

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility 35037 Service: DTV Call KKTV Channel: 26 (UHF)

ID:

Sign:

File **0000028650**

Number:

FRN: **0018223693** Date **04/19**

Submitted: /2021

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
GRAY TELEVISION LICENSEE, LLC Doing Business As: KKTV	KKTV 4370 PEACHTREE ROAD, NE ATLANTA, GA 30319 United States	+1 (404) 504-9828	Robert. Folliard@gray. tv	Limited Liability Company

Reimbursement Contact Name and Information Reimbursement Contact 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.	No
Briefly describe transition plan	KKTV will be replacing the main antenna, transmitter, and transmission line. KKTV will be installing an interim transmitter, transmission line and side-mount antenna.

Transmitters

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

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	
Manufacturer and Type	Model	PowerCD
	Year	2009
	Туре	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	23 kW

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	UAXTE- 32R44
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	16 kW
	Justification for New Transmitter	Upgrading existing IOT transmitter with air cooled solid state transmitter. Per discussions with GatesAir, due to the high altitude of the station's transmitter site, the station will require a 19 kW transmitter to make the power necessary (16 kW).

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
	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

Other Transmitter Cost Not Listed

Name	Description
Building Expansion	Building expansion, electrical expansion, ICE shield expansion.
Mask Filter	30 KW Mask filter

Interim Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Interim
	Description of Use	N/A
	Change Type	Purchase
	Manufacturer	
	Model	TX9
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	19 kW
	Justification for New Transmitter	It's needed so the station can operate while the main transmitter is replaced. Per discussions with GatesAir, due to the high altitude of the station's transmitter site, the station will require a 19 kW transmitter to make the power necessary (16 kW).

Interim Transmitter

Other Transmitter Costs

Service Entrance (3 phases 800A 208V) No	Section	Question	Response
Transformer (480V) Power N/A Rigid Conduit and Wiring No Size N/A Length Other Electrical Service 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? Type N/A Size Other Size N/A Does the Transmitter Building require an addition, modification or Leasehold improvement? Size N/A No No N/A	Electrical Service	Service Entrance (3 phases 800A 208V)	No
Power N/A		Switchgear (industrial 800 amp)	No
Rigid Conduit and Wiring No		Transformer (480V)	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 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? Type N/A Size N/A Other Size N/A Transmitter Building Addition/Modification or Leasehold Improvement Size N/A		Power	N/A
Length Other Electrical Service Pes Description The new transmitter will require reconfiguration of the electrical service on site. 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? Type N/A Size N/A Other Size N/A Transmitter Building Addition/Modification or Leasehold improvement Size N/A Size N/A		Rigid Conduit and Wiring	No
Other Electrical Service 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? Type N/A Size N/A Other Size N/A Transmitter Building Addition/Modification or Leasehold Improvement Size N/A		Size	N/A
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? Type N/A Size N/A Transmitter Building Addition/Modification or Leasehold Improvement Description The new transmitter require reconfiguration as electrical service on site. The electrical service on site. The electrical contractors. No N/A N/A No No N/A		Length	N/A
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?		Other Electrical Service	Yes
HVAC Service? Type N/A Size N/A Other Size N/A Transmitter Building Addition/Modification or Leasehold Improvement Size N/A Does the Transmitter Building require an addition, modification, other leashold improvement? Size N/A		Description	transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical
Size N/A Other Size N/A Transmitter Building Addition/Modification or Leasehold Improvement Size N/A Does the Transmitter Building require an addition, modification, other leashold improvement? Size N/A	HVAC Service		No
Other Size N/A Transmitter Building Does the Transmitter Building require an addition/Modification or Leasehold improvement? Size N/A		Туре	N/A
Transmitter Building Addition/Modification or Leasehold Improvement Does the Transmitter Building require an addition, modification, other leashold improvement? Size N/A		Size	N/A
Addition/Modification addition, modification, other leashold improvement? Size N/A		Other Size	N/A
Size N/A	Addition/Modification or Leasehold	addition, modification, other leashold	No
Channel 14 Costs Is an RF Consulting Engineer needed? N/A		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 Related Expenses	Do you have antenna related expenses?	Yes

