



(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 **03/24**
Submitted: **/2020**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
GREATER WASHINGTON EDUCATIONAL TELECOMMUNICATIONS ASSOC 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
Joseph L. Snelson , Jr . <i>Technical Consultant</i> <i>Meintel, Sgrignoli & 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
Existing Transmitter Description	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
Existing Transmitter Manufacturer and Type	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
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

**Auxiliary
Transmitter**

Other Transmitter Cost Not Listed

Information not provided.

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

Section	Question	Response
Existing Transmitter Description	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
Existing Transmitter Manufacturer and Type	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
Electrical Service	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.
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A

Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	Yes
	Size	600.0 square feet
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

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

**Primary
Transmitter**

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	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
Electrical Service	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
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	Heating and Cooling
	Size	50 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	Yes
	Size	1000.0 square feet
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

**Primary
Transmitter**

Other Transmitter Cost Not Listed

Name	Description
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Pre-installation survey

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

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
Existing Antenna Description	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
Existing Antenna Manufacturer and Type	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
New Antenna Description	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
New Antenna Manufacturer and Types	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
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Single Channel
	Feed Line Size	4 1/16 inches inches

Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
Sweep Test	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
New Transmission Line Costs	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
Existing Transmission Line Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is 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	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
4644	WAVA-FM	FM
12460	WGTS	FM

Other Types of Users

Users
Cellular
Amateur Radio
Trunking

Auxiliary 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

**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
Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	1500
	Explanation	See attached Budget Justification: Outside Professional Services
Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	Yes
	Prepare engineering section of Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	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
Attorney and Other Outside Consulting Services	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
RF Field Engineering Services	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
Architect and Engineering services	Planning and layout of new equipment to be installed at main and aux transmitter sites.

Channel change	Engineering services to evaluate coverage and interference moving channel from 14 to 31.
Progress Reporting	Prepare and file 7 required progress reports on FCC Form 2100, Schedule 387 on a quarterly basis with the FCC.
Site Visits and Surveys	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
AM Pattern Disturbance	Is an Impact Study needed?	No
	Is Remediation needed?	No
Facility Expenses	Name	N/A
	Other Distributed Transmission System Expenses Not listed	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
Permit and Filing Costs	Local Zoning	No
	Non-zoning permits	Yes
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	No
	FCC Special Temporary Authority Application	Yes
Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
	Does this relocation require Equipment Storage?	Yes
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD Notification of a Channel Change?	Yes

Other Expenses

Other Expenses Not Listed

Name	Description
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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.

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
Primary Transmitter ULXTE-90	\$2,302,335.00	\$2,249,957.00		\$1,623,236.45	
Transformer 3 phase /480v - 500 KVA	\$48,400.00	\$46,000.00	N/A	\$8,472.78	N/A
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
Other -- Building Addition Size: 1000.0	<i>\$99,590.00</i>	\$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/A
50 Ton system	\$266,000.00	\$253,000.00	N/A	\$0.00	N/A
4" Rigid Conduit and Wiring (Cost per foot)	\$42,420.00	\$40,320.00	N/A	\$0.00	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.	\$1,542,164.14	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	\$0.00	N/A
Auxiliary Transmitter ULXTE-20	\$494,500.00	\$0.00		\$0.00	
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	Estimate cost v incomplete stated a should been equal the predetermined Cost Estimate \$481,000.00
Auxiliary Transmitter ULXTE-50	\$1,193,358.67	\$1,191,258.67		\$807,402.49	
Other -- Building Addition Size: 600.0	\$50,000.00	\$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/A

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.	\$14,000.00	\$14,000.00	Electrical contractor to connect transmitter into existing electrical panel and wire heat exchanger into transmitter. Includes material and labor.	\$0.00	N/
UHF - Liquid Cooled Solid State Transmitter 31.7 kW	\$1,086,938.67	\$1,086,938.67	This is an auxiliary transmitter to replace what is currently in use.	\$804,087.49	N/
4" Rigid Conduit and Wiring (Cost per foot)	\$42,420.00	\$40,320.00	N/A	\$0.00	N/
Sub-total	\$3,990,193.67	\$3,441,215.67	N/A	\$2,430,638.94	N/
Total for all systems	\$6,078,264.67	\$5,521,473.21	N/A	\$3,629,830.09	N/

