



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **65130** | Service: **DTV** | Call **WQCW** | Channel: **15 (UHF)** |  
ID: | Sign:  
File **0000028733**  
Number:  
FRN: **0018223693** | Date **01/02**  
Submitted: **/2019**

## Applicant Information

### Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
<b>GRAY TELEVISION LICENSEE, LLC</b>	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
<b>Samuel Hariton</b> <i>Widely</i>	Samuel Hariton 4031 University Dr Suite 100 Fairfax, VA 22030 United States	+1 (339) 222-8107	sam.hariton@widely.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
<b>Existing Transmitter Description</b>	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
<b>Existing Transmitter Manufacturer and Type</b>	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

<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A tons
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
<b>Channel 14 Costs</b>	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
<b>Ice Bridge Building Interconnect</b>	Ice bridge between the analog and the digital buildings
<b>Move Gen Set</b>	Move the generator set from the previous site
<b>Transfer Switch</b>	Transfer Switch for the generator set
<b>Transmitter remote control</b>	Burk Transmitter Remote
<b>Gen Set Pad</b>	Pad for the generator set
<b>Pad for Heat Exchangers</b>	Pad and ice shield for Heat Exchangers beside Existing PAD
<b>Ice Bridge Gen Set</b>	Ice bridge for the previous site's 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.
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	15 tons
	Other Size	N/A
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
<b>Channel 14 Costs</b>	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
<b>Inside RF System</b>	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
<b>Existing Antenna Description</b>	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
<b>Existing Antenna Manufacturer and Type</b>	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) .....	2000.0 kW
	Manufacturer	

Model	UHF-16B4P-ELLI-OMNI
Year	2018
Justification for New Antenna	This antenna will be shared between WQCW and WSAZ

## Primary Antenna

### Other Antenna Costs

Section	Question	Response
<b>Combiner for Shared Antenna</b>	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
<b>Elbow Complex</b>	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Broadband
	Feed Line Size	8 3/16 inches inches
<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for a high power antenna?	No
<b>Pattern Scatter Analysis</b>	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No

<b>Sweep Test</b>	Do you require the sweep testing of transmission line and antenna?	Yes
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**Primary  
Antenna**

**Other Antenna Cost Not Listed**

Information not provided.

**Interim  
Antenna**

**New Antenna Costs**

Section	Question	Response
<b>New Antenna Description</b>	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
<b>New Antenna Manufacturer and Type</b>	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	524.00 MHz
	Design power capacity in use	100.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power) .....	530.0 kW
	Manufacturer	
	Model	TFU-24WB C160
	Year	2018

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

### Other Antenna Costs

Section	Question	Response
<b>Combiner for Shared Antenna</b>	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
<b>Elbow Complex</b>	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	B
	Feed Line Size	6 1/8 inches
<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for an antenna?	Yes
<b>Pattern Scatter Analysis</b>	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
<b>Sweep Test</b>	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
<b>Existing Transmission Line Description</b>	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
<b>Existing Transmission Line Manufacturer and Type</b>	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** **New Transmission Line**  
**Transmission Line**

Section	Question	Response
<b>New Transmission Line Costs</b>	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** **Other Transmission Line Expenses Not Listed**  
**Transmission Line**

Information not provided.

**Interim**  
**Transmission Line**

**New Transmission Line**

Section	Question	Response
<b>New Transmission Line Costs</b>	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

<b>Helicopter Services Required</b>	Are helicopter services required?	No
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**Primary  
Tower**

**Other Tower Expenses Not Listed**

Information not provided.

**Outside  
Professional Services Costs**

Section	Question	Response
<b>Outside Project Management Services</b>	Do you require outside project management services?	Yes
	Number of Hours	900
	Explanation	Strategic Support.
<b>Outside RF consulting Engineering Services</b>	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
<b>Attorney and Other Outside Consulting Services</b>	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
<b>RF Field Engineering Services</b>	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**

If wireless is not provided.

## Other Expenses

Section	Question	Response
<b>AM Pattern Disturbance</b>	Is an Impact Study needed?	No
	Is Remediation needed?	No
<b>Facility Expenses</b>	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
<b>Permit and Filing Costs</b>	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
<b>Other Miscellaneous Expenses</b>	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

<b>Other Expenses</b>	<b>Other Expenses Not Listed</b>
	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 Justification
Interim Transmitter ULXTE-30	\$748,717.55	\$624,541.09		\$398,324.96	
UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	\$684,000.00	\$562,623.54	N/A	\$398,324.96	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
15 Ton system	\$55,800.00	\$53,000.00	N/A	N/A	N/A
Ice Bridge	\$6,917.55	\$6,917.55	Steel Products Quote #003	N/A	N/A
Primary Transmitter ULXTED-100	\$2,094,135.72	\$2,086,535.72		\$1,231,600.80	
Ice Bridge Gen Set	\$15,900.00	\$15,900.00	N/A	N/A	N/A