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?	Yes
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	Yes
Existing Antenna Manufacturer and Type	Class	Full Power
	Mounting	Top 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)	550.0 kW

Manufacturer	
Model	ATW22HS6- ETC170- 49H Trasar
Year	2009

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?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna	Class	Full Power
Manufacturer and Types	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)	350.0 kW
	Manufacturer	
		1

Model	ATW17HS6-
V	ETCX-26H
Year	2019
Justification for New Antenna	Current antenna is Channel 49, new channel assignment is 26. Current antenna is not re- tunable.

Other Antenna Costs

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	4 1/16 inches inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	

Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

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?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna	Class	Full Power
Manufacturer and Type	Mounting	Side Mount
	Antenna position in stack	Not in Stac
	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)	20.0 kW
	Manufacturer	
	Model	ATW16H6- ESC170- 26L

Year	2019
Justification for New Antenna	Interim Antenna needed so that the station can broadcast while the new main antenna is installed.

Interim Antenna

Other Antenna Costs

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	No
	Broadband or Single Channel?	N/A
	Feed Line Size	N/A
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

Interim Antenna

Other Antenna Cost Not Listed

Information not provided.

Transmission ^{Seffien}	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

Primary Transmission Line

Existing Transmission Line

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	350 feet per run

New Transmission Line

Primary
Transmissio

on 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	4 1/16 inches
	Other Diameter	N/A
	Segment Length	19 1/2 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	370 feet per run
	Justification for New Transmission Line	New Channel 26 Assignment required RF Line sections to be at 19.5' per section, existing RF Line is currently 19.75' per section.

Other Transmission Line Expenses Not Listed

Primary

Other Transmission

Transmission to provided.

Interim

New Transmission Line

Transmissio	nsettion	Question	Response
	New Transmission Line	Use	Interim
	Costs	Description of Use	N/A
		Change Type	Purchase New
		Туре	Flexible Air
		Diameter	4 inches
		Segment Length	N/A
		Other Segment Length	
		Number of parallel runs	1
		Length	300 feet per
	Justification for New Transmission Line	Interim transmission line needed so that the station can continue broadcasting while the new transmission line is installed.	

Interim Other Transmission Line Expenses Not Listed Transmission Loine tion 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?	No
	One or more FM, AM or TV radio broadcaster(s)	N/A
	Others Types of Users	N/A
	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	Yes
Existing Tower Structure	Do you have a tower registration number?	Yes
Registration	ASR Number	1024861
Coordinates (NAD83 (North American Datum of	Latitude (NAD83)	38° 44' 42.0" N-
1983))	Longitude (NAD83)	104° 51' 45.0" W-
	Overall Structure Height	353.01 feet
	Support Structure Height	299.87 feet
	Ground Elevation Above Mean Sea Level (AMSL)	9439.85 fee

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Gray Television Group, Inc.
Date Constructed	06/01/1960

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:	No 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
Interim Antenna Rigging	Rigging costs for the interim antenna installation

Outside Professional

Section	Question	Response
Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	900
	Explanation	Strategic Planning
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	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	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	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	1
	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	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	Yes
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

Outside Other Professional Services Expenses Not Listed Professional Services (Costsided.

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	No
	FCC License to Cover Application	Yes
	FCC Special Temporary Authority Application	Yes
Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
	Does this relocation require Equipment Storage?	Yes
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD Notification of a Channel Change?	Yes

Other Expenses

Other Expenses Not Listed

Name	Description
Other State and Local Taxes	Other State and Local Taxes on all equipment and services not explicitly stated otherwise.

