



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **65670** | Service: **DTV** | Call **WETA-TV** | Channel: **31 (UHF)** |  
ID: | Sign:  
File **0000028782**  
Number:  
FRN: **0002107274** | Date **01/29**  
Submitted: **/2020**

## Applicant Information

### Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
<b>GREATER WASHINGTON EDUCATIONAL TELECOMMUNICATIONS ASSOC</b> Doing Business As: GREATER WASHINGTON EDUCATIONAL TELECOMMUNICATIONS ASSOC	Legal & Business Affairs Dept. 3939 Campbell Ave Arlington, VA 22206 United States	+1 (703) 998- 2851	Repack@weta. org	Not-for- Profit

## 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>Joseph L. Snelson , Jr .</b> <i>Technical Consultant</i> <i>Meintel, Sgrignoli &amp; Wallace</i>	1282 Smallwood Drive, Suite 372 Waldorf, MD 20603 United States	+1 (303) 344- 8037	Repack@weta. org

**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	WETA proposes to build its repack facility on channel 31 and will be sharing its main antenna, transmission line and combiner with two other parties. See the attached updated narrative for the background and details of its transition plan.

**Transmitters**

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

**Auxiliary  
Transmitter****Add Transmitter Information**

Section	Question	Response
<b>Existing Transmitter Description</b>	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Alternate Site backup transmitter
	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	CD100P1
	Year	1997
	Type	Inductive Output Tube
	IOT Power Type	Single
	Power Capacity	17.5 kW

**Auxiliary  
Transmitter****New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	ULXTE-20
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	12.9 kW
	Justification for New Transmitter	See attached letter from manufacturer regarding IOT transmitters.

**Auxiliary  
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	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
<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

**Auxiliary  
Transmitter**

**Other Transmitter Cost Not Listed**

Information not provided.

**Auxiliary  
Transmitter****Add Transmitter Information**

Section	Question	Response
<b>Existing Transmitter Description</b>	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Used in case of failure of main
	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	DHD15P1
	Year	2003
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	3.6 kW

**Auxiliary  
Transmitter**

**New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	ULXTE-50
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	31.7 kW
	Justification for New Transmitter	This higher power transmitter is required to minimize loss of coverage (ie population) due to lower antenna height at the interim site. WETA will operate at this site while transmitter is installed at the main site for operation on its post repack channel

**Auxiliary  
Transmitter**

**Other Transmitter Costs**

Section	Question	Response
<b>Electrical Service</b>	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	Yes
	Size	4 inches
	Length	420.0 feet
	Other Electrical Service	Yes
	Description	Electrical contractor to connect transmitter into existing electrical panel and wire heat exchanger into transmitter. Includes material and labor. This was originally submitted and approved under another category and moved here.
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A



<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	Yes
	Size	600.0 square feet
<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

**Auxiliary Transmitter**      **Other Transmitter Cost Not Listed**  
Information not provided.

**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	DHD15P1
	Year	2003
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	3.6 kW

**Primary  
Transmitter**

**New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	ULXTE-90
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	56.4 kW
	Justification for New Transmitter	See attached letter from GatesAir regarding inability to retune current transmitter. See revised narrative. Replacement upgrade is part of a multi-station resolution that includes moving WETA's repack channel from 14 to 31 at an ERP of 1000 kW.

**Primary  
Transmitter**

**Other Transmitter Costs**

Section	Question	Response
<b>Electrical Service</b>	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	500 kVA
	Rigid Conduit and Wiring	Yes
	Size	4 inches
	Length	420.0 feet
	Other Electrical Service	No
	Description	N/A
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	Yes
	Type	Heating and Cooling
	Size	50 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?	Yes
	Size	1000.0 square feet
<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
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**Pre-installation survey**

Site Survey by GatesAir of main and aux transmitter sites for transmitter layout.

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**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	Retune Existing
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Owner	District of Columbia Joint Tower Venture
	Site	N/A
	Is the existing antenna shared with another station or stations?	Yes
	Is the existing antenna directional?	No
	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	Top
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	3
	Number of Panels	48

Design power capacity in use	47.0 %
Lower Limit	470.00 MHz
Upper Limit	860.00 MHz
Other Antenna Type	N/A
ERP: (Effective Radiated Power)	73.0 kW
Manufacturer	DIE
Model	TUP-04-12-2
Year	1999

**Facility ID's and Call Signs of all stations with whom the antenna is shared.**

Facility ID	Call Sign
27772	WHUT-TV
74091	WPXW-TV

**Primary Antenna**

**Adjustment to Existing Antenna**

Section	Question	Response
Sweep Test of Existing Antenna	Do you need a sweep test of existing antenna?	Yes

**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	3
	Frequencies of channels supported	RF channel
	Frequency	N/A

Enter a list of RF channel numbers.

RF Channel Number
31
33
35

Primary  
Antenna

Other Antenna Cost Not Listed

Information not provided.



**Auxiliary  
Antenna****Add Antenna Information**

Section	Question	Response
<b>Existing Antenna Description</b>	Type of change	Purchase New
	Antenna Use	Auxiliary (Backup)
	Description of Use	Alternate site backup
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this antenna currently shared with any other stations?	No
	Is this 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	Side Mount
	Antenna position in stack	Not in Stack
	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) .....	30.0 kW

Manufacturer	
Model	TFU-8JST-R03
Year	1998

**Auxiliary  
Antenna****New Antenna Costs**

Section	Question	Response
<b>New Antenna Description</b>	Use	Auxiliary (Backup)
	Description of Use	See attached Buget Justification: Auxiliary Transmitter Site
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
<b>New Antenna Manufacturer and Types</b>	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A

ERP: (Effective Radiated Power) .....	240.0 kW
Manufacturer	
Model	TFU-WB
Year	2018
Justification for New Antenna	Current antenna is tuned to channel 27 and cannot be retuned to operate on channel 31. Proposed antenna costs less than exact replacement.

