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: **65130** | Service: **DTV** | Call Sign: **WQCW** | Channel: **15 (UHF)**

File Number: **0000028733**

FRN: **0018223693** | Date Submitted: **06/27/2019**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
GRAY TELEVISION LICENSEE, LLC	WQCW 4370 PEACHTREE ROAD, NE ATLANTA, GA 30319 United States	+1 (202) 505-2401	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	WQCW will moving approximately a half mile to WSAZ's transmitter site and combining with WSAZ into broadband operations for both main and interim.

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	Visionary DT
	Year	2005
	Type	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	60 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	ULXTED-100
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	63.4 kW
	Justification for New Transmitter	Old transmitter is not retunable

Primary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	Yes
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	Yes
	Size	4 inches
	Length	1000.0 feet
	Other Electrical Service	No
	Description	N/A

HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A tons
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
Transmitter remote control	Burk Transmitter Remote
Pad for Heat Exchangers	Pad and ice shield for Heat Exchangers beside Existing PAD
Ice Bridge Building Interconnect	Ice bridge between the analog and the digital buildings
Transfer Switch	Transfer Switch for the generator set
Move Gen Set	Move the generator set from the previous site
Ice Bridge Gen Set	Ice bridge for the previous site's generator set
Gen Set Pad	Pad for the generator set

Interim Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Interim
	Description of Use	N/A
	Change Type	Purchase
	Manufacturer	
	Model	ULXTE-30
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	19.2 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?	Yes
	Type	Cooling Only
	Size	20 tons
	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
Ice Bridge	Ice bridge from the analog building to the tower (shared cost)

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	Leased
	Owner	Nexstar Broadcasting
	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	Top Mount
	Antenna position in stack	Bottom
	Polarization	Horizontal
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	1000.0 kW

Manufacturer	
Model	TUE-05-12 /60 H-B
Year	2000

Primary Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	Yes
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	Broadband Panel
	Number of Stations Supported	2
	Number of Panels/Bays	64
	Lower Limit	470.00 MHz
	Upper Limit	698.00 MHz
	Design power capacity in use	100.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	640.0 kW
	Manufacturer	
	Model	PEPSIL60D

	Year	2018
	Justification for New Antenna	This antenna will be shared between WQCW and WSAZ

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Type	New
	Number of channels supported	2
	Frequencies of channels supported	Upper and lower frequency
	Frequency	470.0 MHz - 698.0 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?	Broadband
	Feed Line Size	8 3/16 inches inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power 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

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?	Yes
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna Manufacturer and Type	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	2
	Number of Panels/Bays	2
	Lower Limit	476.00 MHz
	Upper Limit	530.00 MHz
	Design power capacity in use	100.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	546.0 kW
	Manufacturer	
	Model	SBB-24C170
	Year	2018

	Justification for New Antenna	Interim antenna shared between WQCW and WSAZ to continue broadcasting through the transition period.

Interim Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Type	New
	Number of channels supported	2
	Frequencies of channels supported	Upper and lower frequency
	Frequency	476.0 MHz - 530.0 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?	B
	Feed Line Size	6 1/8 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	Leased
	Owner	Nexstar Broadcasting
	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	7 3/16 inches
	Other Diameter	N/A
	Segment Length	Broadband
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1125 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?	Yes
	Type	Rigid
	Diameter	8 3/16 inches
	Other Diameter	N/A
	Segment Length	Broadband
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1022 feet per run
	Justification for New Transmission Line	Shared with WSAZ

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	6 1/8 inches
	Segment Length	Broadband
	Other Segment Length	
	Number of parallel runs	1
	Length	960 feet per run
	Justification for New Transmission Line	Shared with WSAZ

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	Leased
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	Yes
	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	No
Existing Tower Structure Registration	Do you have a tower registration number?	No
	ASR Number	
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	38° 30' 21.1" N-
	Longitude (NAD83)	082° 12' 32.3" W-
	Overall Structure Height	1159.11 feet
	Support Structure Height	1154.84 feet
	Ground Elevation Above Mean Sea Level (AMSL)	971.77 feet

Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	Nexstar Broadcasting, Inc.
Date Constructed	07/07/2015

FM, AM or TV radio broadcasters. Facility ID's, Call Signs and Services of other broadcast stations with whom the tower is shared

Facility ID	Call Sign	Service
23342	WOWK-TV	DTV

Other Types of Users

Users
Amateur Radio

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:	Major Reinforcements needed

Primary Tower

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	N/A

Helicopter Services Required	Are helicopter services required?	No

Primary Tower

Other Tower Expenses Not Listed

Information not provided.