Components

Actual Information
Description

File Name

Transformer 3 phase/480v - 500 KVA	<div data-bbox="726 174 1453 409"> <div data-bbox="726 174 1145 208">Component Description:</div> <div data-bbox="1166 174 1453 365">WETA-110-1st Primary Transmitter - 3 Phase, 480 V, 500 KVA Transformer</div> <div data-bbox="726 376 1145 409">Amount:</div> <div data-bbox="1166 376 1453 409">\$2,824.26</div> </div> <div data-bbox="726 510 1453 745"> <div data-bbox="726 510 1145 544">Component Description:</div> <div data-bbox="1166 510 1453 701">WETA-110-1st Primary Transmitter - 3 Phase, 480 V, 500 KVA Transformer</div> <div data-bbox="726 712 1145 745">Amount:</div> <div data-bbox="1166 712 1453 745">\$2,824.26</div> </div> <div data-bbox="726 846 1453 1081"> <div data-bbox="726 846 1145 880">Component Description:</div> <div data-bbox="1166 846 1453 1037">WETA-110-1st Primary Transmitter - 3 Phase, 480 V, 500 KVA Transformer</div> <div data-bbox="726 1048 1145 1081">Amount:</div> <div data-bbox="1166 1048 1453 1081">\$2,824.26</div> </div>
Pre-installation survey	<div data-bbox="726 1227 1453 1529"> <div data-bbox="726 1227 1145 1261">Component Description:</div> <div data-bbox="1166 1227 1453 1485">Site survey to determine site conditions, materials and components required for system installation</div> <div data-bbox="726 1496 1145 1529">Amount:</div> <div data-bbox="1166 1496 1453 1529">\$19,725.00</div> </div>

<p>Other -- Building Addition Size: 1000.0</p>	<table> <tr> <td data-bbox="726 100 1141 414"> <p>Component Description:</p> <p>Amount:</p> </td><td data-bbox="1141 100 1453 414"> <p>Item A - Drawing and 3D laser imaging for planning purposes \$22,590.00</p> </td></tr> <tr> <td data-bbox="726 414 1141 683"> <p>Component Description:</p> <p>Amount:</p> </td><td data-bbox="1141 414 1453 683"> <p>Professional Services \$2,249.25</p> </td></tr> <tr> <td data-bbox="726 683 1141 952"> <p>Component Description:</p> <p>Amount:</p> </td><td data-bbox="1141 683 1453 952"> <p>Completed work billed for May \$7,575.00</p> </td></tr> <tr> <td data-bbox="726 952 1141 1310"> <p>Component Description:</p> <p>Amount:</p> </td><td data-bbox="1141 952 1453 1310"> <p>Monthly progress of Architectural and Engineering Design for existing Transmitter Facility alterations. \$16,810.47</p> </td></tr> <tr> <td data-bbox="726 1310 1141 1579"> <p>Component Description:</p> <p>Amount:</p> </td><td data-bbox="1141 1310 1453 1579"> <p>Monthly Progress of Architectural and Engineering Design \$2,667.61</p> </td></tr> <tr> <td data-bbox="726 1579 1141 1917"> <p>Component Description:</p> <p>Amount:</p> </td><td data-bbox="1141 1579 1453 1917"> <p>Monthly progress of Architectural and Engineering Design for existing Transmitter Facility alterations. \$982.20</p> </td></tr> </table>	<p>Component Description:</p> <p>Amount:</p>	<p>Item A - Drawing and 3D laser imaging for planning purposes \$22,590.00</p>	<p>Component Description:</p> <p>Amount:</p>	<p>Professional Services \$2,249.25</p>	<p>Component Description:</p> <p>Amount:</p>	<p>Completed work billed for May \$7,575.00</p>	<p>Component Description:</p> <p>Amount:</p>	<p>Monthly progress of Architectural and Engineering Design for existing Transmitter Facility alterations. \$16,810.47</p>	<p>Component Description:</p> <p>Amount:</p>	<p>Monthly Progress of Architectural and Engineering Design \$2,667.61</p>	<p>Component Description:</p> <p>Amount:</p>	<p>Monthly progress of Architectural and Engineering Design for existing Transmitter Facility alterations. \$982.20</p>
<p>Component Description:</p> <p>Amount:</p>	<p>Item A - Drawing and 3D laser imaging for planning purposes \$22,590.00</p>												
<p>Component Description:</p> <p>Amount:</p>	<p>Professional Services \$2,249.25</p>												
<p>Component Description:</p> <p>Amount:</p>	<p>Completed work billed for May \$7,575.00</p>												
<p>Component Description:</p> <p>Amount:</p>	<p>Monthly progress of Architectural and Engineering Design for existing Transmitter Facility alterations. \$16,810.47</p>												
<p>Component Description:</p> <p>Amount:</p>	<p>Monthly Progress of Architectural and Engineering Design \$2,667.61</p>												
<p>Component Description:</p> <p>Amount:</p>	<p>Monthly progress of Architectural and Engineering Design for existing Transmitter Facility alterations. \$982.20</p>												
<p>50 Ton system</p>	<p>Information not provided.</p>												
<p>4" Rigid Conduit and Wiring (Cost per foot)</p>	<p>Information not provided.</p>												

UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW	<table> <tr> <td data-bbox="729 174 1038 248">Component Description: Amount:</td><td data-bbox="1173 174 1342 248">A. Transmitter \$548,861.65</td></tr> <tr> <td data-bbox="729 353 1038 427">Component Description: Amount:</td><td data-bbox="1173 353 1342 427">A. Transmitter \$444,440.84</td></tr> <tr> <td data-bbox="729 533 1038 685">Component Description: Amount:</td><td data-bbox="1173 533 1385 685">1/3 Down Payment: ULXTE- 90 Transmitter \$548,861.65</td></tr> </table>	Component Description: Amount:	A. Transmitter \$548,861.65	Component Description: Amount:	A. Transmitter \$444,440.84	Component Description: Amount:	1/3 Down Payment: ULXTE- 90 Transmitter \$548,861.65
Component Description: Amount:	A. Transmitter \$548,861.65						
Component Description: Amount:	A. Transmitter \$444,440.84						
Component Description: Amount:	1/3 Down Payment: ULXTE- 90 Transmitter \$548,861.65						
Switchgear - industrial 800 amp	Information not provided.						
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	<table> <tr> <td data-bbox="729 931 1038 1323">Component Description: Amount:</td><td data-bbox="1173 931 1390 1368">The original invoice was incorrectly associated with this category. This category is no longer required and may be removed. 10/18/18 JS N/A</td></tr> </table>	Component Description: Amount:	The original invoice was incorrectly associated with this category. This category is no longer required and may be removed. 10/18/18 JS N/A				
Component Description: Amount:	The original invoice was incorrectly associated with this category. This category is no longer required and may be removed. 10/18/18 JS N/A						
Other -- Building Addition Size: 600.0	<table> <tr> <td data-bbox="729 1505 1038 1579">Component Description: Amount:</td><td data-bbox="1173 1505 1318 1621">Professional Services \$3,315.00</td></tr> </table>	Component Description: Amount:	Professional Services \$3,315.00				
Component Description: Amount:	Professional Services \$3,315.00						
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.						