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 TX9	\$727,834.41	\$731,884.41		\$583,432.52	
UHF inside RF system including switching	\$147,500.00	\$151,550.00	State and local taxes added to the cost	\$5,098.11	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

UHF - Air	\$578,334.41	\$578,334.41	Per	\$578,334.41	N/A
Cooled Solid			Estimated		
State			Cost		
Transmitter 19			Justification		
kW			KKTV-110-		
			New 1st		
			Interim		
			Transmitter		
			v1, New		
			interim		
			transmitter		
			required		
			during the		
			transition of		
			the main		
			transmitter		
			to the new		
			repack		
			frequency.		
Transmitter	\$1,085,897.88	\$1,085,897.88	frequency.	\$134,981.72	
Transmitter	\$1,085,897.88 \$417,208.00	\$1,085,897.88 \$417,208.00	frequency. GE Johnson	\$134,981.72 \$134,981.72	N/A
Transmitter UAXTE-32R44					N/A
Transmitter UAXTE-32R44 Building			GE Johnson		N/A
Transmitter UAXTE-32R44 Building			GE Johnson Construction		N/A
Transmitter UAXTE-32R44 Building			GE Johnson Construction Co. KKTV		N/A
Transmitter UAXTE-32R44 Building			GE Johnson Construction Co. KKTV Renovations		N/A
_			GE Johnson Construction Co. KKTV Renovations Estimate		N/A
Transmitter UAXTE-32R44 Building			GE Johnson Construction Co. KKTV Renovations Estimate (\$394,468). Keystone Associates		N/A
Transmitter UAXTE-32R44 Building			GE Johnson Construction Co. KKTV Renovations Estimate (\$394,468). Keystone		N/A
Transmitter UAXTE-32R44 Building			GE Johnson Construction Co. KKTV Renovations Estimate (\$394,468). Keystone Associates		N/A
Transmitter UAXTE-32R44 Building			GE Johnson Construction Co. KKTV Renovations Estimate (\$394,468). Keystone Associates Architect Fee quote (\$22,740).		N/A
Transmitter UAXTE-32R44 Building			GE Johnson Construction Co. KKTV Renovations Estimate (\$394,468). Keystone Associates Architect Fee quote (\$22,740). Combined		N/A
Transmitter UAXTE-32R44 Building			GE Johnson Construction Co. KKTV Renovations Estimate (\$394,468). Keystone Associates Architect Fee quote (\$22,740).		N/A
Transmitter UAXTE-32R44 Building			GE Johnson Construction Co. KKTV Renovations Estimate (\$394,468). Keystone Associates Architect Fee quote (\$22,740). Combined		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
UHF - Air Cooled Solid State Transmitter 16 kW	\$646,889.88	\$646,889.88	GatesAir quote GA- 00022480r1	\$0.00	N/A
Sub-total	\$1,813,732.29	\$1,817,782.29	N/A	\$718,414.24	N/A
Total for all systems	\$2,844,129.00	\$3,513,356.67	N/A	\$2,113,449.02	N/A

Components

Actual Information Description	File Name	
UHF inside RF system including switching	Component Description: Amount:	DIELECTRIC- R0019581503 ELBOW 450 EIA 6 X 6 CU "QS" INSIDE USE \$4,890.07
	Component Description: Amount:	SHELF-APD-D \$208.04

Other Electrical Service: Information not provided. 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. UHF - Air Cooled Solid State Transmitter 19 kW **Component Description:** 75% Final Payment \$363,603.75 Amount: **Component Description:** RF Adapter 4-50 EIA& 25' Switch Control **Amount:** \$1,391.26 **Component Description:** Engineerin 9027.5198.02 Amount: \$39,062.30 **Component Description:** 25% downpayment UHF 19.0 kw CH26 R&S TX9 **Amount:** \$121,201.25 **Component Description:** Engineering 9027.5198.02 **Amount:** \$21,189.96 **Component Description: DP Tax** \$31,885.89 **Amount: Building Expansion Component Description:** Limited Architectural Services

Amount:

\$5,200.00

Component Description: KKTV-Digital

Transmitter
Upgrade
\$52,565,72

Amount: \$52,565.72

Component Description: Remove and

dispose 6' of existing chain link fence to include one line post.