## Auxiliary Antenna

### Other Antenna Costs

Section	Question	Response
<b>Combiner for Shared Antenna</b>	Do you need a Combiner for a Shared Antenna?	No
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
<b>Elbow Complex</b>	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

<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for a high power 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?	Yes
<b>Sweep Test</b>	Do you require the sweep testing of transmission line and antenna?	Yes

## Auxiliary Antenna

### Other Antenna Cost Not Listed

Name	Description
Auxiliary Antenna Installation	Includes Engineer Reviewed Rigging Plan

**Transmission Line**

Section	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

# Auxiliary Transmission Line

## Add Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Alternate Transmitter Site
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmission currently shared with any other stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	
	Type	Rigid
	Diameter	3 1/8 inches
	Other Diameter	N/A
	Segment Length	19 1/2 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	521 feet per run

**Auxiliary  
Transmission Line**

**New Transmission Line**

Section	Question	Response
<b>New Transmission Line Costs</b>	Use	Auxiliary (Backup)
	Description of Use	Off site Interim
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	Rigid
	Diameter	4 1/16 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	550 feet per run
	Justification for New Transmission Line	See revised attached budget narrative. Line is not of standard length. Ability to support temporary operations reliably while main site is being converted to channel 31 is questionable. There is a high risk of failure.



Auxiliary	Other Transmission Line Expenses Not Listed
Transmission Line	Information not provided.

**Primary  
Transmission Line**

**Add 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	Owned
	Owner	N/A
	Site	N/A
	Is this transmission currently shared with any other stations?	No
	Is Transmission Line in operating condition?	Yes
<b>Existing Transmission Line Manufacturer and Type</b>	Manufacturer	
	Type	Rigid
	Diameter	3 1/8 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	170 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	6 1/8 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	170 feet per run
	Justification for New Transmission Line	Current line will not support higher power level to meet ERP determined from multi-station resolution.

Primary  
Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
Installation	Estimated removal of current line and installation of new. installation

**Tower  
Equipment  
And Rigging  
Costs**

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

**Auxiliary  
Tower**

**Add Tower**

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Auxiliary (Backup)
	Description of Use	Alternate site for WETA
	Ownership	Owned
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	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?	Yes
	ASR Number	1018169
Coordinates ( NAD83 ( North American Datum of 1983))	Latitude (NAD83)	38° 53' 30.0" N-
	Longitude (NAD83)	077° 07' 54.0" W-
	Overall Structure Height	495.40 feet
	Support Structure Height	492.12 feet
	Ground Elevation Above Mean Sea Level (AMSL)	370.07 feet
	Structure Type	LTOWER - Lattice Tower

	Tower Owner	GREATER WASHINGTON EDUCATIONAL TELECOMMUNICATIONS ASSN DBA = WETA FM
	Date Constructed	02/12/2014

**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
65669	WETA	FM
12460	WGTS	FM
4644	WAVA-FM	FM

#### Other Types of Users

Users
Cellular
Amateur Radio
Trunking

#### Auxiliary Tower

#### Tower Modification Costs

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

**Auxiliary  
Tower**

**Tower Rigging Costs**

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

**Auxiliary  
Tower**

**Other Tower Expenses Not Listed**

Name	Description
Tower Rigging and Installation	Tower rigging and installation labor to install tower modifications: includes engineer review rigging plan, additional tower mounting materials related to modifications

**Outside  
Professional**

Section	Question	Response
<b>Services Costs Outside Project Management Services</b>	Do you require outside project management services?	Yes
	Number of Hours	1500
	Explanation	See attached Budget Justification: Outside Professional Services
<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	Yes
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	2
	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
<b>Attorney and Other Outside Consulting Services</b>	Prepare and file Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes

	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	Yes
	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	Yes
	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	Yes
	RF exposure measurements	Yes
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

**Outside Professional Services Costs**

**Other Professional Services Expenses Not Listed**

Name	Description
<b>Architect and Engineering services</b>	Planning and layout of new equipment to be installed at main and aux transmitter sites.



<b>Channel change</b>	Engineering services to evaluate coverage and interference moving channel from 14 to 31.
<b>Progress Reporting</b>	Prepare and file 7 required progress reports on FCC Form 2100, Schedule 387 on a quarterly basis with the FCC.
<b>Site Visits and Surveys</b>	Site visits to establish what equipment is on premises, where new equipment will be located and do equipment inventory for both main and auxiliary sites.

## 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	No
	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

## Other Expenses

### Other Expenses Not Listed

Name	Description
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**Additional Legal Expenses for Repack**

Legal work related to WETA repack and reimbursement, including advice on FCC rules, regulations and policies, required FCC filings, reimbursement rules and procedures, and coordination of repack efforts with other site users at multi-party tower site.

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## 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
<b>Primary Transmitter ULXTE-90</b>	<b>\$2,302,335.00</b>	<b>\$2,249,957.00</b>		<b>\$78,248.05</b>	
Pre-installation survey	<i>\$19,725.00</i>	\$19,725.00	Pre-installation survey by GatesAir to determine requirements for transmitter installation.	\$19,725.00	N/A
50 Ton system	\$266,000.00	\$253,000.00	N/A	N/A	N/A
4" Rigid Conduit and Wiring (Cost per foot)	\$42,420.00	\$40,320.00	N/A	N/A	N/A
Transformer 3 phase /480v - 500 KVA	\$48,400.00	\$46,000.00	N/A	\$5,648.52	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW	\$1,788,000.00	\$1,755,022.00	See attached quote. NOTE: Quote shows cost of both main and auxiliary transmitters. See revised narrative.	N/A	N/A