UHF - Liquid Cooled Solid State Transmitter 31.7 kW	<table> <tr> <td data-bbox="726 174 1145 248"> Component Description: Amount: </td><td data-bbox="1145 174 1453 248"> A. Transmitter \$93,154.85 </td></tr> <tr> <td data-bbox="726 353 1145 510"> Component Description: Amount: </td><td data-bbox="1145 353 1453 510"> 1/3 Payment ULXTE-50 Transmitter \$352,242.88 </td></tr> <tr> <td data-bbox="726 616 1145 772"> Component Description: Amount: </td><td data-bbox="1145 616 1453 772"> 1/3 down payment of total transmitter cost \$358,689.76 </td></tr> <tr> <td data-bbox="726 878 1145 990"> Component Description: Amount: </td><td data-bbox="1145 878 1453 990"> ULXTE-50 Transmitter \$358,689.76 </td></tr> </table>	Component Description: Amount:	A. Transmitter \$93,154.85	Component Description: Amount:	1/3 Payment ULXTE-50 Transmitter \$352,242.88	Component Description: Amount:	1/3 down payment of total transmitter cost \$358,689.76	Component Description: Amount:	ULXTE-50 Transmitter \$358,689.76
Component Description: Amount:	A. Transmitter \$93,154.85								
Component Description: Amount:	1/3 Payment ULXTE-50 Transmitter \$352,242.88								
Component Description: Amount:	1/3 down payment of total transmitter cost \$358,689.76								
Component Description: Amount:	ULXTE-50 Transmitter \$358,689.76								
4" Rigid Conduit and Wiring (Cost per foot)	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 Justification
Primary Antenna TUP-04-12-2	\$90,930.00	\$147,007.50		\$123,084.25	
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	
Auxiliary Antenna TFU-WB	\$323,960.00	\$159,991.00		\$82,943.77	
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
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$6,400.00
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
Sub-total	\$414,890.00	\$306,998.50	N/A	\$206,028.02
Total for all systems	\$6,078,264.67	\$5,521,473.21	N/A	\$3,629,830.09

Components

Actual Information

Description

File Name

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

Auxiliary Antenna Installation	Component Description: Connection Redesign Sketches, Connection Redesign Drawings Amount: \$2,600.00
	Component Description: WETA-250- Auxiliary Antenna - Antenna Rigging and Installation Amount: \$16,250.00
	Component Description: Auxiliary Antenna - Antenna Rigging and Installation Amount: \$850.00
	Component Description: Auxiliary Antenna Rigging and Installation Amount: \$32,500.00
	Component Description: Troubleshoot antenna burnout issues - Emergency Rate Tower Technicians Amount: \$21,300.00
	Component Description: Auxiliary Antenna Rigging and Installation Amount: \$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)	Component Description: ELBOW 4-50 DIGIT 7 X 14 Amount: \$8,093.77
Sweep test of existing antenna	Component Description: OTHER Amount: \$6,400.00
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	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
Primary Transmission Line	\$79,040.00	\$113,029.50		\$0.00	
Installation	<i>\$44,700.00</i>	\$44,700.00	See attached quote 800163CMZ WETA COMPONENTS for field survey and installation of line.	\$0.00	N/A
Rigid Transmission Line - copper, 6 1/8"	\$34,340.00	\$68,329.50	See attached quote 800163CMZ WETA COMPONENTS.	\$0.00	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	\$3,629,830.09	N/A

Components

Actual Information	
Description	File Name
Installation	Information not provided.

Rigid Transmission Line - copper, 6 1/8"	Information not provided.	
Rigid Transmission Line - copper, 4 1/16"	Component Description: Amount:	RIGID TRANSMISSION LINE T/L 4-50 EIA LENGTH 5' TO 10' FIXED FLG 1 END/ SWIVEL FLG 1 END" \$1,402.00
	Component Description: Amount:	HANGER HOR 4 3PT SUSPENSION \$1,440.00
	Component Description: Amount:	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
Tower Rigging and Installation	<i>\$331,200.00</i>	\$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
Short Tower (less than 500')	\$84,200.00	\$80,000.00	N/A	\$0.00
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	\$3,629,830.09

