

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID: File	65942 000002	Service: DTV 7913	Call Sign:	WMPT	Channel: 21 (UHF)
Number:		1			
FRN: 00	03857380	Date	04/06		
		Submitted:	/2018		

Applicant Name, Type, and Contact Information

Information

Applicant	Address	Phone	Email	Applicant Type
MARYLAND PUBLIC BROADCASTING COMMISSION Doing Business As: MARYLAND PUBLIC BROADCASTING COMMISSION	Larry D. Unger, President & CEO 11767 OWINGS MILLS BOULEVARD OWINGS MILLS, MD 21117 United States	+1 (410) 356- 5600	lunger@mpt. org	Government Entity

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Ontact Name and Information

Contact Information	Applicant	Address	Phone	Email
	Joseph L. Snelson , Jr . Technical Consultant Meintel, Sgrignoli & Wallace	1282 Smallwood Drive, Suite 372 Waldorf, MD 20603 United States	+1 (303) 344- 8037	joe. snelson@mswdtv. com

Broadcaster	Question	Response
Information and Transition Plan	Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	No
	Briefly describe transition plan	Current transmission system consists of a main/aux transmitter feeding a transmission line connected to an antenna. An interim antenna and line will be needed as the main antenna must be removed and replaced. See attached narrative.

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

Primary	Existing Transmitter Information			
Transmitter	Section	Question	Response	
	Existing Transmitter Description	Type of change	Purchase New	
		Use	Primary (Main)	
		Description of Use	N/A	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is this transmitter currently shared with another station?	No	
		Is this transmitter currently in operating condition?	Yes	
	Existing Transmitter	Manufacturer		
	Manufacturer and Type	Model	CCT-U- DCX2	
		Year	1999	
		Туре	Inductive Output Tube	
		IOT Power Type	Two	
		Power Capacity	40.0 kW	

Existing Transmitter Information

Primary	New Transmitter Costs			
Transmitter	Section	Question	Response	
	New Transmitter	Use	Primary (Main)	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	Yes	
		Manufacturer		
		Model	HPTV-PRLX- U48	
		Transmitter Type	Solid State	
		Solid State Cooling	Liquid Cooled	
		Solid State Power capacity	75 kW	
		Justification for New Transmitter	See previous submissions regarding upgrade from IOT to solid state. This increase of power is part a multi-station agreement provided to the FCC to accommodate moving WETA to channel 31.	

Primary	Other Transmitter Costs	ransmitter Costs			
Transmitter	Section	Question	Response		
	Electrical Service	Service Entrance (3 phases 800A 208V)	No		
		Switchgear (industrial 800 amp)	No		
		Transformer (480V)	No		
		Power	N/A		

Other Transmitter Costs

	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	Yes
	Description	Electrical contractor to connect transmitter into existing electrical panel and wire heat exchanger into transmitter. Includes material and labor.
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Other Transmitter Cost Not Listed

Primary Other Transmitter Name

Description

CIF Mask Filter	Constant Impedance mask Filter. Current mask filter is a CIF.
Site Design and Survey	Incorporates all aspects of the transmitter room design, including power distribution requirements, equipment placement, RF system layout, plumbing, and remote control.
8-Pole MAsk Filter	A more rigid mask filter to protect adjacent land mobile stations on Ch. 20 in Philadelphia.
Remote Control Interface	License required to interface transmitter into current remote control system
Coolant	The coolant used for the transmitter heat exchanger is not included in the transmitter price
Rigid Coax Line	Rigid interconnection coax lines from transmitter to filter to antenna switch.