Other -- Building Addition Size: 1000.0	<b>\$99,590.00</b>	\$99,590.00	Arktx Proposal dated 20180626 - \$26,590 -drawing & 3D laser imaging for initial planning purposes & OsbornEngineering proposal J20170990 - \$73,000 total) - estimate for new roof structure to support transmitter heat exchanger.	\$52,874.53	N/
<b>Auxiliary Transmitter ULXTE-20</b>	<b>\$494,500.00</b>	<b>\$0.00</b>		<b>\$0.00</b>	
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	\$494,500.00	\$0.00	This category is no longer needed and may be removed. 10/18/18 JS	\$0.00	Estima cost v incorre stated a should been eq the predeter Cost Es \$481,
<b>Auxiliary Transmitter ULXTE-50</b>	<b>\$1,193,358.67</b>	<b>\$1,191,258.67</b>		<b>\$807,402.49</b>	
Other -- Building Addition Size: 600.0	<b>\$50,000.00</b>	\$50,000.00	See revised narrative. Remodeling needed to accommodate new transmitter and filter while current transmitter remains operational. Previously approved under another category and moved here.	\$3,315.00	N/

Other Electrical Service: Electrical contractor to connect transmitter into existing electrical panel and wire heat exchanger into transmitter. Includes material and labor. This was originally submitted and approved under another category and moved here.	<b>\$14,000.00</b>	\$14,000.00	Electrical contractor to connect transmitter into existing electrical panel and wire heat exchanger into transmitter. Includes material and labor.	N/A	N/
4" Rigid Conduit and Wiring (Cost per foot)	\$42,420.00	\$40,320.00	N/A	N/A	N/
UHF - Liquid Cooled Solid State Transmitter 31.7 kW	<b>\$1,086,938.67</b>	\$1,086,938.67	This is an auxiliary transmitter to replace what is currently in use.	\$804,087.49	N/
<b>Sub-total</b>	\$3,990,193.67	\$3,441,215.67	N/A	\$885,650.54	N/
<b>Total for all systems</b>	\$6,078,264.67	\$5,521,473.21	N/A	\$3,174,681.74	N/

## Components

**Actual Information**  
**Description**

**File Name**

Pre-installation survey	<p><b>Component Description:</b> Site survey to determine site conditions, materials and components required for system installation</p> <p><b>Amount:</b> \$19,725.00</p>
50 Ton system	Information not provided.
4" Rigid Conduit and Wiring (Cost per foot)	Information not provided.
Transformer 3 phase/480v - 500 KVA	<p><b>Component Description:</b> WETA-110-1st Primary Transmitter - 3 Phase, 480 V, 500 KVA Transformer</p> <p><b>Amount:</b> \$2,824.26</p> <p><b>Component Description:</b> WETA-110-1st Primary Transmitter - 3 Phase, 480 V, 500 KVA Transformer</p> <p><b>Amount:</b> \$2,824.26</p>
Switchgear - industrial 800 amp	Information not provided.
UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW	<p><b>Component Description:</b> A. Transmitter</p> <p><b>Amount:</b> \$548,861.65</p> <p><b>Component Description:</b> 1/3 Down Payment: ULXTE-90 Transmitter</p> <p><b>Amount:</b> \$548,861.65</p>

Other -- Building Addition  
Size: 1000.0

<b>Component Description:</b>	Completed work billed for May
<b>Amount:</b>	\$7,575.00
<b>Component Description:</b>	Monthly progress of Architectural and Engineering Design for existing Transmitter Facility alterations.
<b>Amount:</b>	\$982.20
<b>Component Description:</b>	Monthly progress of Architectural and Engineering Design for existing Transmitter Facility alterations.
<b>Amount:</b>	\$16,810.47
<b>Component Description:</b>	Monthly Progress of Architectural and Engineering Design
<b>Amount:</b>	\$2,667.61
<b>Component Description:</b>	Professional Services
<b>Amount:</b>	\$2,249.25
<b>Component Description:</b>	Item A - Drawing and 3D laser imaging for planning purposes
<b>Amount:</b>	\$22,590.00



UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	<p><b>Component Description:</b></p> <p>The original invoice was incorrectly associated with this category. This category is no longer required and may be removed. 10/18/18 JS</p> <p><b>Amount:</b></p> <p>N/A</p>
Other -- Building Addition Size: 600.0	<p><b>Component Description:</b></p> <p>Professional Services</p> <p><b>Amount:</b></p> <p>\$3,315.00</p>
Other Electrical Service: Electrical contractor to connect transmitter into existing electrical panel and wire heat exchanger into transmitter. Includes material and labor. This was originally submitted and approved under another category and moved here.	Information not provided.
4" Rigid Conduit and Wiring (Cost per foot)	Information not provided.

UHF - Liquid Cooled Solid State Transmitter 31.7 kW	<table> <tr> <td data-bbox="718 91 1117 336"> <b>Component Description:</b>   <b>Amount:</b> </td><td data-bbox="1117 91 1453 336"> 1/3 Payment ULXTE-50 Transmitter \$352,242.88 </td></tr> <tr> <td data-bbox="718 336 1117 582"> <b>Component Description:</b>   <b>Amount:</b> </td><td data-bbox="1117 336 1453 582"> 1/3 down payment of total transmitter cost \$358,689.76 </td></tr> <tr> <td data-bbox="718 582 1117 828"> <b>Component Description:</b>   <b>Amount:</b> </td><td data-bbox="1117 582 1453 828"> ULXTE-50 Transmitter \$358,689.76 </td></tr> <tr> <td data-bbox="718 828 1117 1041"> <b>Component Description:</b>   <b>Amount:</b> </td><td data-bbox="1117 828 1453 1041"> A. Transmitter \$93,154.85 </td></tr> </table>	<b>Component Description:</b>   <b>Amount:</b>	1/3 Payment ULXTE-50 Transmitter \$352,242.88	<b>Component Description:</b>   <b>Amount:</b>	1/3 down payment of total transmitter cost \$358,689.76	<b>Component Description:</b>   <b>Amount:</b>	ULXTE-50 Transmitter \$358,689.76	<b>Component Description:</b>   <b>Amount:</b>	A. Transmitter \$93,154.85
<b>Component Description:</b>   <b>Amount:</b>	1/3 Payment ULXTE-50 Transmitter \$352,242.88								
<b>Component Description:</b>   <b>Amount:</b>	1/3 down payment of total transmitter cost \$358,689.76								
<b>Component Description:</b>   <b>Amount:</b>	ULXTE-50 Transmitter \$358,689.76								
<b>Component Description:</b>   <b>Amount:</b>	A. Transmitter \$93,154.85								