Components

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

Tower Rigging and Installation		
	Component Description:	Existing Aux Tower
		Major Tower
		Modification
		Installation
	Amount:	\$165,000.00
	Component Description:	Existing Aux Tower
		Major Tower
		Modification
		Installation
	Amount:	\$82,500.00
	Component Description:	WETA-450-Existing
		Auxiliary Tower -
		Major Tower
		Modification
		Installation Costs
	Amount:	\$82,500.00
	Component Description:	Professional
		services
	Amount:	\$1,200.00

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:		Final 25% Tower
			Mods
	Amount:		\$56,000.00
	Component Description:		25% downpayment
			per Proposal
			18334VA - per PO
			Terms
	Amount:		\$57,500.00
	Component Description:		50% due upon
			mobilization - per
			proposal 18334VA -
			per PO Terms
	Amount:		\$115,000.00
Short Tower (less than 500')	Information not provided.		

**Cost
Information**

Outside Professional Services

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$545,615.00	\$792,458.54		\$390,438.13	
Site Visits and Surveys	<i>\$9,000.00</i>	\$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	<i>\$14,000.00</i>	\$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	\$85,000.00	\$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	\$50,500.00	\$50,500.00	Justifying Quote - WETA Arlington Auxiliary Fee Proposal 20180328	\$38,836.44	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 - 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.
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

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
Project management of the transition	\$237,000.00	\$225,000.00	N/A	\$75,511.40	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.
RF Exposure Measurements	\$21,050.00	\$20,000.00	N/A	\$0.00	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
Sub-total	\$545,615.00	\$792,458.54	N/A	\$390,438.13	N/A
Total for all systems	\$6,078,264.67	\$5,521,473.21	N/A	\$3,629,830.09	N/A

Components

Actual Information	
Description	File Name
Site Visits and Surveys	<p>Component Description: WETA-590-Site Visits and Surveys</p> <p>Amount: \$5,700.00</p>

Progress Reporting	<table> <tr> <td data-bbox="710 96 1134 264"> Component Description: Amount: </td><td data-bbox="1134 96 1453 264"> Legal services \$861.00 </td></tr> <tr> <td data-bbox="710 264 1134 488"> Component Description: Amount: </td><td data-bbox="1134 264 1453 488"> WETA-590- Progress Reporting \$666.40 </td></tr> <tr> <td data-bbox="710 488 1134 712"> Component Description: Amount: </td><td data-bbox="1134 488 1453 712"> Item G - Preparation of progress report \$47.60 </td></tr> <tr> <td data-bbox="710 712 1134 936"> Component Description: Amount: </td><td data-bbox="1134 712 1453 936"> Item G - Prepare progress report \$893.35 </td></tr> <tr> <td data-bbox="710 936 1134 1160"> Component Description: Amount: </td><td data-bbox="1134 936 1453 1160"> Legal Services Rendered \$1,380.40 </td></tr> <tr> <td data-bbox="710 1160 1134 1440"> Component Description: Amount: </td><td data-bbox="1134 1160 1453 1440"> Item G - Preparation and submission of progress reports \$285.60 </td></tr> </table>	Component Description: Amount:	Legal services \$861.00	Component Description: Amount:	WETA-590- Progress Reporting \$666.40	Component Description: Amount:	Item G - Preparation of progress report \$47.60	Component Description: Amount:	Item G - Prepare progress report \$893.35	Component Description: Amount:	Legal Services Rendered \$1,380.40	Component Description: Amount:	Item G - Preparation and submission of progress reports \$285.60
Component Description: Amount:	Legal services \$861.00												
Component Description: Amount:	WETA-590- Progress Reporting \$666.40												
Component Description: Amount:	Item G - Preparation of progress report \$47.60												
Component Description: Amount:	Item G - Prepare progress report \$893.35												
Component Description: Amount:	Legal Services Rendered \$1,380.40												
Component Description: Amount:	Item G - Preparation and submission of progress reports \$285.60												
Channel change	<table> <tr> <td data-bbox="710 1440 1134 1753"> Component Description: Amount: </td><td data-bbox="1134 1440 1453 1753"> Item A - Auction repack analysis related to WETA Ch. 14 \$10,743.75 </td></tr> <tr> <td data-bbox="710 1753 1134 2134"> Component Description: Amount: </td><td data-bbox="1134 1753 1453 2134"> Item B - Coverage study and interference maps for various scenarios including Ch. 20 SFN option \$2,868.75 </td></tr> </table>	Component Description: Amount:	Item A - Auction repack analysis related to WETA Ch. 14 \$10,743.75	Component Description: Amount:	Item B - Coverage study and interference maps for various scenarios including Ch. 20 SFN option \$2,868.75								
Component Description: Amount:	Item A - Auction repack analysis related to WETA Ch. 14 \$10,743.75												
Component Description: Amount:	Item B - Coverage study and interference maps for various scenarios including Ch. 20 SFN option \$2,868.75												

