00	\$15,000.00	See vendor invoice	\$10,055.00	N/A
Short Tower (less than 500')	\$84,200.00	\$134,954.41	E-17440-5 Includes steel member replacement at top of tower	N/A	N/A

Serious tower reinforcement /modifications	\$1,052,000.00	\$804,375.00	Includes state and local taxes	N/A	N/A
Level II corrosion	\$6,400.00	\$6,400.00	N/A	\$6,400.00	N/A
Interim Tower	\$536,776.25	\$532,576.25		\$7,332.00	
New tower	\$351,576.25	\$351,576.25	Includes the foundation, as well as state and local taxes and shipping.	\$7,332.00	N/A
Ice Bridge	\$21,000.00	\$21,000.00	N/A	N/A	N/A
Interim Antenna Installation	\$80,000.00	\$80,000.00	N/A	N/A	N/A
Short Tower (less than 500')	\$84,200.00	\$80,000.00	N/A	N/A	N/A
Sub-total	\$1,972,004.25	\$1,778,148.66	N/A	\$76,155.75	N/A
Total for all systems	\$6,951,991.33	\$5,794,003.72	N/A	\$1,760,351.89	N/A

Actual Information	
Description	File Name

Structural engineering towe load study for well		
documented tower	Component Description:	Structural
		Engineering
	•	Services
	Amount:	\$6,500.00
	Component Description:	Engineering
		Evaluation
	Amount:	\$2,000.00
	Component Description:	Engineering
		evaluation of the
		460' guyed tower.
	Amount:	\$2,000.00
	Component Description:	Site Survey
	Amount:	\$8,115.00
	Component Description:	Po opolycia
	Component Description.	Re-analysis Structural
		engineering of 460
		tower
	Amount:	\$1,200.00
Replace Main Antenna	Information not provided.	
Move Equipment		
	Component Description:	Tower Equipment
		and Rigging
	Amount:	\$32,553.75

Anode Grounding System		
	Component Description:	Supply labor and equipment to install customer supplied Anode Grounding Systems (3) guy anchor system (6 anodes total) for the (3) WTAP-TV guy anchors with all materials supplied by WTAP- TV \$7,250.00
	Component Description: Amount:	Grounding System \$2,805.00
Short Tower (less than 500')	Information not provided.	
Serious tower reinforcement /modifications	Information not provided.	
Level II corrosion		
	Component Description: Amount:	Level II corrosion risk analysis \$6,400.00

New tower		
	Component Description:	Geotechnical services for New Interim tower
	Amount:	proposed site \$5,865.00
	Component Description:	For professional
		services rendered through October 31, 2018
	Amount:	\$852.00
	Component Description:	Total professional services
	Amount:	\$615.00
Ice Bridge	Information not provided.	
Interim Antenna Installation	Information not provided.	
Short Tower (less than 500')	Information not provided.	

Outside Professional Services

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 Co Justificati
Outside Professional Services	\$199,680.00	\$197,311.76		\$82,360.96	
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	\$2,105.00	\$2,000.00	N/A	\$1,337.50	N/A
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	\$10,520.00	\$12,041.13	Environmentex Consulting Proposal	N/A	N/A
NEPA Section 106 environmental review, if needed	\$6,310.00	\$12,458.13	Waterman Douglass & Associates invoice 20180051 A WTAP; Justifying invoice Environmentex 18303	\$7,391.11	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$7,360.00	\$7,000.00	N/A	\$125.00	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 - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$196.50	N/A
Prepare request for Special Temporary Authorization	\$4,100.00	\$3,000.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	N/A	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,062.50	Hodge Structural Engineers invoice 17G000507.1	\$7,062.50	N/A

Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A
ASR modification (prepare FCC Form 854)	\$2,105.00	\$2,000.00	N/A	N/A	N/A
Project management of the transition	\$142,200.00	\$135,000.00	N/A	\$66,248.35	N/A
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Sub-total	\$199,680.00	\$197,311.76	N/A	\$82,360.96	N/A
Total for all systems	\$6,951,991.33	\$5,794,003.72	N/A	\$1,760,351.89	N/A

Actual Information	
Description	File Name

Component Description:	Regarding interim operation on repack Ch-35, various discussions regarding removal of tower lighting requirement, prepare and submit FAA form 74460-1 \$650.00
Component Description:	Regarding interim operation on repack Ch-35, determine site location and elevation data for new (interim antenna) tower. \$687.50
Information not provided.	
Component Description: Amount:	20180051 WTAP Tower NEPA Study \$7,391.11
Component Description: Amount:	Review proposed main antenna and broadband interim antenna specification from 2 manufacturers. \$125.00
	Amount: Component Description: Information not provided. Component Description: Amount: Component Description:

Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description:	Complete and file initial repack construction permit application for WTAP
	Amount:	\$196.50
Prepare request for Special Temporary Authorization	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Information not provided.	