## 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 Justification
<b>Primary Antenna TUP-04-12-2</b>	<b>\$90,930.00</b>	<b>\$147,007.50</b>		<b>\$123,084.25</b>	
New combiner, cost per channel (without antenna)	\$84,200.00	\$140,607.50	see Estimated Cost Justification WETA-210-Primary Antenna - New Combiner v0	\$119,884.25	
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$3,200.00	
<b>Auxiliary Antenna TFU-WB</b>	<b>\$323,960.00</b>	<b>\$159,991.00</b>		<b>\$82,943.77</b>	
Auxiliary Antenna Installation	<i>\$89,750.00</i>	\$89,750.00	Per Estimated Cost Justification WETA-250-Auxiliary Antenna - Antenna Rigging and Installation v0	\$68,450.00	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$4,050.00	Revised. See narrative weta_budget_rev_070918.pdf.	N/A	

Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$6,750.00	Special side mount brackets required to optimize antenna pattern.	N/A
Elbow complex, single channel, at antenna input, per 4 1/16. feedline (if needed)	\$9,570.00	\$8,116.00	See narrative weta_budget_rev_070918.pdf	\$8,093.77
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	\$189,500.00	\$44,925.00	See narrative weta_budget_rev_070918.pdf.	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$6,400.00
<b>Sub-total</b>	\$414,890.00	\$306,998.50	N/A	\$206,028.02
<b>Total for all systems</b>	\$6,078,264.67	\$5,521,473.21	N/A	\$3,174,681.74

## Components

### Actual Information

#### Description

#### File Name

New combiner, cost per channel (without antenna)	<div> <div> <b>Component Description:</b>   <b>Amount:</b> </div> <div> Combiner Costs - 50% WHUT Incremental Cost \$20,723.25 </div> </div> <div> <div> <b>Component Description:</b>   <b>Amount:</b> </div> <div> Combiner Costs - 50% WETA/WPXW \$119,884.25 </div> </div>
Sweep test of existing antenna	<div> <div> <b>Component Description:</b>   <b>Amount:</b> </div> <div> WETA-210-Primary Antenna - Sweep Test \$3,200.00 </div> </div>

Auxiliary Antenna Installation	<b>Component Description:</b> Connection Redesign Sketches, Connection Redesign Drawings <b>Amount:</b> \$2,600.00
	<b>Component Description:</b> Auxiliary Antenna - Antenna Rigging and Installation <b>Amount:</b> \$850.00
	<b>Component Description:</b> Auxiliary Antenna Rigging and Installation <b>Amount:</b> \$32,500.00
	<b>Component Description:</b> Troubleshoot antenna burnout issues - Emergency Rate Tower Technicians <b>Amount:</b> \$21,300.00
	<b>Component Description:</b> WETA-250- Auxiliary Antenna - Antenna Rigging and Installation <b>Amount:</b> \$16,250.00
	<b>Component Description:</b> Auxiliary Antenna Rigging and Installation <b>Amount:</b> \$16,250.00
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.

Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.
Elbow complex, single channel, at antenna input, per 4 1/16. feedline (if needed)	<b>Component Description:</b> ELBOW 4-50 DIGIT 7 X 14 <b>Amount:</b> \$8,093.77
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	Information not provided.
Sweep test of existing antenna	<b>Component Description:</b> OTHER <b>Amount:</b> \$6,400.00

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
Primary Transmission Line	\$79,040.00	\$113,029.50		\$0.00	
Rigid Transmission Line - copper, 6 1/8"	\$34,340.00	\$68,329.50	See attached quote 800163CMZ WETA COMPONENTS.	N/A	N/A
Installation	<i>\$44,700.00</i>	\$44,700.00	See attached quote 800163CMZ WETA COMPONENTS for field survey and installation of line.	N/A	N/A
Auxiliary Transmission Line	\$78,100.00	\$84,460.00		\$3,859.00	
Rigid Transmission Line - copper, 4 1/16"	\$78,100.00	\$84,460.00	See narrative 070918.pdf.; See Justifying Change Order - R0019581504	\$3,859.00	N/A
Sub-total	\$157,140.00	\$197,489.50	N/A	\$3,859.00	N/A
Total for all systems	\$6,078,264.67	\$5,521,473.21	N/A	\$3,174,681.74	N/A

Components

Actual Information	
Description	File Name
Rigid Transmission Line - copper, 6 1/8"	Information not provided.



Installation	Information not provided.	
Rigid Transmission Line - copper, 4 1/16"	<b>Component Description:</b>  <b>Amount:</b>	RIGID TRANSMISSION LINE T/L 4-50 EIA LENGTH 5' TO 10' FIXED FLG 1 END/ SWIVEL FLG 1 END" \$1,402.00
	<b>Component Description:</b>  <b>Amount:</b>	HANGER HOR 4 3PT SUSPENSION \$1,440.00
	<b>Component Description:</b>  <b>Amount:</b>	T/L 4-50 EIA LENGTH 5' TO 10' FIXED FLG 1 \$1,017.00

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
Auxiliary Tower LTOWER	\$849,000.00	\$666,250.00		\$572,750.00
Structural engineering tower load study for well documented tower	\$12,600.00	\$12,000.00	N/A	\$0.00
Short Tower (less than 500')	\$84,200.00	\$80,000.00	N/A	N/A
Tower Rigging and Installation	\$331,200.00	\$331,200.00	see Estimated Cost Justification WETA-450-Existing Auxiliary Tower - Major Tower Modification Installation Costs v0	\$331,200.00
Major tower reinforcement /modifications	\$421,000.00	\$243,050.00	see Estimated Cost Justification WETA-450-Existing Auxiliary Tower - Major Tower Reinforcement_Modifications v0	\$241,550.00
Sub-total	\$849,000.00	\$666,250.00	N/A	\$572,750.00
Total for all systems	\$6,078,264.67	\$5,521,473.21	N/A	\$3,174,681.74