Component Description:	Item C - RF sweep at transmitter site and UHF panel testing for new repack channel
Amount:	\$1,687.50

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

Component Description:	Item A - Auction repack analysis for new Ch 14 assignment
Amount:	\$5,850.00

Component Description:	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.
Amount:	\$2,193.75

Architect and Engineering services	Component Description:	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.
	Amount:	\$1,012.50
	Component Description:	Item B - Land Mobile interference and remediation on Ch. 14
	Amount:	\$4,106.25
	Component Description:	Item B - Repack research issues related to Land Mobile interference on Ch. 14
	Amount:	\$20,362.50
	Component Description:	Item A - Channel 14 issues and alternatives. SFN research options.
	Amount:	\$4,893.75
	Component Description:	Invoice moved to the correct category.
	Amount:	N/A

Component Description:	Professional Services
Amount:	\$300.00

Component Description:	Professional Services
Amount:	\$900.00

Component Description:	Monthly progress of Architectural and Engineering Design for existing Transmitter Facility alterations.
Amount:	\$9,362.29

Component Description:	Professional Services through June 28, 2019
Amount:	\$4,781.15

Component Description:	Professional Services
Amount:	\$2,499.75

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

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

	Component Description: Professional Services Amount: \$5,827.88
	Component Description: Monthly progress of Architectural and Engineering Design for existing Transmitter Facility alteration for FCC Repack. Amount: \$900.00
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 - Negotiation of lease and other matters for shared locations	Component Description: Item A - Attorney fees for various matter relating to channel 14 assignment and channel 31 move Amount: \$6,330.80
	Component Description: Item A - Attorney fees for discussion regarding viability of Ch. 14 and move to Ch. 31 Amount: \$6,822.08
	Component Description: Legal services Amount: \$2,250.00

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

Component Description:	Legal services
Amount:	\$5,890.50

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

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

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

Component Description:	Legal services
Amount:	\$2,543.20

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

Component Description:	Legal services
Amount:	\$10,468.03

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

Component Description:	Legal Services Rendered
Amount:	\$380.80

Component Description:	Work on WETA repack issues with DCJTV-owned combiner
Amount:	\$16,929.59

Component Description:	Legal services
Amount:	\$3,189.20

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

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

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

Component Description:	Item A - Attorney fees for exploring and negotiating channel alternatives to Ch. 14
Amount:	\$5,758.86

Component Description:	Legal Services
Amount:	\$1,100.00

Component Description:	Work on WETA repack reimbursement issues
Amount:	\$7,327.35

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

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

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

Component Description:	Item A - Negotiation with 3rd parties for WETA move to Ch. 31
Amount:	\$12,350.00

Component Description:	Legal Services Rendered
Amount:	\$6,147.03

Component Description:	Item A - Negotiation with 3rd parties in connection with WETA move to Ch. 31
Amount:	\$4,700.00

Component Description:	Legal services
Amount:	\$1,050.00

Component Description:	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.
Amount:	\$1,190.00