Antennas Section		Question	Response
Antenna Rela	ated Expenses	Do you have antenna related expenses?	Yes

Primary	Existing Antenna Information			
Antenna	Section	Question	Response	
	Existing Antenna Description	Type of change	Purchase New	
		Antenna Use	Primary (Main)	
		Description of Use	N/A	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is the existing antenna shared with another station or stations?	No	
		Is the existing antenna directional?	Yes	
		Is antenna in operating condition?	Yes	
		Is antenna located on or in close proximity to an antenna farm?	No	
	Existing Antenna Manufacturer and Type	Class	Full Power	
		Mounting	Top Mount	
		Antenna position in stack	Тор	
		Polarization	Horizontal	
		Туре	Slotted Coaxial	
		Number of Stations Supported	N/A	
		Number of Panels	N/A	
		Design power capacity in use	N/A	
		Lower Limit	N/A	
		Upper Limit	N/A	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	516.0 kW	

Manufacturer	
Model	TFU-24- GTH-R04
Year	2001

Antenna	Section	Question	Response
	New Antenna	Use	Primary (Main
	Description	Description of Use	N/A
		Change Type	Purchase Nev
		Is this a request for upgraded equipment?	Yes
		Ownership	Owned
		Owner	N/A
		Is antenna shared?	No
		Is antenna directional?	Yes
		Will antenna be located on or in close proximity to an antenna farm?	No
	New Antenna	Class	Full Power
	Manufacturer and Types	Mounting	Top Mount
		Antenna position in stack	Not in Stack
		Polarization	Elliptical
		Туре	Slotted Coaxial
		Number of Stations Supported	N/A
		Number of Panels/Bays	N/A
		Lower Limit	N/A
		Upper Limit	N/A
		Design power capacity in use	N/A
		Other Antenna Type	N/A
		ERP: (Effective Radiated Power)	1000.0 kW
		Manufacturer	
		Model	TFU-20GTH /VP-R O4

Year	2018
Justification for New Antenna	Current
	antenna
	tuned for
	channel 42
	and cannot
	be retuned.
	Applicant is
	proposing to
	replace with
	similar make
	and model
	tuned to
	channel 21
	with elliptical
	polarization.
	part a multi-
	station
	agreement
	provided to
	the FCC to
	accommodate
	moving
	WETA.

Primary Other Antenna Costs

Antenna				
	Section	Question	Response	
	Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No	
		Туре		
		Number of channels supported	N/A	
		Frequencies of channels supported	N/A	
		Frequency	N/A	
		Do you need a combiner output splitter /switcher for dual feed lines?	N/A	
	Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes	
		Broadband or Single Channel?	Single Channel	

	Feed Line Size	6 1/8 inches inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	No
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Primary Antenna

Other Antenna Cost Not Listed

Name	Description
Mounting Pole	62.7 ft. mounting pole to bring Center of Radiation to current height.
Wedding Cake Adaptor	Joins antenna to mounting pole
RF Feed Though Components	Elbows and cut line segments to feed antenna to tower top plate

Interim	New Antenna Costs			
Antenna	Section	Question	Response	
	New Antenna Description	Use	Interim	
		Description of Use	N/A	
		Change Type	Purchase New	
		Ownership	Owned	
		Owner	N/A	
		Is antenna shared?	No	
		Is antenna directional?	Yes	
		Will antenna be located on or in close proximity to an antenna farm?	No	
	New Antenna Manufacturer and Type	Class	Full Power	
		Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		Туре	Broadband Panel	
		Number of Stations Supported	1	
		Number of Panels/Bays	32	
		Lower Limit	470.00 MHz	
		Upper Limit	698.00 MHz	
		Design power capacity in use	50.0 %	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	516.0 kW	
		Manufacturer		
		Model	TUA-O4-8 /32H-1-R SM	

Year	2018
Justification for New Antenna	See attached narrative regarding Interim facility.

Other Antenna Costs Interim Antenna Section Question Response **Elbow Complex** Do you require the separate purchase of Yes the Elbow Complex? в Broadband or Single Channel? Feed Line Size 6 1/8 inches Side Mount Brackets Do you require the separate purchase of Yes side mount brackets for an antenna? Do you require separate purchase of Yes Pattern Scatter Analysis 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?

Interim Other Antenna Cost Not Listed

Antenna

Information not provided.

