Approved by OMB (Office of Management and Budget) 3060-1178

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID: **4685** | Service: **DTV** | Call Sign: **WTAP-TV** | Channel: **35 (UHF)**

File Number: **0000028742**

FRN: **0018223693** | Date Submitted: **12/10/2018**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
GRAY TELEVISION LICENSEE, LLC Doing Business As: GRAY TELEVISION LICENSEE, LLC	Robert Folliard PO Box 30319 Atlanta, GA 30319 United States	+1 (202) 750-1585	Robert.Folliard@gray.tv	Limited Liability Company

Reimbursement Contact Information

Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

Applicant	Address	Phone	Email
Samuel Hariton *Widelity*	Samuel Hariton 4031 University Dr Suite 100 Fairfax, VA 22030 United States	+1 (339) 222-8107	sam.hariton@widelity.com

Broadcaster Information and Transition Plan

Question	Response
Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	Yes
Briefly describe transition plan	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 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	CD3100P1
	Year	2001
	Type	Inductive Output Tube
	IOT Power Type	Single
	Power Capacity	30 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-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 Transmitter

Other Transmitter Costs

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
	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 leashold 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
Generator Relocation	Relocation of existing generator system to facilitate reconfiguration of transmitter building.
Transmitter building work	Necessary building work for new mask filter.

Remote Control System	Remote control system for new transmitter.

Interim Transmitter

New Transmitter Costs

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	38 kW
	Justification for New Transmitter	Interim transmitter needed to continue broadcasting through transition period.

Interim Transmitter

Other Transmitter Costs

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
	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 leashold 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?	No

Interim Transmitter

Other Transmitter Cost Not Listed

Name	Description
Remote Control System	Remote control system for interim transmitter

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	Elliptical
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	315.0 kW

Manufacturer	
Model	ATW20H3-ESO-49 TRASAR
Year	2011

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?	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
	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)	242.0 kW
	Manufacturer	

	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?	No
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
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	Do you require the sweep testing of transmission line and antenna?	Yes

Primary Antenna	**Other Antenna Cost Not Listed** Information not provided.

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?	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
	Type	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)	250.0 kW
	Manufacturer	
	Model	TFU-16WB C160
	Year	2017

	Justification for New Antenna	So that the station may operate on either channel during the transition.

Interim Antenna

Other Antenna Costs

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	B
	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 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 3/4 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	528 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	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.

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	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 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

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)	No
	Others Types of Users	Yes
	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	Yes
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1239800
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	39° 20' 59.8" N-
	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
Wood EMG
Wood Co Sherrif
Warren Vol Fire
WOVA-LD 125125
WIYE-LD 130392
WA CO Sheriff
T-Mobile
Ohio Marc
Coast Guard

Primary Tower

Tower Modification Costs

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for documented tower
Tower Reinforcements	Please select whether tower reinforcements are needed:	Serious 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
Level II corrosion	Level II corrosion testing
Replace Main Antenna	Remove existing main antenna and install new main antenna.
Move Equipment	Remove and install existing main and aux equipment
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

Tower Rigging Costs

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 Professional Services Costs

Section	Question	Response
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 Professional Services Costs

Other Professional Services Expenses Not Listed

Information not provided.

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	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

Other Expenses Not Listed

Name	Description
Fencing	Erect fence extension around relocated generator

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 ULXTE-60	**$1,484,006.86**	**$1,202,796.76**		**$723,979.03**	
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
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	$1,473,000.00	$1,191,789.90	N/A	$723,979.03	N/A
Remote Control System	***$9,006.86***	$9,006.86	N/A	N/A	N/A
Primary Transmitter ULXTE-50	**$1,197,181.52**	**$1,197,181.52**		**$615,164.63**	
Remote Control System	***$9,046.86***	$9,046.86	N/A	N/A	N/A
Transmitter building work	***$15,900.00***	$15,900.00	N/A	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.	***$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
UHF - Liquid Cooled Solid State Transmitter 31.7 kW	***$870,034.66***	$870,034.66	GA-0002297r2	$606,056.59	N/A
Sub-total	$2,681,188.38	$2,399,978.28	N/A	$1,339,143.66	N/A
Total for all systems	$5,657,101.88	$5,013,046.65	N/A	$1,539,488.51	N/A

Components

Actual Information Description	File Name
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.

UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	**Component Description:** **Amount:**	ULXTE-60 Transmitter $723,979.03
Remote Control System	Information not provided.	
Remote Control System	Information not provided.	
Transmitter building work	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.	**Component Description:** **Amount:**	Provide 277/490V SVC to Customer $9,108.04
Generator Relocation	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 31.7 kW	**Component Description:** **Amount:**	ULXTE-50 Transmitter $606,056.59

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 TFU-16WB C160	**$267,830.00**	**$193,775.50**		**$0.00**	
UHF - Lower Power Side Mount, One station antenna -- 200-500 kW, elliptically or circularly polarized	$227,000.00	$154,787.50	See attached Quote	N/A	N/A
Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	N/A	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	**$269,180.00**	**$224,208.00**		**$57,506.40**	
Side mount brackets for high power antennas (if not included in antenna base cost)	$23,150.00	$17,520.00	N/A	$5,256.00	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	$12,300.00	$12,768.00	JEHQ1288-03	$3,830.40	N/A
Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	$1,920.00	N/A

UHF - Lower Power Side Mount, One station antenna -- 200-500 kW, elliptically or circularly polarized	$227,000.00	$187,520.00	See attached Quote	$46,500.00	N/A
Sub-total	$537,010.00	$417,983.50	N/A	$57,506.40	N/A
Total for all systems	$5,657,101.88	$5,013,046.65	N/A	$1,539,488.51	N/A

Components

Actual Information Description	File Name
UHF - Lower Power Side Mount, One station antenna -- 200-500 kW, elliptically or circularly polarized	Information not provided.
Sweep test of existing antenna	Information not provided.
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.
Side mount brackets for high power antennas (if not included in antenna base cost)	**Component Description:** Side mount brackets New Primary Antenna **Amount:** $5,256.00

Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	**Component Description:** **Amount:**	WTAP-210-Elbow complex New Primary Antenna $3,830.40
Sweep test of existing antenna	**Component Description:** **Amount:**	Sweep test New Primary Antenna $1,920.00
UHF - Lower Power Side Mount, One station antenna -- 200-500 kW, elliptically or circularly polarized	**Component Description:** **Amount:**	New Primary Antenna $46,500.00

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	**$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**		**$58,271.12**	
Rigid Transmission Line - copper, 6 1/8"	$125,240.00	$100,536.15	JEHQ1288-03	$58,271.12	N/A
Sub-total	$174,140.00	$147,871.70	N/A	$58,271.12	N/A
Total for all systems	$5,657,101.88	$5,013,046.65	N/A	$1,539,488.51	N/A

Components

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:**	Rigid Transmission Line - Copper, Elbow, Dehydrator, etc.
	Amount:	$30,175.50
	Component Description:	New Primary Transmission Line
	Amount:	$28,095.62

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	**$1,439,826.25**	**$1,243,225.66**		**$21,655.00**	
Anode Grounding System	***$15,000.00***	$15,000.00	See vendor invoice	$10,055.00	N/A
Move Equipment	***$134,813.25***	$134,813.25	N/A	N/A	N/A
Level II corrosion	***$6,400.00***	$6,400.00	N/A	$6,400.00	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
Replace Main Antenna	***$134,813.00***	$134,813.00	N/A	N/A	N/A
Structural engineering tower load study for well documented tower	$12,600.00	$12,870.00	Includes state and local taxes	$5,200.00	N/A
Interim Tower	**$536,776.25**	**$532,576.25**		**$5,865.00**	

New tower	***$351,576.25***	$351,576.25	Includes the foundation, as well as state and local taxes and shipping.	$5,865.00	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	$1,976,602.50	$1,775,801.91	N/A	$27,520.00	N/A
Total for all systems	$5,657,101.88	$5,013,046.65	N/A	$1,539,488.51	N/A

Components

Actual Information Description	File Name	
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
	Amount:	$7,250.00
	Component Description:	Grounding System
	Amount:	$2,805.00