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

Component Description:	Legal Services
Amount:	\$1,650.00

	Component Description:	Attorney - Negotiate Lease and Other Matters
	Amount:	\$1,666.00
	Component Description:	Item A - Negotiation of move to Ch. 31 and related issues
	Amount:	\$20,644.80
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Component Description:	Item B - Preparation of construction permit application and related
	Amount:	\$1,618.40
	Component Description:	Item B - Work related to construction permit application
	Amount:	\$476.00
	Component Description:	Item B - Follow-up work related to CP application
	Amount:	\$226.95
	Component Description:	Item B - Monitor construction permit application
	Amount:	\$190.40

<p>Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application</p>	<table> <tr> <td data-bbox="713 174 1023 210">Component Description:</td><td data-bbox="1158 174 1390 286">Attorney - Construction Permit Application (Aux)</td></tr> <tr> <td data-bbox="713 297 826 333">Amount:</td><td data-bbox="1158 297 1254 333">\$333.20</td></tr> <tr> <td data-bbox="713 434 1023 470">Component Description:</td><td data-bbox="1158 434 1390 546">Item C - Preparation of CP application for aux site</td></tr> <tr> <td data-bbox="713 557 826 593">Amount:</td><td data-bbox="1158 557 1254 593">\$285.60</td></tr> <tr> <td data-bbox="713 694 1023 730">Component Description:</td><td data-bbox="1158 694 1390 806">Attorney - Construction Permit Application (Aux)</td></tr> <tr> <td data-bbox="713 817 826 853">Amount:</td><td data-bbox="1158 817 1254 853">\$179.35</td></tr> <tr> <td data-bbox="713 954 1023 990">Component Description:</td><td data-bbox="1158 954 1390 1025">Construction Permit App Aux</td></tr> <tr> <td data-bbox="713 1037 826 1072">Amount:</td><td data-bbox="1158 1037 1238 1072">\$36.55</td></tr> </table>	Component Description:	Attorney - Construction Permit Application (Aux)	Amount:	\$333.20	Component Description:	Item C - Preparation of CP application for aux site	Amount:	\$285.60	Component Description:	Attorney - Construction Permit Application (Aux)	Amount:	\$179.35	Component Description:	Construction Permit App Aux	Amount:	\$36.55
Component Description:	Attorney - Construction Permit Application (Aux)																
Amount:	\$333.20																
Component Description:	Item C - Preparation of CP application for aux site																
Amount:	\$285.60																
Component Description:	Attorney - Construction Permit Application (Aux)																
Amount:	\$179.35																
Component Description:	Construction Permit App Aux																
Amount:	\$36.55																
<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="713 1391 1023 1426">Component Description:</td><td data-bbox="1158 1391 1390 1585">Item E - Attorney fees related to STA for waiver of repack construction permit app</td></tr> <tr> <td data-bbox="713 1597 826 1632">Amount:</td><td data-bbox="1158 1597 1254 1632">\$328.95</td></tr> </table>	Component Description:	Item E - Attorney fees related to STA for waiver of repack construction permit app	Amount:	\$328.95												
Component Description:	Item E - Attorney fees related to STA for waiver of repack construction permit app																
Amount:	\$328.95																
<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.	
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	
Project management of the transition	<div> <div> Component Description: Amount: </div> <div> work related to TV repack rebuild of WETA TV transmitter room \$4,050.00 </div> </div> <div> <div> Component Description: Amount: </div> <div> Project Management \$3,254.45 </div> </div> <div> <div> Component Description: Amount: </div> <div> Project Management \$6,646.30 </div> </div> <div> <div> Component Description: Amount: </div> <div> Project Management \$3,879.85 </div> </div> <div> <div> Component Description: Amount: </div> <div> Project Management \$4,005.60 </div> </div> <div> <div> Component Description: Amount: </div> <div> Project Management \$3,572.95 </div> </div>	