Transmissior	n Seffien	Question	Response
	Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

Primary	Existing Transmission Line			
Transmissio	n Line Section	Question	Response	
	Existing Transmission Line Description	Type of change	Purchase New	
		Use	Primary (Main)	
		Description of Use	N/A	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is the existing transmission line shared with another station or stations?	No	
		Is Transmission Line in operating condition?	Yes	
	Existing Transmission	Manufacturer		
	Line Manufacturer and Type	Туре	Rigid	
		Diameter	6 1/8 inches	
		Other Diameter	N/A	
		Segment Length	19 1/2 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	935 feet per run	

Primary	New Transmission Line				
Transmissio	Section	Question	Response		
	New Transmission Line Costs	Use	Primary (Main)		
		Description of Use	N/A		
		Change Type	Purchase New		
		Is this a request for upgraded equipment?	No		
		Туре	Rigid		
		Diameter	7 3/16 inches		
		Other Diameter	N/A		
		Segment Length	19 1/2 inches		
		Other Segment Length	N/A		
		Number of parallel runs	1		
		Length	935 feet per run		
		Justification for New Transmission Line	Current line will be used for the interim facility, This line will be used for the repack facility on channel 21. This is part of an agreement provided to the FCC to move WMPT to Ch. 21 to accommodate moving WETA to channel 31.		

Primary Other Transmission Line Expenses Not Listed

Other Transmission Transmission

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

Existing Tower	
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Primary	Existing Tower	isting Tower				
Tower	Section	Question	Response			
	Existing Tower Description	Type of change	Modify Existing			
		Tower Use	Primary (Main)			
		Description of Use	N/A			
		Ownership	Owned			
		Is this tower consider Complex?	No			
		Is this tower currently shared with any other stations?	No			
		One or more FM, AM or TV radio broadcaster(s)	N/A			
		Others Types of Users	N/A			
		Is tower documented for structural analysis?	Yes			
		Is tower compliant with Rev G?	Modify Existing Primary (Main) N/A Owned No No No N/A			
	Existing Tower Structure	Do you have a tower registration number?	? Yes			
	Registration	ASR Number	1225569			
	Coordinates (NAD83 (North American Datum of	Latitude (NAD83)	Modify Existing Modify Existing Primary (Main) N/A Owned No No N/A No N/A No N/A Yes Yes Yes 1225569 39° 00' 36.7" N- O76° 36' 31.8" W- 902.88 feet 786.08 feet			
	1983))	Longitude (NAD83)				
		Overall Structure Height	902.88 feet			
		Support Structure Height	786.08 feet			
		Ground Elevation Above Mean Sea Level (AMSL)	146.00 feet			
			1			

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Maryland Public Broadcasting Commission
Date Constructed	04/01/2003

Primary Tower Modification Costs

Tower Section Question Response **Engineering Study** Please what type of engineering study is Study needed required, if any: for documented tower **Tower Reinforcements** Please select whether tower reinforcements No are needed: reinforcements needed

Primary Tower Rigging Costs

Tower

SectionQuestionResponseTower Rigging CostsComplex TowerN/AHelicopter Services
RequiredAre helicopter services required?No

Primary Other Tower Expenses Not Listed

Tower Information not provided.

Outside Professional	Section	Question	Response	
	Services Costs Outside Project Management Services	Do you require outside project management services?	Yes	
		Number of Hours	400	
		Explanation	Applicant has limited internal resources to oversee installing and commissioning this repack project. It will rely on outside services to manage all work required.	
	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		
		For Main Facility		
		Prepare engineering section of Form FCC License to Cover Application	Yes rm FCC Yes	
		For Auxiliary Facility	No	
		For Main Facility	Yes	
		Prepare request for Special Temporary Authority	Yes	
		Quantity	1	
		Do you have Distributed Transmission System engineering services?	N/A	
		Critical Facility	N/A	
		Terrain-Shielded Facility	N/A	
	Attorney and Other Outside Consulting Services	Prepare and file Form FCC Construction Permit Application	Yes	

	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	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	No
RF Field Engineering Services	Comprehensive coverage verification via field study	No
	RF exposure measurements	No
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

Outside Other Professional Services Expenses Not Listed

Professional Services Costs

Description

Progress Reporting	Prepare and file 10 required progress
	reports on FCC Form 2100, Schedule 387 on a quarterly basis with the FCC.