Pad for Heat Exchangers	<b>\$66,555.00</b>	\$66,555.00	1/2 the cost paid by WQCW. See revised quote WQCW-SOG101rev3	N/A	N
Gen Set Pad	<b>\$17,000.00</b>	\$17,000.00	Maynard C. Smith Construction Quote #WQCW-Generator Pad	N/A	N
Transmitter remote control	<b>\$2,838.00</b>	\$2,838.00	BGS quote 509404	N/A	N
Transfer Switch	<b>\$23,320.00</b>	\$23,320.00	N/A	N/A	N
Move Gen Set	<b>\$10,550.00</b>	\$10,550.00	Cummins Quote 2260000000372075	N/A	N
Ice Bridge Building Interconnect	<b>\$11,500.00</b>	\$11,500.00	Maynard C Smith Construction Quote #IceBridge Rev 2	N/A	N
4" Rigid Conduit and Wiring (Cost per foot)	\$101,000.00	\$96,000.00	N/A	N/A	N
UHF - Liquid Cooled Solid State Transmitter 63.4 kW	<b>\$1,792,872.72</b>	\$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
<b>Sub-total</b>	\$2,842,853.27	\$2,711,076.81	N/A	\$1,629,925.76	N
<b>Total for all systems</b>	\$6,040,377.65	\$4,661,376.45	N/A	\$2,047,194.14	N

## Components

Actual Information		
Description	File Name	
UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	<b>Component Description:</b> <b>Amount:</b>	Interim Transmitter \$398,324.96
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.	
15 Ton system	Information not provided.	
Ice Bridge	Information not provided.	
Ice Bridge Gen Set	Information not provided.	
Pad for Heat Exchangers	Information not provided.	
Gen Set Pad	Information not provided.	
Transmitter remote control	Information not provided.	
Transfer Switch	Information not provided.	
Move Gen Set	Information not provided.	
Ice Bridge Building Interconnect	Information not provided.	
4" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 63.4 kW	<b>Component Description:</b> <b>Amount:</b>	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.	



## 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
<b>Interim Antenna TFU-24WB C160</b>	<b>\$173,161.38</b>	<b>\$116,081.38</b>		<b>\$43,359.60</b>	
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
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
New combiner, cost per channel (without antenna)	\$84,200.00	\$50,000.00	WQCW's half of the shared combiner	\$0.00	N/A
Sweep test of existing antenna	\$6,730.00	\$3,200.00	WQCW's half of the cost	\$1,760.00	N/A



UHF â€“ Broadband Panel, Side Mount Auxiliary /Interim, 530 horizontally polarized	<b>\$22,690.69</b>	\$22,690.69	PHANTOM ANTENNA	\$18,908.91	N/A
UHF – Broadband Panel, Side Mount Auxiliary /Interim, 530 horizontally polarized	<b>\$22,690.69</b>	\$22,690.69	***System Notice: Estimate adjusted and locked because line has been superseded. ***WCQW's half of the cost	\$22,690.69	N/A
<b>Primary Antenna UHF-16B4P- ELLI-OMNI</b>	<b>\$877,880.00</b>	<b>\$338,482.09</b>		<b>\$164,979.85</b>	
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
Sweep test of existing antenna	\$6,730.00	\$3,200.00	N/A	\$1,760.00	N/A

UHF - High Power Top Mount (200-1000 kW), Two Station broadband panel antenna, elliptically or circularly polarized	\$768,000.00	\$221,724.00	WQCW's half of the shared antenna, for HPOL only.	\$121,948.20	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
<b>Sub-total</b>	\$1,051,041.38	\$454,563.47	N/A	\$208,339.45	N/A
<b>Total for all systems</b>	\$6,040,377.65	\$4,661,376.45	N/A	\$2,047,194.14	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.
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	Information not provided.

New combiner, cost per channel (without antenna)	<b>Component Description:</b> Interim combiner (70% payment of Quote Q-77110 sec. 1 and 4) <b>Amount:</b> \$31,856.01
Sweep test of existing antenna	<b>Component Description:</b> WQCW-Sweep Test New Auxiliary Antenna <b>Amount:</b> \$800.00  <b>Component Description:</b> Sweep Test <b>Amount:</b> \$960.00
UHF 48" Broadband Panel, Side Mount Auxiliary/Interim, 530 horizontally polarized	<b>Component Description:</b> UHF - Broadband Panel, Side Mount Aux /Interim SBB-24C170 24 Bay Antenna <b>Amount:</b> \$18,908.91
UHF – Broadband Panel, Side Mount Auxiliary/Interim, 530 horizontally polarized	<b>Component Description:</b> Interim Antenna <b>Amount:</b> \$22,690.69
New combiner, cost per channel (without antenna)	<b>Component Description:</b> Interim channel combiner <b>Amount:</b> \$41,271.65

Sweep test of existing antenna	<div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> WQCW-210-Sweep test New Primary Antenna  \$800.00 </div> </div> <div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> Sweep test Primary Antenna  \$960.00 </div> </div>
UHF - High Power Top Mount (200-1000 kW), Two Station broadband panel antenna, elliptically or circularly polarized	<div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> New Primary Antenna  \$66,517.20 </div> </div> <div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> UHF High Power Top Mount  \$55,431.00 </div> </div>
Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	Information not provided.