Perform engineering study for new channel	Component Description:	Regarding repack
assignment and antenna development		Ch-35, review antenna proposal from two vendors
	Amount:	\$187.50
	Component Description: Amount:	RF Consulting \$125.00
	Component Description:	Antenna and
		Transmission Line Mapping
	Amount:	\$3,600.00
	Component Description:	Perform engineering study for new channel assignment
	Amount:	\$2,712.50
	Component Description:	Perform engineering study for new channel
	Amount:	assignment \$437.50
Prepare and or review reimbursement form	Information not provided.	
ASR modification (prepare FCC Form 854)	Information not provided.	
Project management of the transition	Component Description:	Project
	Amount:	Management \$1,363.95
	Component Description:	Project

Component Description: Amount:	Project Management \$28.20
Component Description: Amount:	Project Management \$3,605.65
Component Description: Amount:	Project Management \$1,890.75
Component Description: Amount:	Project Management \$1,992.65
Component Description: Amount:	Project Management \$2,457.40
Component Description: Amount:	Cost Reconciliation \$2,775.45
Component Description: Amount:	Project Management \$4,280.65
Component Description: Amount:	Project management \$3,536.90
Component Description: Amount:	Project Management \$755.80

Component Description: Amount:	Project Management \$1,706.25
Component Description: Amount:	Project Management \$2,472.60
Component Description: Amount:	Project Management \$2,116.85
Component Description: Amount:	Project Management \$1,728.10
Component Description: Amount:	Project Management \$802.25
Component Description: Amount:	Project managment \$1,328.55
Component Description: Amount:	Project Management \$3,558.80
Component Description: Amount:	Project Management \$3,588.75
Component Description: Amount:	Project Management \$2,721.85

	Component Description: Amount:	Project Management \$1,845.25
	Component Description: Amount:	Project Management \$2,775.85
	Component Description: Amount:	Project Management \$2,521.95
	Component Description: Amount:	Transition Related Project Management Costs \$3,300.00
	Component Description: Amount:	Project Management \$4,369.80
	Component Description: Amount:	Project Management \$1,936.65
	Component Description: Amount:	Project management \$2,750.15
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	

Other Expenses

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
Other Expenses	\$88,481.00	\$79,229.00		\$1,137.87	
Fencing	\$9,691.00	\$9,691.00	N/A	N/A	N/A
MVPD Notification of Channel Change	\$1,000.00	\$1,000.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	\$13,600.00	\$13,600.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$30,000.00	\$30,000.00	N/A	\$1,137.87	N/A
Non-zoning permits	\$16,000.00	\$16,000.00	N/A	N/A	N/A
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A

FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 minor change CP application	\$1,110.00	\$1,070.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$2,353.00	N/A	N/A	N/A
Sub-total	\$88,481.00	\$79,229.00	N/A	\$1,137.87	N/A
Total for all systems	\$6,951,991.33	\$5,794,003.72	N/A	\$1,760,351.89	N/A

Actual Information Description	File Name	
Fencing	Information not provided.	
MVPD Notification of Channel Change	Information not provided.	
Develop and air announcement of upcoming channel change	Information not provided.	
Equipment Delivery and Handling Charges	Information not provided.	
Disposal Costs (for equipment and other waste, net of any salvage value)	Component Description: Amount:	30 yrd dumpster \$1,137.87
Non-zoning permits	Information not provided.	
FCC Filing Fees - Special Temporary Authorization request	Information not provided.	

FCC Filing Fees - Form 2100 license to cover application	Information not provided.
FCC Filing Fees - Form 2100 minor change CP application	Information not provided.
DTV Medical Facility Notification	Information not provided.

Cost Information	Grand Total				
		Predetermined Cost Estimate	Estimated Cost	Actual Cost	
	Total for all systems	\$6,951,991.33	\$5,794,003.72	\$1,760,351.89	

Reimbursem	entestatus	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 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.	
		 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. 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.
- 7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

-	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.	
an auth named	re, under penalty of perjury, that I am norized representative of the above- applicant for the Authorization(s) ed above.	Robert J. Folliard , III Assistant Secretary 06/03/2019

Certification	Section	Question	Response
Gertification	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).	
		 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 must be promptly refunded to the Commission.	
9.	The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.	
an au name	are, under penalty of perjury, that I am thorized representative of the above- d applicant for the Authorization(s) ied above.	Robert J. Folliard , III Assistant Secretary 06/03/2019

Attachments

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