Components

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

Short Tower (less than 500')	Information not provided.	
Tower Rigging and Installation	<b>Component Description:</b>  <b>Amount:</b>	Existing Aux Tower Major Tower Modification Installation \$165,000.00
	<b>Component Description:</b>  <b>Amount:</b>	Existing Aux Tower Major Tower Modification Installation \$82,500.00
	<b>Component Description:</b>  <b>Amount:</b>	Professional services \$1,200.00
	<b>Component Description:</b>  <b>Amount:</b>	WETA-450-Existing Auxiliary Tower - Major Tower Modification Installation Costs \$82,500.00

Major tower reinforcement  
/modifications

**Component Description:** Connection  
Redesign Sketches  
and Drawings - by  
Morris & Ritchie  
**Amount:** \$3,450.00

**Component Description:** WETA Channel  
Repack Antenna  
Replacement  
**Amount:** \$9,600.00

**Component Description:** 25% downpayment  
per Proposal  
18334VA - per PO  
Terms  
**Amount:** \$57,500.00

**Component Description:** Final 25% Tower  
Mods  
**Amount:** \$56,000.00

**Component Description:** 50% due upon  
mobilization - per  
proposal 18334VA -  
per PO Terms  
**Amount:** \$115,000.00

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 Justificatio
Outside Professional Services	\$545,615.00	\$792,458.54		\$382,554.88	
Attorney Fees - Negotiation of lease and other matters for shared locations	\$4,210.00	\$180,592.74	per WETA- 550- Attorney - Negotiate Lease and Other Matters Budget Increase Justification v0	\$180,592.74	WETA-550 Attorney - Negotiate Lease and Other Matters Budget Increase Justification v0 has been uploaded to LMS and will be included with invoices #31516 / 31281. Estimated cost will be adjusted.

Site Visits and Surveys	<b>\$9,000.00</b>	\$9,000.00	Site visits to establish what equipment is on premises, where new equipment will be located and do equipment inventory for both main and auxiliary sites.	\$5,700.00	N/A
Progress Reporting	<b>\$14,000.00</b>	\$14,000.00	Prepare and file 7 required progress reports on FCC Form 2100, Schedule 387 on a quarterly basis with the FCC.	\$4,134.35	N/A
Channel change	<b>\$85,000.00</b>	\$85,000.00	Engineering services to evaluate coverage and interference moving channel from 14 to 31.	\$53,718.75	N/A
Architect and Engineering services	<b>\$50,500.00</b>	\$50,500.00	Justifying Quote - WETA Arlington Auxiliary Fee Proposal 20180328	\$38,836.44	N/A

RF Exposure Measurements	\$21,050.00	\$20,000.00	N/A	\$0.00	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$100,000.00	\$80,000 for Main transmitter site and \$20,000 for auxiliary site.	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$7,000.00	The need for filing two STA's in a project of this magnitude is anticipated.	\$0.00	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,511.75	Actual Costs are Marginally higher than estimated costs	\$2,511.75	Actuals are marginally higher than estimates costs
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	\$4,210.00	\$4,000.00	N/A	\$834.70	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$0.00	N/A
Prepare request for Special Temporary Authorization	\$4,100.00	\$3,000.00	Two STA's are anticipated, one for the main site and the other for the auxiliary.	\$328.95	N/A

RF Consulting Engineer Fees-Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	\$1,580.00	\$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
RF Consulting Engineer Fees-Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	\$2,105.00	\$3,000.00	Time required will be similar to that required of the main site to prepare this application.	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	N/A	N/A



Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$45,000.00	Extensive study has already been given to searching for a new channel and Land Mobile interference and remediation with WETA on ch. 14. Additional studies for multi-station resolution had to be performed.	\$5,575.00	N/A
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$11,000.00	Coordination with 4 TV stations and 3 FM stations. Cut over must be carefully planned with other two stations. Contacting Land Mobile operators on cutover to ensure no interference by WETA	N/A	N/A

Prepare and or review reimbursement form	\$2,630.00	\$21,854.05	This is a complex project and requires careful attention to detail in assembling. Substantial time has been placed into the preparation of the form with supporting justification for both main and auxiliary sites.	\$22,694.05	Actuals are marginally higher than estimated costs.
Project management of the transition	\$237,000.00	\$225,000.00	N/A	\$67,628.15	N/A
<b>Sub-total</b>	\$545,615.00	\$792,458.54	N/A	\$382,554.88	N/A
<b>Total for all systems</b>	\$6,078,264.67	\$5,521,473.21	N/A	\$3,174,681.74	N/A

## Components

Actual Information	
Description	File Name
Attorney Fees - Negotiation of lease and other matters for shared locations	<p><b>Component Description:</b> Item A - Attorney fees for exploring and negotiating channel alternatives to Ch. 14</p> <p><b>Amount:</b> \$5,758.86</p>

<b>Component Description:</b>	Item A - Attorney fees for various matter relating to channel 14 assignment and channel 31 move
<b>Amount:</b>	\$6,330.80

<b>Component Description:</b>	WETA-550-Attorney - Negotiate Lease and Other Matters:
<b>Amount:</b>	\$2,280.90

<b>Component Description:</b>	Work on WETA repack issues regarding DCJTV invoices for combiner and concerns with reimbursement of same.
<b>Amount:</b>	\$7,587.46

<b>Component Description:</b>	Work on amendment to agreement with DCJTV
<b>Amount:</b>	\$3,998.40

<b>Component Description:</b>	Email to S. Amron (WETA Legal) regarding inquiries from other parket stations about WETA repack
<b>Amount:</b>	\$5,481.65

<b>Component Description:</b>	Legal services
<b>Amount:</b>	\$5,890.50

<b>Component Description:</b>	Legal services
<b>Amount:</b>	\$2,543.20

<b>Component Description:</b>	Work on WETA repack work regarding reimbursement.
<b>Amount:</b>	\$3,909.15