Other	Section	Question	Response	
Expenses	AM Pattern Disturbance	Is an Impact Study needed?	No	
		Is Remediation needed?	No	
	Facility Expenses	Name	N/A	
		Is an Impact Study needed? No Is Remediation needed? No		
		Is an Impact Study needed?NoIs Remediation needed?NoIs Remediation needed?NoNameN/AOther Distributed Transmission System Expenses Not listedN/AOther Distributed Transmission System Expenses Not listedN/AIs Notification of a Medical Facility required as a result of DTV broadcasting?YesLocal ZoningNoNon-zoning permitsNoBLM or NFS CoordinationNoFCC Construction Permit Minor ChangeNoFCC License to Cover ApplicationNoFCC Special Temporary Authority ApplicationNoDoes this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?YesDoes this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?Yes		
			Yes	
	Permit and Filing Costs	Local Zoning	No	
		Non-zoning permits	No	
		BLM or NFS Coordination	No	
		FCC Construction Permit Minor Change	No	
		FCC License to Cover Application	No	
			No	
	Other Miscellaneous Expenses	Disposal Costs (for equipment and other	Yes	
		Delivery or Handling Charges not otherwise	Yes	
			Yes	
		Development and Airing of an Announcement regarding an upcoming	No	
		Does this relocation require MVPD Notification of a Channel Change?	Yes	

Other Expenses Not Listed

Expenses Information not provided.

Transmitters

Cost Information

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 HPTV- PRLX-U48	\$2,126,470.00	\$2,133,045.00		\$1,021,806.82	
CIF Mask Filter	\$40,690.00	\$40,690.00	Constant Impedance mask Filter. Current mask filter is a CIF.	N/A	N/A
Other Electrical Service: Electrical contractor to connect transmitter into existing electrical panel and wire heat exchanger into transmitter. Includes material and labor.	\$42,600.00	\$42,600.00	Electrical contractor to connect transmitter into existing electrical panel. Includes material and labor for three transmitter cabinets. Attached quote is for each cabinet.	N/A	N/A
8-Pole MAsk Filter	\$15,000.00	\$15,000.00	A more rigid mask filter to protect adjacent land mobile stations on Ch. 20 in Philadelphia.	N/A	N/A

UHF - Liquid Cooled Solid State Transmitter 68.5 - 75 kW	\$1,999,000.00	\$2,005,575.00	See attached quote. An increase of power is part a multi-station agreement provided to the FCC to accommodate moving WETA to channel 31.	\$1,019,695.00	N/A
Remote Control Interface	\$2,940.00	\$2,940.00	License required to interface transmitter into current remote control system.	N/A	N/A
Coolant	\$3,000.00	\$3,000.00	The coolant used for the transmitter heat exchanger is not included in the transmitter price. Cost reflects what is need for two transmitter cabinets.	N/A	N/A
Rigid Coax Line	\$7,940.00	\$7,940.00	Rigid interconnection coax lines from transmitter to filter to antenna switch. NOTE: The full length will not be used. These will be cut to desired length for interconnection purposes inside building.	N/A	N/A

Sub-total Total for	\$2,126,470.00 \$3,584,041.00	\$2,133,045.00 \$3,565,627.80	placement, RF system layout, plumbing, and remote control. N/A N/A	\$1,021,806.82 \$1,279,854.76	N/A N/A
Site Design and Survey	\$15,300.00	\$15,300.00	Incorporates all aspects of the transmitter room design, including power distribution requirements, equipment placement, RF	\$2,111.82	N/A

Components

Actual Information Description	File Name	
CIF Mask Filter	Information not provided.	
Other Electrical Service: Electrical contractor to connect transmitter into existing electrical panel and wire heat exchanger into transmitter. Includes material and labor.	Information not provided.	
8-Pole MAsk Filter	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 68.5 - 75 kW	Component Description:System WMPTPRLX u48 D21Amount:\$1,019,695.00	
Remote Control Interface	Information not provided.	
Coolant	Information not provided.	
Rigid Coax Line	Information not provided.	