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	\$6,040,377.65	\$4,661,376.45	N/A	\$2,047,194.14	N/A

Components

Actual Information Description	File Name
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Rigid Transmission Line - copper, 6 1/8" broadband	<b>Component Description:</b>		Interim
	<b>Amount:</b>		Transmission Line
			\$22,638.15
	<b>Component Description:</b>		Rigid
Rigid Transmission Line - copper, 8 3/16" broadband			Transmission Line
	<b>Amount:</b>		- Copper
			\$18,865.12
	<b>Component Description:</b>		New Primary
	<b>Amount:</b>		Transmission Line
			\$44,950.93
	<b>Component Description:</b>		MACX8758-1
	<b>Amount:</b>		\$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	\$6,040,377.65	\$4,661,376.45	N/A	\$2,047,194.14	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')	<b>Component Description:</b>  <b>Amount:</b>	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
<b>Outside Professional Services</b>	<b>\$177,120.00</b>	<b>\$167,750.00</b>		<b>\$43,959.35</b>	
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	\$40,725.35	N/A
<b>Sub-total</b>	\$177,120.00	\$167,750.00	N/A	\$43,959.35	N/A
<b>Total for all systems</b>	\$6,040,377.65	\$4,661,376.45	N/A	\$2,047,194.14	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	<p><b>Component Description:</b> Complete and file initial repack CP application</p> <p><b>Amount:</b> \$196.50</p>
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	<b>Component Description:</b>  <b>Amount:</b>	support response to review of reimbursement form 399 provide summaries of additional antenna configurations \$375.00  <b>Component Description:</b> <b>Amount:</b> RF Consulting Fee \$1,425.00
Perform engineering study for new channel assignment and antenna development	<b>Component Description:</b>  <b>Amount:</b>	Consulting Engineer \$425.00  <b>Component Description:</b>  <b>Amount:</b> Perform engineering study for new channel assignment \$812.50
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	<b>Component Description:</b>  <b>Amount:</b>	Project Management \$2,755.65

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$1,543.30

<b>Component Description:</b>	Project management
<b>Amount:</b>	\$2,509.40

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$2,906.30

<b>Component Description:</b>	Transition Related Project Management Costs
<b>Amount:</b>	\$1,500.00

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$2,558.55

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$1,401.45

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$1,558.55

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$2,035.25

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$1,477.25

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$1,609.00

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$1,743.75

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$1,985.40

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$1,829.35

<b>Component Description:</b>	Project management
<b>Amount:</b>	\$2,555.15

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$1,988.85

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$28.20

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$1,728.10

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$3,057.40

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$3,291.45

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$2,221.55

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## 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
<b>Other Expenses</b>	<b>\$128,749.00</b>	<b>\$120,234.15</b>		<b>\$0.00</b>	
MVPD Notification of Channel Change	<i>\$1,272.00</i>	\$1,272.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	<i>\$10,000.00</i>	\$10,000.00	N/A	N/A	N/A
Equipment Storage	<i>\$10,600.00</i>	\$10,600.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	<i>\$15,900.00</i>	\$15,900.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	<i>\$67,237.00</i>	\$67,237.00	Maynard C. Smith Construction Co. quote for WQCW Demo Safety Klean Disposal Quote for WQCW	N/A	N/A
Non-zoning permits	<i>\$11,660.00</i>	\$11,660.00	N/A	N/A	N/A



FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$3,050.15	N/A	N/A	N/A
<b>Sub-total</b>	\$128,749.00	\$120,234.15	N/A	\$0.00	N/A
<b>Total for all systems</b>	\$6,040,377.65	\$4,661,376.45	N/A	\$2,047,194.14	N/A

## Components

Information not provided.

**Cost  
Information**

**Grand Total**

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$6,040,377.65	\$4,661,376.45	\$2,047,194.14

**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	<p>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.</p>	
		<ol style="list-style-type: none"> <li>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.</li> <li>2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> <li>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.</li> </ol>	

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*

01/02/2019

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 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 AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).	
		<ol style="list-style-type: none"> <li>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.</li> <li>2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.</li> <li>3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> </ol>	

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.

<p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>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.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p><b>Robert Folliard</b>  <i>Assistant Secretary</i></p> <p>01/02/2019</p>

## Attachments