Amount: \$2,622.00

Component Description: Architectural

Amount:

Amount:

Services \$654.40

Component Description: Removed and

stored on site \$2,622.00

Component Description: Architectural and

Engineering Services for September 2017

Amount: \$2,362.18

Component Description: Total Labor 6 hrs

@ \$97.00/ hour - Craig Raffath

Amount: \$805.12

Component Description: Phase II drawings

dated 6 Mar 19.

Amount: \$9,398.01

Component Description: Professional

Services

Amount: \$552.17

Component Description: KKTV-Digital

Transmitter Upgrade

Amount: \$19,085.29

Component Description: KKTV-Digital

Transmitter Upgrade

Amount: \$34,929.63

Component Description: Architectural

Services for August 2018

Amount: \$2,709.20

Component Description: Additional Services

/Variance/Nakai

Amount: \$1,476.00

Mask Filter Information not provided.

Other Electrical Service: Information not provided.

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

UHF - Air Cooled Solid State Transmitter 16 kW

contractors.

Information not provided.

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 ATW16H6- ESC170-26L	\$130,691.21	\$130,361.21		\$130,361.19	
UHF - High Power, Side Mount, basic slot antenna, 20 kW input, directional,, elliptically or circularly polarized	\$123,961.21	\$123,961.21	Per Estimated Cost Justification KKTV-280- New Interim Antenna v0	\$123,961.19	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$6,400.00	N/A
Primary Antenna ATW17HS6- ETCX-26H	\$305,800.00	\$202,070.25		\$202,070.24	
Elbow complex, single channel, at antenna input, per 4 1/16. feedline (if needed)	\$9,570.00	\$3,336.25	Please see attached DTVPros quote JEHQ1409- 02.	\$3,336.24	N/A

UHF - High Power Top Mount (200- 1000 kW), One station antenna,	\$289,500.00	\$192,334.00	Please see attached DTVPros quote JEHQ1409- 02, this price	\$192,334.00	N/A
elliptically or circularly polarized			includes new top plate.		
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$6,400.00	N/A
Sub-total	\$436,491.21	\$332,431.46	N/A	\$332,431.43	N/A
Total for all systems	\$2,844,129.00	\$3,513,356.67	N/A	\$2,113,449.02	N/A

Components

Actual Information	
Description	File Name

UHF - High Power, Side Mount, basic slot antenna, 20 kW input, directional,, elliptically or circularly polarized

Component Description: UHF- High Power

Side Mount (200-

1000KW)

Amount: \$27,812.12

Component Description: UHF-HIGH

POWER SIDE MOUNT (200-1000KW)

Amount: \$34,962.40

Component Description: UHF-high power

side mount (200-

1000KW)

ATW16H-ESC170-26L side mounted

elliptically
polarized UHF
TRASAR
television
transmitting
antenna

Amount: \$27,812.12

Component Description: UHF-High Power

Side Mount (200-

1000KW)

Amount: \$33,374.55

Sweep test of existing	
antenna	

Component Description: Sweep test new

interim antenna

Amount: \$1,600.00

Component Description: KKTV-280-Sweep

test new interim

antenna

Amount: \$1,280.00

Component Description: KKTV-280-Sweep

test new interim

antenna

Amount: \$1,600.00

Component Description: Sweep test new

interim antenna

Amount: \$1,920.00

Elbow complex, single channel, at antenna input, per 4 1/16. feedline (if needed)