Site Design and Survey		
	Component Description:	Site Survey
		expense for all 6
		locations.
	Amount:	\$2,111.82

Antennas

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna TUA-O4-8 /32H-1-R SM	\$271,740.00	\$266,348.00		\$116,825.85	
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	N/A	\$953.10	N/A
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	\$13,700.00	\$10,298.00	N/A	\$4,634.10	N/A
UHF – Broadband Panel, Side Mount Auxiliary /Interim, 516 horizontally polarized	\$222,900.00	\$222,900.00	See attached narrative regarding Interim facility.	\$100,305.00	N/A

Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$21,750.00	N/A	\$10,933.65	N/A
Primary Antenna TFU-20GTH /VP-R O4	\$469,981.00	\$394,119.00		\$5,760.00	
UHF - High Power Top Mount (200- 1000 kW), One station antenna , elliptically or circularly polarized	\$289,500.00	\$213,885.00	N/A	N/A	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$12,383.00	See attached revised quote.	N/A	N/A
Mounting Pole	\$122,215.00	\$122,215.00	Mounting pole to bring Center of Radiation to current height.	N/A	N/A
Wedding Cake Adaptor	\$18,330.00	\$18,330.00	Joins antenna to mounting pole	N/A	N/A

RF Feed Though Components	\$20,906.00	\$20,906.00	Elbows and cut line segments to feed antenna to tower top plate	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$5,760.00	N/A
Sub-total	\$741,721.00	\$660,467.00	N/A	\$122,585.85	N/A
Total for all systems	\$3,584,041.00	\$3,565,627.80	N/A	\$1,279,854.76	N/A

Components

Actual Information Description	File Name	
Sweep test of existing antenna	Information not provided.	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Component Description: Amount:	trans test 6-75 \$953.10
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	Component Description: Amount:	complex broadband antenna input 45% with order 45% prior to shipping 10% net 30 \$4,634.10
UHF – Broadband Panel, Side Mount Auxiliary/Interim, 516 horizontally polarized	Component Description: Amount:	UHF Broadband panel 45% with order 45% prior to shipping 10% net 30 \$100,305.00

power antennas (if not included in antenna base cost)	Component Description:	6-75 pressure cap, includes gague, allows atenna to be capped and pressurized after installed on tower.
	Amount:	\$372.60
	Component Description:	t/l 6-75 e/a length 15'to 20' fixed FLG 1 end/swivel flg 1 end
	Amount:	\$773.55
	Component Description:	side mount brackets 45% with order 45% prior to shipping 10% Net 30
	Amount:	\$9,787.50
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	Information not provided.	
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Information not provided.	
Mounting Pole	Information not provided.	
Wedding Cake Adaptor	Information not provided.	
RF Feed Though Components	Information not provided.	

component Description:	repack sweep includes 1 on site engineer for one day ,travel
	engineer for one day ,travel
	day ,travel
	-
	expenses and
	report
mount:	\$2,880.00
component Description:	repack sweep on
	site field engineer
	45% with order
	45% prior to
	shipping 10% net
	30
mount:	\$2,880.00
	component Description:

Transmission Line

Cost Information

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	\$271,150.00	\$179,550.80		\$80,669.59	
Rigid Transmission Line - copper, 7 3 /16"	\$271,150.00	\$179,550.80	N/A	\$80,669.59	N/A
Sub-total	\$271,150.00	\$179,550.80	N/A	\$80,669.59	N/A
Total for all systems	\$3,584,041.00	\$3,565,627.80	N/A	\$1,279,854.76	N/A

Components

Actual Information	
Description	File Name

Rigid Transmission Line - copper, 7 3/16"	Component Description: Amount:	Line copper 7 3/16 45% upon ordering 45% prior to shipment Balance Net 30 \$77,780.59
	Component Description: Amount:	Rigid Transmission line copper 45% upon ordering 45% prior to shipment 10% net 30 \$877.50
	Component Description: Amount:	rigid transmission line copper tlscr's 45% upon ordering 45% prior to shipping 10% net 30 \$2,011.50