<b>Component Description:</b>	Work on WETA repack and amendment of agreement
<b>Amount:</b>	\$3,439.10

<b>Component Description:</b>	Legal services
<b>Amount:</b>	\$1,050.00

<b>Component Description:</b>	Legal Services Rendered
<b>Amount:</b>	\$380.80

<b>Component Description:</b>	Legal services
<b>Amount:</b>	\$2,250.00

<b>Component Description:</b>	Attorney - Negotiate Lease and Other Matters
<b>Amount:</b>	\$1,047.20

<b>Component Description:</b>	Item A - Attorney fees for discussion regarding viability of Ch. 14 and move to Ch. 31
<b>Amount:</b>	\$6,822.08

<b>Component Description:</b>	Item A - Attorney fees for exploration and negotiation of Ch. 31 move
<b>Amount:</b>	\$1,626.47

<b>Component Description:</b>	Item A - Attorney fees for negotiation of move to Channel 31. See attached invoice and items marked as A on page 2 for detail breakout.
<b>Amount:</b>	\$1,190.00

<b>Component Description:</b>	Work on WETA repack reimbursement issues
<b>Amount:</b>	\$7,327.35

<b>Component Description:</b>	Legal Services
<b>Amount:</b>	\$1,650.00

<b>Component Description:</b>	Negotiating with 3rd parties (interference) for move to Ch. 31
<b>Amount:</b>	\$476.00

<b>Component Description:</b>	Attorney Fees- Negotiate Lease and Other Matters
<b>Amount:</b>	\$2,332.40

<b>Component Description:</b>	Legal Services Rendered
<b>Amount:</b>	\$6,147.03

<b>Component Description:</b>	Attorney - Negotiate Lease and Other Matters
<b>Amount:</b>	\$1,666.00

<b>Component Description:</b>	Legal services
<b>Amount:</b>	\$3,189.20

<b>Component Description:</b>	Item A - Negotiation of move to Ch. 31 and related issues
<b>Amount:</b>	\$20,644.80

<b>Component Description:</b>	Item A - Attorney fees related to negotiation of WETA move to Ch. 31
<b>Amount:</b>	\$17,227.32

<b>Component Description:</b>	Item A - Negotiate with 3rd parties re: move to Ch. 31 and related
<b>Amount:</b>	\$4,093.60

<b>Component Description:</b>	Legal Services
<b>Amount:</b>	\$1,100.00

<b>Component Description:</b>	Work on WETA repack issues regarding combiner replacement
<b>Amount:</b>	\$8,704.85

	<b>Component Description:</b>	Item A - Negotiation with 3rd parties for WETA move to Ch. 31
	<b>Amount:</b>	\$12,350.00
	<b>Component Description:</b>	Work on WETA repack issues with DCJTV-owned combiner
	<b>Amount:</b>	\$16,929.59
	<b>Component Description:</b>	Item A - Negotiation with 3rd parties in connection with WETA move to Ch. 31
	<b>Amount:</b>	\$4,700.00
	<b>Component Description:</b>	Legal services
	<b>Amount:</b>	\$10,468.03
Site Visits and Surveys	<b>Component Description:</b>	WETA-590-Site Visits and Surveys
	<b>Amount:</b>	\$5,700.00

Progress Reporting	<b>Component Description:</b> <b>Amount:</b>	Legal services \$861.00
	<b>Component Description:</b> <b>Amount:</b>	WETA-590- Progress Reporting \$666.40
	<b>Component Description:</b> <b>Amount:</b>	Item G - Preparation and submission of progress reports \$285.60
	<b>Component Description:</b> <b>Amount:</b>	Legal Services Rendered \$1,380.40
	<b>Component Description:</b> <b>Amount:</b>	Item G - Prepare progress report \$893.35
	<b>Component Description:</b> <b>Amount:</b>	Item G - Preparation of progress report \$47.60
Channel change	<b>Component Description:</b>  <b>Amount:</b>	Item A - Develop new channel options with MPT. Extensive work to obtain a multi-resolution agreement between 3 parties for channel changes for 5 stations so WETA could get ch 31. \$2,193.75



<b>Component Description:</b>	Item B - Coverage study and interference maps for various scenarios including Ch. 20 SFN option
<b>Amount:</b>	\$2,868.75

<b>Component Description:</b>	Item B - Repack research issues related to Land Mobile interference on Ch. 14
<b>Amount:</b>	\$20,362.50

<b>Component Description:</b>	Invoice moved to the correct category.
<b>Amount:</b>	N/A

<b>Component Description:</b>	Item B - Land Mobile interference and remediation on Ch. 14
<b>Amount:</b>	\$4,106.25

<b>Component Description:</b>	Item A - Auction repack analysis related to WETA Ch. 14
<b>Amount:</b>	\$10,743.75

<b>Component Description:</b>	Item A - Channel 14 issues and alternatives. SFN research options.
<b>Amount:</b>	\$4,893.75

	<p><b>Component Description:</b></p> <p>Item B - TV study for alternative channel assignments. WETA originally assigned channel 14. This was an unworkable channel due to numerous Land Mobile stations in DC. Studies we undertaken to find another channel. WETA ultimately found channel 31.</p> <p><b>Amount:</b></p> <p>\$1,012.50</p>	
	<p><b>Component Description:</b></p> <p>Item C - RF sweep at transmitter site and UHF panel testing for new repack channel</p> <p><b>Amount:</b></p> <p>\$1,687.50</p>	
	<p><b>Component Description:</b></p> <p>Invoice moved to the correct category.</p> <p><b>Amount:</b></p> <p>N/A</p>	
	<p><b>Component Description:</b></p> <p>Item A - Auction repack analysis for new Ch 14 assignment</p> <p><b>Amount:</b></p> <p>\$5,850.00</p>	
Architect and Engineering services	<p><b>Component Description:</b></p> <p>Monthly progress of Architectural and Engineering Design for existing Transmitter Facility alterations.</p> <p><b>Amount:</b></p> <p>\$9,362.29</p>	