Component Description: KKTV-210-Elbow

complex new primary antenna

Amount: \$667.25

Component Description: KKTV Elbow

Complex New Primary Antenna

Amount: \$834.06

Component Description: KKTV Elbow

Complex new primary antenna

Amount: \$1,000.87

Component Description: KKTV-210-Elbow

complex new primary antenna

Amount: \$834.06

UHF - High Power Top Mount (200-1000 kW), One station antenna, elliptically or circularly polarized

Component Description: UHF-HIGH

POWER TOP MOUNT (200-1000KW)

Amount: \$38,466.80

Component Description: UHF-high power

top mount (200-

1000KW)

ATW17H56-ETCX-26H top mounted

elliptically
polarized UHF
TRASAR
television
transmitting
antenna

Amount: \$48,083.50

Component Description: UHF - High Power

Top Mount (200-

1000KW) ATW17HS6-ETCX-26H Top

Mounted
Elliptically
Polarized UHF
TRASAR
Television
Transmitting
Antenna

Amount: \$57,700.20

Component Description: UHF - HIGH

POWER TOP

MOUNT

Amount: \$48,083.50

Sweep test of existing antenna		
anoma	Component Description:	KKTV-210-Sweep test new primary
		antenna
	Amount:	\$1,600.00
	Component Description:	KKTV Sweep Test
		New Primary
		Antenna
	Amount:	\$1,600.00
	Component Description:	KKTV-210-Sweep
		test new primary

Amount: antenna \$1,280.00

Component Description: KKTV Sweep Test

New Primary Antenna

Amount: \$1,920.00

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	\$22,200.00	\$24,627.20		\$24,627.13	
Flexible Air Transmission Line - dielectric, 4"	\$22,200.00	\$24,627.20	Per Estimated Cost Justification KKTV-380- New Interim Transmission Line v1	\$24,627.13	N/A
Primary Transmission Line	\$52,540.00	\$72,722.93		\$59,824.49	
Rigid Transmission Line - copper, 4 1 /16"	\$52,540.00	\$72,722.93	see Estimated Cost Justification KKTV-310- New Primary Transmission Line v0	\$59,824.49	N/A
Sub-total	\$74,740.00	\$97,350.13	N/A	\$84,451.62	N/A
Total for all systems	\$2,844,129.00	\$3,513,356.67	N/A	\$2,113,449.02	N/A

Components

Actual Information	
Description	File Name

Flexible Air Transmission Line - dielectric, 4"

Component Description: New Interim

Transmission Line

Amount: \$6,213.78

Component Description: New Interim

Transmission Line

Amount: \$5,178.13

Component Description: T/L TUNER

INDOOR USE 3-

50 14-37

Amount: \$1,547.67

Component Description: KKTV-380-New

Interim

Transmission Line

Amount: \$5,178.13

Component Description: KKTV-380-New

Interim

Transmission Line

Amount: \$6,509.42

Rigid Transmission Line - copper, 4 1/16"

Component Description: KKTV New

Primary

Transmission Line

Amount: \$12,386.21

Component Description: KKTV-310-New

Primary

Transmission Line

Amount: \$20,188.58

Component Description: KKTV New

Primary

Transmission Line

Amount: \$14,863.49

Component Description: KKTV-310-New

Primary

Transmission Line

Amount: \$12,386.21

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 Justification
Primary Tower TOWER	\$183,400.00	\$948,600.00		\$820,615.00	
Interim Antenna Rigging	\$86,600.00	\$86,600.00	N/A	N/A	N/A
Structural engineering tower load study for well documented tower	\$12,600.00	\$12,000.00	N/A	\$2,500.00	N/A
Short Tower (less than 500')	\$84,200.00	\$850,000.00	The tower is on top of Cheyenne Mountain. Thin Air Quote 2838-001- KKTV	\$818,115.00	N/A
Sub-total	\$183,400.00	\$948,600.00	N/A	\$820,615.00	N/A
Total for all systems	\$2,844,129.00	\$3,513,356.67	N/A	\$2,113,449.02	N/A

Components

Actual Information Description	File Name
Interim Antenna Rigging	Information not provided.