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.
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	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 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	1
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	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	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

Information not provided.

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 Justifi
Interim Transmitter ULXTE-30	**$737,724.05**	**$616,347.59**		**$547,957.18**	
UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	$684,000.00	$562,623.54	N/A	$503,150.68	N
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
Other -- HVAC Service Type: C Size:20 (Other)	***$44,806.50***	$44,806.50	20 ton split system shared cost with WSAZ. Please see Maynard C. Smith Construction Quote WQCW-HVACRev1	$44,806.50	N
Ice Bridge	***$6,917.55***	$6,917.55	Steel Products Quote #003	N/A	N
Primary Transmitter ULXTED-100	**$2,102,587.22**	**$2,094,987.22**		**$1,318,107.30**	

Gen Set Pad	***$17,000.00***	$17,000.00	Maynard C. Smith Construction Quote #WQCW-Generator Pad	N/A	N
Ice Bridge Gen Set	***$15,900.00***	$15,900.00	N/A	N/A	N
Move Gen Set	***$10,550.00***	$10,550.00	Cummins Quote 2260000000372075	N/A	N
Transfer Switch	***$23,320.00***	$23,320.00	N/A	N/A	N
Pad for Heat Exchangers	***$74,256.50***	$74,256.50	1/2 the cost paid by WQCW. See revised quote WQCW-SOG101rev3	$74,256.50	N
UHF - Liquid Cooled Solid State Transmitter 63.4 kW	***$1,792,872.72***	$1,792,872.72	GatesAir quote GA-00022572	$1,231,600.80	N
Service entrance 3 phase/800 amp/208 volt	$14,400.00	$13,700.00	N/A	N/A	N
Switchgear - industrial 800 amp	$38,200.00	$36,300.00	N/A	N/A	N
4" Rigid Conduit and Wiring (Cost per foot)	$101,000.00	$96,000.00	N/A	N/A	N
Ice Bridge Building Interconnect	***$12,250.00***	$12,250.00	Maynard C Smith Construction Quote #IceBridge Rev 2; Maynard C Smith Construction Invoice 19-14	$12,250.00	N
Transmitter remote control	***$2,838.00***	$2,838.00	BGS quote 509404	N/A	N
Sub-total	$2,840,311.27	$2,711,334.81	N/A	$1,866,064.48	N

Total for all systems	$6,090,780.59	$4,743,782.39	N/A	$2,305,395.40	N

Components

Actual Information Description	File Name	
UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	**Component Description:** **Amount:** **Component Description:** **Amount:**	Interim Transmitter $398,324.96 ULXTE-30 Transmitter $104,825.72
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.	
Other -- HVAC Service Type: C Size:20 (Other)	**Component Description:** **Amount:**	Quote 04a: WQCW Transmitter HVAC101Rev1 $44,806.50
Ice Bridge	Information not provided.	
Gen Set Pad	Information not provided.	
Ice Bridge Gen Set	Information not provided.	
Move Gen Set	Information not provided.	
Transfer Switch	Information not provided.	

Pad for Heat Exchangers	**Component Description:** **Amount:**	Quote #02a WQCW-SOG101Rev5 $74,256.50
UHF - Liquid Cooled Solid State Transmitter 63.4 kW	**Component Description:** **Amount:**	ULXTE-100 Primary Transmitter $1,231,600.80
Service entrance 3 phase /800 amp/208 volt	Information not provided.	
Switchgear - industrial 800 amp	Information not provided.	
4" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
Ice Bridge Building Interconnect	**Component Description:** **Amount:**	Quote #03a WQCW Ice Bridge Rev 3 $12,250.00
Transmitter remote control	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 SBB-24C170	**$226,106.32**	**$169,026.32**		**$43,359.59**	
Side mount brackets for high power antennas (if not included in antenna base cost)	$23,150.00	$11,000.00	WQCW's half of the shared antenna brackets	N/A	N/A
UHF â€“ Broadband Panel, Side Mount Auxiliary /Interim, 546 horizontally polarized	***$75,635.63***	$75,635.63	THIS IS THE CORRECTED INTERIM ANTENNA CATEGORY, ESTIMATED COST PER DTVPROS QUOTE JEHQ 1487 - 50% split with WSAZ	$18,908.90	N/A
Sweep test of existing antenna	$6,730.00	$3,200.00	WQCW's half of the cost split with WSAZ	$1,760.00	N/A
New combiner, cost per channel (without antenna)	$84,200.00	$50,000.00	WQCW's half of the shared combiner	$0.00	N/A

Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	$13,700.00	$6,500.00	WQCW's half of the cost	N/A	N/A
UHF – Broadband Panel, Side Mount Auxiliary /Interim, 530 horizontally polarized	***$22,690.69***	$22,690.69	***System Notice: Estimate adjusted and locked because line has been superseded. ***WCQW's half of the cost	$22,690.69	Please do not upload invoices here
Primary Antenna PEPSIL60D	**$877,880.00**	**$367,685.09**		**$164,979.85**	
Sweep test of existing antenna	$6,730.00	$3,200.00	Estimated cost split with WSAZ per DTVPros Quote JEHQ 1487 - 6,400 divided evenly between the two stations.	$1,760.00	N/A
New combiner, cost per channel (without antenna)	$84,200.00	$104,558.09	WQCW's half of the cost of Q-76838 minus cost of retuning (section 3 of Q-76838)	$41,271.65	N/A

Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	$18,950.00	$9,000.00	WQCW's half of the cost	N/A	N/A
UHF - High Power Top Mount (200-1000 kW), Two Station broadband panel antenna, elliptically or circularly polarized	$768,000.00	$250,927.00	WQCW's half of the shared antenna with WSAZ per DTVPros Quote JEHQ 1484	$121,948.20	N/A
Sub-total	$1,103,986.32	$536,711.41	N/A	$208,339.44	N/A
Total for all systems	$6,090,780.59	$4,743,782.39	N/A	$2,305,395.40	N/A

Components

Actual Information Description	File Name
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.
UHF â€“ Broadband Panel, Side Mount Auxiliary/Interim, 546 horizontally polarized	**Component Description:** Interim Antenna **Amount:** $18,908.90

Sweep test of existing antenna	**Component Description:** **Amount:**	Sweep Test $960.00
	Component Description: **Amount:**	WQCW-Sweep Test Interim Antenna $800.00
New combiner, cost per channel (without antenna)	**Component Description:** **Amount:**	Interim combiner (70% payment of Quote Q-77110 sec. 1 and 4) $31,856.01
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	Information not provided.	
UHF – Broadband Panel, Side Mount Auxiliary/Interim, 530 horizontally polarized	**Component Description:** **Amount:**	Interim Antenna $22,690.69
Sweep test of existing antenna	**Component Description:** **Amount:**	Sweep test Primary Antenna $960.00
	Component Description: **Amount:**	WQCW-210-Sweep test New Primary Antenna $800.00
New combiner, cost per channel (without antenna)	**Component Description:** **Amount:**	Interim channel combiner $41,271.65

Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	Information not provided.	
UHF - High Power Top Mount (200-1000 kW), Two Station broadband panel antenna, elliptically or circularly polarized	**Component Description:** **Amount:**	New Primary Antenna $66,517.20
	Component Description: **Amount:**	UHF High Power Top Mount $55,431.00

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	**$222,720.00**	**$150,921.02**		**$41,503.27**	
Rigid Transmission Line - copper, 6 1 /8" broadband	$222,720.00	$150,921.02	WQCW's half of the cost	$41,503.27	N/A
Primary Transmission Line	**$407,778.00**	**$193,669.00**		**$82,410.06**	
Rigid Transmission Line - copper, 8 3 /16" broadband	$407,778.00	$193,669.00	WQCW's half of the cost	$82,410.06	N/A
Sub-total	$630,498.00	$344,590.02	N/A	$123,913.33	N/A
Total for all systems	$6,090,780.59	$4,743,782.39	N/A	$2,305,395.40	N/A

Components

Actual Information Description	File Name

Rigid Transmission Line - copper, 6 1/8" broadband	**Component Description:** **Amount:**	Interim Transmission Line $22,638.15
	Component Description: **Amount:**	Rigid Transmission Line - Copper $18,865.12
Rigid Transmission Line - copper, 8 3/16" broadband	**Component Description:** **Amount:**	New Primary Transmission Line $44,950.93
	Component Description: **Amount:**	MACX8758-1 $37,459.13

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 GTOWER	**$644,100.00**	**$576,945.00**		**$41,056.25**	
Structural engineering tower load study for well documented tower	$12,600.00	$12,720.00	Includes state and local taxes	N/A	N/A
Major tower reinforcement /modifications	$421,000.00	$400,000.00	N/A	N/A	N/A
Tall Tower (greater than 500')	$210,500.00	$164,225.00	Quote Q18-06-023b shows total cost for the project. Total cost divided between WQCW and WSAZ at 50% each	$41,056.25	N/A
Sub-total	$644,100.00	$576,945.00	N/A	$41,056.25	N/A
Total for all systems	$6,090,780.59	$4,743,782.39	N/A	$2,305,395.40	N/A

Components

Actual Information Description	File Name
Structural engineering tower load study for well documented tower	Information not provided.