Move Equipment	Information not provided.	
Level II corrosion	**Component Description:** **Amount:**	Level II corrosion risk analysis $6,400.00
Short Tower (less than 500')	Information not provided.	
Serious tower reinforcement /modifications	Information not provided.	
Replace Main Antenna	Information not provided.	
Structural engineering tower load study for well documented tower	**Component Description:** **Amount:**	Re-analysis Structural engineering of 460 tower $1,200.00
	Component Description: **Amount:**	Engineering Evaluation $2,000.00
	Component Description: **Amount:**	Engineering evaluation of the 460' guyed tower. $2,000.00
New tower	**Component Description:** **Amount:**	Geotechnical services for New Interim tower proposed site $5,865.00
Ice Bridge	Information not provided.	
Interim Antenna Installation	Information not provided.	
Short Tower (less 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 Co Justificati
Outside Professional Services	**$199,680.00**	**$192,182.26**		**$57,047.33**	
NEPA Section 106 environmental review, if needed	$6,310.00	$7,391.13	Waterman Douglass & Associates invoice 20180051 A WTAP	$7,391.13	N/A
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	$2,105.00	$2,000.00	N/A	$687.50	N/A
ASR modification (prepare FCC Form 854)	$2,105.00	$2,000.00	N/A	N/A	N/A
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	$10,520.00	$12,041.13	Environmentex Consulting Proposal	N/A	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
Prepare and or review reimbursement form	$2,630.00	$2,500.00	N/A	N/A	N/A
Address transition timing and coordination issues w/ other stations and wireless	$2,630.00	$2,500.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	$3,155.00	$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 request for Special Temporary Authorization	$4,100.00	$3,000.00	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	$196.50	N/A
Project management of the transition	$142,200.00	$135,000.00	N/A	$45,184.70	N/A
Perform engineering study for new channel assignment and antenna development	$7,360.00	$7,000.00	N/A	$3,462.50	N/A
Sub-total	$199,680.00	$192,182.26	N/A	$57,047.33	N/A
Total for all systems	$5,657,101.88	$5,013,046.65	N/A	$1,539,488.51	N/A

Components

Actual Information Description	File Name	
NEPA Section 106 environmental review, if needed	**Component Description:** **Amount:**	20180051 WTAP Tower NEPA Study $7,391.13
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	**Component Description:** **Amount:**	Regarding interim operation on repack Ch-35, determine site location and elevation data for new (interim antenna) tower. $687.50

ASR modification (prepare FCC Form 854)	Information not provided.	
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	Information not provided.	
Attorney Fees - Prepare and File request for Special Temporary Authorization	**Component Description:** **Amount:**	Review proposed main antenna and broadband interim antenna specification from 2 manufacturers. $125.00
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	
Prepare and or review reimbursement form	Information not provided.	
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	
Prepare request for Special Temporary Authorization	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
Project management of the transition	**Component Description:**	Transition Related Project Management Costs
	Amount:	$3,300.00
	Component Description:	Project managment
	Amount:	$1,328.55
	Component Description:	Project Management
	Amount:	$3,558.80
	Component Description:	Project Management
	Amount:	$755.80
	Component Description:	Project Management
	Amount:	$1,992.65
	Component Description:	Project Management
	Amount:	$2,457.40
	Component Description:	Project Management
	Amount:	$2,116.85

Component Description:	Project Management
Amount:	$2,521.95

Component Description:	Project Management
Amount:	$802.25

Component Description:	Project Management
Amount:	$2,472.60

Component Description:	Project Management
Amount:	$1,936.65

Component Description:	Project Management
Amount:	$1,890.75

Component Description:	Project Management
Amount:	$1,706.25

Component Description:	Project Management
Amount:	$1,728.10

Component Description:	Project Management
Amount:	$1,845.25

Component Description:	Project Management
Amount:	$2,721.85

Component Description:	Project Management
Amount:	$28.20
Component Description:	Project management
Amount:	$2,750.15
Component Description:	Project Management
Amount:	$1,363.95
Component Description:	Project Management
Amount:	$4,369.80
Component Description:	Project management
Amount:	$3,536.90

Perform engineering study for new channel assignment and antenna development	**Component Description:** **Amount:**	Regarding repack Ch-35, review antenna proposals from two vendors $187.50
	Component Description: **Amount:**	RF Consulting $125.00
	Component Description: **Amount:**	Perform engineering study for new channel assignment $437.50
	Component Description: **Amount:**	Perform engineering study for new channel assignment $2,712.50

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	**$88,481.00**	**$79,229.00**		**$0.00**	
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
Non-zoning permits	***$16,000.00***	$16,000.00	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	N/A	N/A
Equipment Delivery and Handling Charges	***$5,000.00***	$5,000.00	N/A	N/A	N/A
DTV Medical Facility Notification	$11,550.00	$2,353.00	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
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	$190.00	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
Sub-total	$88,481.00	$79,229.00	N/A	$0.00	N/A
Total for all systems	$5,657,101.88	$5,013,046.65	N/A	$1,539,488.51	N/A

Components

Information not provided.

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	$5,657,101.88	$5,013,046.65	$1,539,488.51

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	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.	
	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** *Assistant Secretary* 12/10/2018

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) .
6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

	8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission. 9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.	
	I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.	**Robert Folliard** *Assistant Secretary* 12/10/2018

Attachments