Structural engineering tower oad study for well documented tower	Component Description:	Structural
		Analysis and
	Amount:	Report \$2,500.00
	Amount:	\$2,500.00
Short Tower (less than 500')		
	Component Description:	Cheyenne
		Mountain KKTV
		Tower Work
		Antenna and Line
	Amount:	\$163,632.00
	Component Description:	KKTV Repack,
		final 30% invoice
	Amount:	\$245,425.50
	Component Description:	Cheyenne
		Mountain KKTV
		Tower Work
		Antenna & Line-
		50%Down
	Amount:	\$409,057.50

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 Cos
Outside Professional Services	\$196,065.00	\$186,075.00		\$122,512.80	
Project management of the transition	\$142,200.00	\$135,000.00	N/A	\$115,936.30	N/A
RF Exposure Measurements	\$21,050.00	\$21,650.00	State and local taxes included	\$0.00	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	\$83.00	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$631.00	N/A
Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	N/A	N/A

Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	\$250.00	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	\$2,105.00	\$675.00	Please see the attached invoice from Chesapeake RF Consultants #4962	\$675.00	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	\$7,000.00	N/A	\$4,937.50	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	\$196,065.00	\$186,075.00	N/A	\$122,512.80	N/A
Total for all systems	\$2,844,129.00	\$3,513,356.67	N/A	\$2,113,449.02	N/A

Components

Actual Information Description	File Name	
Project management of the transition	Component Description: Amount:	Project Management \$3,571.85
	Component Description: Amount:	Project Management \$3,481.05
	Component Description: Amount:	Project Management \$1,831.65
	Component Description: Amount:	Project management \$1,311.35
	Component Description: Amount:	Project Management \$7,145.65
	Component Description: Amount:	Project Management \$62.50
	Component Description: Amount:	Project Management \$2,479.55

Component Description:

Project Management

Amount:

\$2,352.40

Component Description:

Project

Amount:

Management \$1,783.05

Component Description:

Project

Amount:

Management \$699.55

Component Description:

Project

Amount:

Management

\$1,653.10

Component Description:

Project

Amount:

Management

\$2,926.15

Component Description:

Project

Amount:

Management

\$2,098.40

Component Description:

Project

Amount:

Management

\$2,456.40

Component Description:

Project

Amount:

Management \$226.25

Component Description:

Project

Amount:

Management

\$3,154.95

Component Description:

Project Management

Amount:

\$3,909.80

Component Description:

Project

Amount:

Management \$1,541.50

Component Description:

Project

Management

Amount:

\$2,133.25

Component Description:

Project

management

Amount:

\$1,823.80

Component Description:

Project

Management

Amount:

\$3,325.90

Component Description:

Project

Management

Amount:

\$2,620.95

Component Description:

Project

Management

Amount:

\$28.20

Component Description:

Amount:

Project mgt \$5,850.45

Component Description:

Project

Management

Amount:

\$2,265.85

Component Description: Project

Management \$2,868.75

Amount: \$2,868.75

Component Description: Project

management

Amount: \$2,539.40

Component Description: Pi

Amount:

Amount:

Project managment

\$1,328.55

Component Description: Project Mgt,

Budget Review, Cost Reconciliation

Amount: \$2,576.05

Component Description: Project

Management

Amount: \$1,829.35

Component Description: Project

Management \$1,706.25

Component Description: Project

management \$3,756.70

Amount: \$3,756.70

Component Description: Project

Management

Amount: \$3,377.55

Component Description: Project Mgt,

Budget Review,

Cost

Reconciliation

Amount: \$755.80

Component Description: Project

Management

Amount:

\$2,751.45

Component Description:

Project

Management

Amount:

\$203.75

Component Description:

Project

Amount:

Management \$818.15

Project

Component Description:

Management

Amount:

\$3,156.05

Component Description:

Project

management, cost

reconciliation, budget review

Amount:

\$2,943.80

Component Description:

Project

Amount:

Management \$1,941.95

Project

Amount:

Management

\$4,706.95

Component Description:

Component Description:

Project

Amount:

Amount:

Management

\$4,033.25

Component Description:

Project

Management

\$2,370.65

Component Description:

Amount:

Project

Management

\$1,820.10

Component Description:

Project

management

Amount:

\$2,555.15

Component Description:

Cost

Amount:

Reconciliation \$2,650.20

Component Description:

Amount:

Amount:

Project Mgt

\$802.25

Component Description:

Project

Management

\$3,710.65

RF Exposure Measurements

Information not provided.

Attorney Fees - Prepare and File request for Special Temporary Authorization Information not provided.

Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application

Component Description:

Professional

Services

Amount: \$83.00

Component Description:

KKTV-550-

Attorney fees 2100

license to cover

\$296.00

Amount:

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	Total Professional Services \$631.00
Prepare request for Special Temporary Authorization	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Component Description: Amount:	Consulting Engineer \$250.00
Prepare and or review reimbursement form	Information not provided.	
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Component Description: Amount:	Develop final technical parameters for side-mount antenna on repack Ch-26 for use as interim. \$675.00
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Information not provided.	

Perform engineering study for new channel assignment **Component Description:** Perform and antenna development engineering study for new channel assignment \$2,862.50 Amount: **Component Description:** Review prospective sub antenna specs Amount: \$187.50 **Component Description:** Conduct channel study Amount: \$187.50 **Component Description:** Consultation of build-out of repack Ch-26 main antenna facility Amount: \$250.00 **Component Description:** Consulting Engineer \$1,450.00 Amount:

Information not provided.

Address transition timing

and coordination issues w/ other stations and wireless

Cost Information

Other Expenses

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

			Estimated		
Description	Predetermined Cost Estimate	Estimated Cost	Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$139,700.50	\$131,117.79		\$35,023.93	
Other State and Local Taxes	\$41,053.00	\$41,053.00	N/A	\$29,972.93	N/A
MVPD Notification of Channel Change	\$2,000.00	\$2,000.00	See Justifying Quote - Wiley Rein MVPD quote - all gray stations	\$2,000.00	N/A
Develop and air announcement of upcoming channel change	\$5,412.50	\$5,412.50	N/A	\$296.00	N/A
Equipment Storage	\$15,155.00	\$15,155.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$25,000.00	\$25,000.00	N/A	N/A	N/A
Non-zoning permits	\$14,000.00	\$14,000.00	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					
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$2,982.29	N/A	\$2,755.00	N/A
Equipment Delivery and Handling Charges	\$25,000.00	\$25,000.00	N/A	N/A	N/A
Sub-total	\$139,700.50	\$131,117.79	N/A	\$35,023.93	N/A
Total for all systems	\$2,844,129.00	\$3,513,356.67	N/A	\$2,113,449.02	N/A

Components

Actual Information Description	File Name	
Other State and Local Taxes	Component Description: Amount:	Repack Use Tax \$29,972.93
MVPD Notification of Channel Change	Component Description: Amount:	Professional services \$2,000.00
Develop and air announcement of upcoming channel change	Component Description: Amount:	Professional services \$296.00
Equipment Storage	Information not provided.	
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.	
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.	
DTV Medical Facility Notification	Component Description: Amount:	Mailing: Print and mail a two page, black and white generically addressed letter with a specifically addressed USPS barcoded route sorted envelope: \$2,755.00
Equipment Delivery and Handling Charges	Information not provided.	

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$2,844,129.00	\$3,513,356.67	\$2,113,449.02

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

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 abovenamed applicant for the Authorization(s) specified above. Robert Folliard , III

Assistant Secretary

04/19/2021

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.
- The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.
- 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 abovenamed applicant for the Authorization(s) specified above. Robert Folliard , III

Assistant Secretary

04/19/2021

Attachments