Major tower reinforcement /modifications	Information not provided.	
Tall Tower (greater than 500')	**Component Description:** **Amount:**	Tower rigging services $41,056.25

Cost Information

Outside Professional Services

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	**$177,120.00**	**$167,750.00**		**$66,021.90**	
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	N/A	N/A
ASR modification (prepare FCC Form 854)	$2,105.00	$2,000.00	N/A	N/A	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	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	$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	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	$3,155.00	$3,000.00	N/A	$1,800.00	N/A
Perform engineering study for new channel assignment and antenna development	$7,360.00	$7,000.00	N/A	$1,237.50	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

Prepare and or review reimbursement form	$2,630.00	$2,500.00	N/A	N/A	N/A
Project management of the transition	$142,200.00	$135,000.00	N/A	$62,787.90	N/A
Sub-total	$177,120.00	$167,750.00	N/A	$66,021.90	N/A
Total for all systems	$6,090,780.59	$4,743,782.39	N/A	$2,305,395.40	N/A

Components

Actual Information Description	File Name
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	Information not provided.
ASR modification (prepare FCC Form 854)	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	Information not provided.
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	**Component Description:** Complete and file ititial repack CP application **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	**Component Description:** support response to review of reimbursement form 399 provide summaries of additional antenna configurations **Amount:** $375.00 **Component Description:** RF Consulting Fee **Amount:** $1,425.00
Perform engineering study for new channel assignment and antenna development	**Component Description:** Perform engineering study for new channel assignment **Amount:** $812.50 **Component Description:** Consulting Engineer **Amount:** $425.00
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.
Prepare and or review reimbursement form	Information not provided.
Project management of the transition	**Component Description:** Project Management **Amount:** $2,813.35

Component Description: Project Management
Amount: $2,154.80

Component Description: Project Management
Amount: $4,696.90

Component Description: Project Management
Amount: $2,558.55

Component Description: Project Management
Amount: $5,551.95

Component Description: Project Management
Amount: $1,401.45

Component Description: Project Management
Amount: $2,005.70

Component Description: Project Management
Amount: $3,057.40

Component Description: Project Management
Amount: $1,988.85

Component Description: Project Management
Amount: $2,906.30

Component Description: Project Management
Amount: $1,477.25

Component Description: Project Management
Amount: $1,543.30

Component Description: Transition Related Project Management Costs
Amount: $1,500.00

Component Description: Cost Reconciliation
Amount: $1,965.45

Component Description: Project Management
Amount: $1,985.40

Component Description: Project Management
Amount: $28.20

Component Description: Project Management
Amount: $1,829.35

Component Description: Project Management
Amount: $1,743.75

Component Description: Project management
Amount: $2,509.40

Component Description:	Project Management
Amount:	$2,874.40
Component Description:	Project Management
Amount:	$3,291.45
Component Description:	Project Management
Amount:	$1,609.00
Component Description:	Project Management
Amount:	$2,221.55
Component Description:	Project Management
Amount:	$2,035.25
Component Description:	Project Management
Amount:	$2,755.65
Component Description:	Project Management
Amount:	$1,728.10
Component Description:	Project Management
Amount:	$1,558.55
Component Description:	Project management
Amount:	$2,555.15

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	**$128,749.00**	**$120,234.15**		**$0.00**	
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
DTV Medical Facility Notification	$11,550.00	$3,050.15	N/A	N/A	N/A
Non-zoning permits	***$11,660.00***	$11,660.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	***$67,237.00***	$67,237.00	Maynard C. Smith Construction Co. quote for WQCW Demo Safety Klean Disposal Quote for WQCW	N/A	N/A
Equipment Delivery and Handling Charges	***$15,900.00***	$15,900.00	N/A	N/A	N/A
Equipment Storage	***$10,600.00***	$10,600.00	N/A	N/A	N/A

Develop and air announcement of upcoming channel change	***$10,000.00***	$10,000.00	N/A	N/A	N/A
MVPD Notification of Channel Change	***$1,272.00***	$1,272.00	N/A	N/A	N/A
Sub-total	$128,749.00	$120,234.15	N/A	$0.00	N/A
Total for all systems	$6,090,780.59	$4,743,782.39	N/A	$2,305,395.40	N/A

Components

Information not provided.

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	$6,090,780.59	$4,743,782.39	$2,305,395.40

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 , III .** *Assistant Secretary* 06/27/2019

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 , III .** *Assistant Secretary* 06/27/2019

Attachments