<b>Component Description:</b>	Professional Services through June 28, 2019
<b>Amount:</b>	\$4,781.15

<b>Component Description:</b>	Professional Services
<b>Amount:</b>	\$2,499.75

<b>Component Description:</b>	Monthly progress of Architectural and Engineering Design for existing Transmitter Facility alterations.
<b>Amount:</b>	\$7,203.72

<b>Component Description:</b>	Monthly progress of Architectural and Engineering Design for existing Transmitter Facility alterations.
<b>Amount:</b>	\$7,061.65

<b>Component Description:</b>	Professional Services
<b>Amount:</b>	\$5,827.88

<b>Component Description:</b>	Professional Services
<b>Amount:</b>	\$900.00

<b>Component Description:</b>	Professional Services
<b>Amount:</b>	\$300.00

	<p><b>Component Description:</b> Monthly progress of Architectural and Engineering Design for existing Transmitter Facility alteration for FCC Repack.</p> <p><b>Amount:</b> \$900.00</p>
RF Exposure Measurements	Information not provided.
Comprehensive coverage verification via field study, if needed	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	<p><b>Component Description:</b> Item B - Follow-up work related to CP application</p> <p><b>Amount:</b> \$226.95</p> <p><b>Component Description:</b> Item B - Monitor construction permit application</p> <p><b>Amount:</b> \$190.40</p> <p><b>Component Description:</b> Item B - Preparation of construction permit application and related</p> <p><b>Amount:</b> \$1,618.40</p> <p><b>Component Description:</b> Item B - Work related to construction permit application</p> <p><b>Amount:</b> \$476.00</p>

<p>Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application</p>	<table> <tr> <td data-bbox="711 98 1134 405"> <p><b>Component Description:</b></p> <p><b>Amount:</b></p> </td><td data-bbox="1134 98 1441 405"> <p>Attorney - Construction Permit Application (Aux) \$333.20</p> </td></tr> <tr> <td data-bbox="711 405 1134 712"> <p><b>Component Description:</b></p> <p><b>Amount:</b></p> </td><td data-bbox="1134 405 1441 712"> <p>Construction Permit App Aux \$36.55</p> </td></tr> <tr> <td data-bbox="711 712 1134 1019"> <p><b>Component Description:</b></p> <p><b>Amount:</b></p> </td><td data-bbox="1134 712 1441 1019"> <p>Item C - Preparation of CP application for aux site \$285.60</p> </td></tr> <tr> <td data-bbox="711 1019 1134 1122"> <p><b>Component Description:</b></p> <p><b>Amount:</b></p> </td><td data-bbox="1134 1019 1441 1122"> <p>Attorney - Construction Permit Application (Aux) \$179.35</p> </td></tr> </table>	<p><b>Component Description:</b></p> <p><b>Amount:</b></p>	<p>Attorney - Construction Permit Application (Aux) \$333.20</p>	<p><b>Component Description:</b></p> <p><b>Amount:</b></p>	<p>Construction Permit App Aux \$36.55</p>	<p><b>Component Description:</b></p> <p><b>Amount:</b></p>	<p>Item C - Preparation of CP application for aux site \$285.60</p>	<p><b>Component Description:</b></p> <p><b>Amount:</b></p>	<p>Attorney - Construction Permit Application (Aux) \$179.35</p>
<p><b>Component Description:</b></p> <p><b>Amount:</b></p>	<p>Attorney - Construction Permit Application (Aux) \$333.20</p>								
<p><b>Component Description:</b></p> <p><b>Amount:</b></p>	<p>Construction Permit App Aux \$36.55</p>								
<p><b>Component Description:</b></p> <p><b>Amount:</b></p>	<p>Item C - Preparation of CP application for aux site \$285.60</p>								
<p><b>Component Description:</b></p> <p><b>Amount:</b></p>	<p>Attorney - Construction Permit Application (Aux) \$179.35</p>								
<p>Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application</p>	<p>Information not provided.</p>								
<p>Prepare request for Special Temporary Authorization</p>	<table> <tr> <td data-bbox="711 1317 1134 1688"> <p><b>Component Description:</b></p> <p><b>Amount:</b></p> </td><td data-bbox="1134 1317 1441 1688"> <p>Item E - Attorney fees related to STA for waiver of repack construction permit app \$328.95</p> </td></tr> </table>	<p><b>Component Description:</b></p> <p><b>Amount:</b></p>	<p>Item E - Attorney fees related to STA for waiver of repack construction permit app \$328.95</p>						
<p><b>Component Description:</b></p> <p><b>Amount:</b></p>	<p>Item E - Attorney fees related to STA for waiver of repack construction permit app \$328.95</p>								
<p>RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application</p>	<p>Information not provided.</p>								
<p>Prepare engineering section of FCC Form 2100 (main), License to Cover Application</p>	<p>Information not provided.</p>								

RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Information not provided.	
Perform engineering study for new channel assignment and antenna development	<p><b>Component Description:</b></p> <p><b>Amount:</b></p> <p><b>Component Description:</b></p> <p><b>Amount:</b></p>	<p>Regarding interim antenna for repack Ch-31, determine TV antenna parameters for RF exposure determination on tower structure. \$575.00</p> <p>Review of Land mobile interference with WETA on Ch. 14 \$5,000.00</p>
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	
Prepare and or review reimbursement form	<p><b>Component Description:</b></p> <p><b>Amount:</b></p> <p><b>Component Description:</b></p> <p><b>Amount:</b></p>	<p>WETA-590-Prepare and/or Review Reimbursement Form \$168.00</p> <p>WETA-590-Prepare and/or Review Reimbursement Form \$672.00</p>

<b>Component Description:</b>	Legal Services
<b>Amount:</b>	\$1,000.00

<b>Component Description:</b>	Prepare and/or Review Reimbursement Form
<b>Amount:</b>	\$238.00