Component Description:	Project Management
Amount:	\$3,715.20

Component Description:	Project Management
Amount:	\$3,877.65

Component Description:	Project Management
Amount:	\$4,626.65

Component Description:	Project Management
Amount:	\$3,729.80

Component Description:	Project Management
Amount:	\$4,988.10

Component Description:	Project Management
Amount:	\$4,894.25

Component Description:	Project Management
Amount:	\$4,347.90

Component Description:	Project Management
Amount:	\$3,540.40

Component Description:	Project Management
Amount:	\$1,945.35

	Component Description: Amount:	Project Management \$993.75
	Component Description: Amount:	Project Management \$6,954.05
	Component Description: Amount:	Project Management \$6,489.15
Prepare and or review reimbursement form	Component Description: Amount:	WETA-590-Prepare and/or Review Reimbursement Form \$168.00
	Component Description: Amount:	Emails with S. Amron \$190.40
	Component Description: Amount:	Item F - Attorney fees for preparation of Form 399 \$952.00
	Component Description: Amount:	Item F - Educate WETA staff on reimbursement procedures and processes \$2,760.80

Component Description:	Item F - Educate WETA staff on reimbursement
Amount:	\$238.00

Component Description:	Legal Services Rendered
Amount:	\$2,998.80

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

Component Description:	Item F - Attorney fees for preparation of Form 399
Amount:	\$2,500.00

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

Component Description:	Item F - Attorney fees for preparation of Form 399
Amount:	\$5,807.20

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

	Component Description:	Prepare and/or Review Reimbursement Form
	Amount:	\$238.00
	Component Description:	Item F - Attorney fees in preparation of Form 399
	Amount:	\$190.40
	Component Description:	Item F - Educate WETA staff on reimbursement process & procedure and related
	Amount:	\$295.80
	Component Description:	Legal Services
	Amount:	\$1,000.00
	Component Description:	WETA-590-Prepare and/or Review Reimbursement Form
	Amount:	\$672.00
RF Exposure Measurements	Information not provided.	

Perform engineering study
for new channel assignment
and antenna development

Component Description:

Regarding interim
antenna for repack
Ch-31, determine
TV antenna
parameters for RF
exposure
determination on
tower structure.

Amount:

\$575.00

Component Description:

Review of Land
mobile interference
with WETA on Ch.
14

Amount:

\$5,000.00

**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
Other Expenses	\$121,426.00	\$117,061.00		\$26,116.00	
Additional Legal Expenses for Repack	<i>\$0.00</i>	\$0.00	N/A	N/A	N
MVPD Notification of Channel Change	<i>\$7,000.00</i>	\$7,000.00	Estimated cost of using outside firm to contact MVPD's regarding channel change to repack channel.	\$1,369.00	N
Develop and air announcement of upcoming channel change	<i>\$7,500.00</i>	\$7,500.00	Costs for production and airtime of channel change announcements.	\$550.00	N
Equipment Storage	<i>\$10,000.00</i>	\$10,000.00	See attached Budget Justification: FEES AND MISCELLANEOUS EXPENSES	N/A	N
Equipment Delivery and Handling Charges	<i>\$34,500.00</i>	\$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

Disposal Costs (for equipment and other waste, net of any salvage value)	\$45,681.00	\$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
Non-zoning permits	\$5,000.00	\$5,000.00	Estimate of building permit costs to modify auxiliary transmitter site and extensive electrical work at main site.	N/A	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
DTV Medical Facility Notification	\$11,550.00	\$7,000.00	N/A	\$4,250.00	N
Sub-total	\$121,426.00	\$117,061.00	N/A	\$26,116.00	N
Total for all systems	\$6,078,264.67	\$5,521,473.21	N/A	\$3,629,830.09	N

Components

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

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

Cost Information	Grand Total			
		Predetermined Cost Estimate	Estimated Cost	Actual Cost
	Total for all systems	\$6,078,264.67	\$5,521,473.21	\$3,629,830.09

Reimbursement Status	Question	Response
	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"> 1. The Authorized Person signing below certifies that he/she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount. 	

4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

	<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>Sarah Gurfein-Amron <i>Contract and Regluatory Specialist</i></p> <p>03/24/2020</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"> 1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct. 3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount. 	

5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD) .
6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.
8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

	<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>Sarah Gurfein-Amron <i>Contract and Regulatory Specialist</i></p> <p>03/24/2020</p>

Attachments