<b>Component Description:</b>	Item F - Attorney fees related to preparation of Form 399
<b>Amount:</b>	\$2,943.55

<b>Component Description:</b>	Item F - Attorney fees related to preparation of Form 399
<b>Amount:</b>	\$1,643.90

<b>Component Description:</b>	Item F - Attorney fees in preparation of Form 399
<b>Amount:</b>	\$190.40

<b>Component Description:</b>	Item F - Attorney fees for educating WETA staff on reimbursement procedures
<b>Amount:</b>	\$95.20

<b>Component Description:</b>	Legal Services Rendered
<b>Amount:</b>	\$2,998.80

	<b>Component Description:</b>	Emails with S. Amron
	<b>Amount:</b>	\$190.40
	<b>Component Description:</b>	Item F - Attorney fees for preparation of Form 399
	<b>Amount:</b>	\$5,807.20
	<b>Component Description:</b>	Item F - Attorney fees for preparation of Form 399
	<b>Amount:</b>	\$2,500.00
	<b>Component Description:</b>	Item F - Educate WETA staff on reimbursement procedures and processes
	<b>Amount:</b>	\$2,760.80
	<b>Component Description:</b>	Item F - Educate WETA staff on reimbursement process & procedure and related
	<b>Amount:</b>	\$295.80
	<b>Component Description:</b>	Item F - Attorney fees for preparation of Form 399
	<b>Amount:</b>	\$952.00
	<b>Component Description:</b>	Item F - Educate WETA staff on reimbursement
	<b>Amount:</b>	\$238.00
Project management of the		



transition

<b>Component Description:</b>	work related to TV repack rebuild of WETA TV transmitter room
<b>Amount:</b>	\$4,050.00

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$3,254.45

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$6,646.30

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$3,879.85

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$3,572.95

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$3,715.20

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$4,626.65

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$3,729.80

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$3,540.40

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$6,489.15

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$4,988.10

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$993.75

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$4,894.25

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$4,347.90

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$6,954.05

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$1,945.35

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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 Justification
<b>Other Expenses</b>	<b>\$121,426.00</b>	<b>\$117,061.00</b>		<b>\$26,116.00</b>	
Additional Legal Expenses for Repack	<i>\$0.00</i>	\$0.00	N/A	N/A	N
DTV Medical Facility Notification	\$11,550.00	\$7,000.00	N/A	\$4,250.00	N
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$380.00	Anticipate needing to file two STA's in a project this complex.	N/A	N
Non-zoning permits	<i>\$5,000.00</i>	\$5,000.00	Estimate of building permit costs to modify auxiliary transmitter site and extensive electrical work at main site.	N/A	N
Disposal Costs (for equipment and other waste, net of any salvage value)	<i>\$45,681.00</i>	\$45,681.00	Some disposal costs are anticipated for old equipment removed from service. Please see attached GatesAir Quote Q-79737.	\$19,947.00	N

Equipment Delivery and Handling Charges	<b>\$34,500.00</b>	\$34,500.00	See WETA ULXTE90 6 pole CIF with RF Switch Load.pdf \$13,500 See WETA Interim Site ULXTE-50 9-6-18. pdf 11,000 Est. Ship for antenna and transmission line and other equipment 10,000	N/A	N
Equipment Storage	<b>\$10,000.00</b>	\$10,000.00	See attached Budget Justification: FEES AND MISCELLANEOUS EXPENSES	N/A	N
Develop and air announcement of upcoming channel change	<b>\$7,500.00</b>	\$7,500.00	Costs for production and airtime of channel change announcements.	\$550.00	N
MVPD Notification of Channel Change	<b>\$7,000.00</b>	\$7,000.00	Estimated cost of using outside firm to contact MVPD's regarding channel change to repack channel.	\$1,369.00	N
<b>Sub-total</b>	\$121,426.00	\$117,061.00	N/A	\$26,116.00	N
<b>Total for all systems</b>	\$6,078,264.67	\$5,521,473.21	N/A	\$3,174,681.74	N

## Components

Actual Information	
Description	File Name
Additional Legal Expenses for Repack	Information not provided.

DTV Medical Facility Notification	<b>Component Description:</b> <b>Amount:</b>	Medical Notification \$4,250.00
FCC Filing Fees - Special Temporary Authorization request	Information not provided.	
Non-zoning permits	Information not provided.	
Disposal Costs (for equipment and other waste, net of any salvage value)	<b>Component Description:</b>  <b>Amount:</b>	Lump Sum: Decommissioning, Demolition, Transportation and Disposal of IOT Harris Transmission system and Components \$19,947.00
Equipment Delivery and Handling Charges	Information not provided.	
Equipment Storage	Information not provided.	
Develop and air announcement of upcoming channel change	<b>Component Description:</b> <b>Amount:</b>	Repack Promo \$180.00
	<b>Component Description:</b> <b>Amount:</b>	Repack Promo \$370.00
MVPD Notification of Channel Change	<b>Component Description:</b> <b>Amount:</b>	Medical Notification \$1,250.00
	<b>Component Description:</b> <b>Amount:</b>	WETA-610-MVPD Notifications \$119.00

<b>Cost Information</b>	<b>Grand Total</b>		
		<b>Predetermined Cost Estimate</b>	<b>Estimated Cost</b>
			<b>Actual Cost</b>
	<b>Total for all systems</b>	\$6,078,264.67	\$5,521,473.21
			\$3,174,681.74

<b>Reimbursement Status</b>	<b>Question</b>	<b>Response</b>
	The facility has ceased operating on its pre-auction channel.	Yes
	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.



<p>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.</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>Sarah Gurfein-Amron</b>  <i>Contracts &amp; Regulatory Specialist</i></p> <p>01/29/2020</p>

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	<p>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).</p>	
		<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> <li>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.</li> </ol>	

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.

<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>Sarah Gurfein-Amron</b>  <i>Contracts &amp; Regulatory Specialist</i></p> <p>01/29/2020</p>

## Attachments