Tower Equipment and Rigging Costs

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower TOWER	\$223,100.00	\$379,755.00		\$5,000.00	
Structural engineering tower load study for well documented tower	\$12,600.00	\$7,000.00	N/A	\$5,000.00	N/A
Tall Tower (greater than 500')	\$210,500.00	\$372,755.00	See attached quote.	N/A	N/A
Sub-total	\$223,100.00	\$379,755.00	N/A	\$5,000.00	N/A
Total for all systems	\$3,584,041.00	\$3,565,627.80	N/A	\$1,279,854.76	N/A

Components

Actual Information Description	File Name	
Structural engineering tower load study for well documented tower	Component Description: Amount:	Structural engineering \$2,500.00
	Component Description:	Structural analysis
	Amount:	Annapolis. \$2,500.00
Tall Tower (greater than 500')	Information not provided.	

Outside Professional Services

Cost Information

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 Co Justificati
Outside Professional Services	\$130,490.00	\$126,250.00		\$0.00	
Attorney Fees - Negotiation of lease and other matters for shared locations	\$4,210.00	\$5,000.00	Fees related to multi-party resolution agreement with Maryland Public TV, WETA and HME Equity Fund II, LLC. Involved several stations moving channels to accommodate WETA moving from ch 14 to 31.	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	N/A	N/A

Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	N/A	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	N/A	N/A
Project management of the transition	\$63,200.00	\$60,000.00	N/A	N/A	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A

Progress Reporting	\$35,000.00	\$35,000.00	Prepare and file 10 required progress reports on FCC Form 2100, Schedule 387 on a quarterly basis with the FCC.	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	N/A	N/A	N/A
Sub-total	\$130,490.00	\$126,250.00	N/A	\$0.00	N/A
Total for all systems	\$3,584,041.00	\$3,565,627.80	N/A	\$1,279,854.76	N/A

Components

Information not provided.

Other Expenses

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$91,110.00	\$86,560.00		\$49,792.50	
MVPD Notification of Channel Change	\$1,000.00	\$1,000.00	Notification will need to be made to MVPD's as required. Applicant to explore using an outside firm to determine which facilities will need to be notified and send the appropriate notification letters.	N/A	N/A
Equipment Storage	\$9,840.00	\$9,840.00	Station may receive antenna and transmission line prior to tower crew availability. No on-site storage is available. Obtained estimate from manufacturer for 60 days of storage.	N/A	N/A

Sub-total	\$91,110.00	\$86,560.00	pole. N/A	\$49,792.50	N/A
Equipment Delivery and Handling Charges	\$27,575.00	\$27,575.00	See attached transmitter quote. Estimating \$10,000 for two antennas and mounting	\$29,220.00	Line items did not include the proof and installation
Disposal Costs (for equipment and other waste, net of any salvage value)	\$41,145.00	\$41,145.00	See transmitter quote for equipment removal from building.	\$20,572.50	N/A
DTV Medical Facility Notification	\$11,550.00	\$7,000.00	N/A	N/A	N/A

Components

Actual Information Description	File Name
MVPD Notification of Channel Change	Information not provided.
Equipment Storage	Information not provided.
DTV Medical Facility Notification	Information not provided.

Disposal Costs (for equipment and other waste, net of any salvage value)	Component Description:	50% deposit for removal and disposal of existing transmitter. 45% due with installation/5% due upon proof \$20,572.50
Equipment Delivery and Handling Charges	Component Description: Amount:	50% deposit on check out and proof parallax. 45% due upon installation, 5% due upon proof. \$6,550.00
	Component Description:	50% for shipping, Offloading, and placement. 45% due upon installation, 5% due upon proof \$8,787.50
	Component Description: Amount:	50% deposit on Installation, 45% due upon installation, 5% due upon proof \$13,882.50

Cost Information	Grand Total			
		Predetermined Cost Estimate	Estimated Cost	Actual Cost
	Total for all systems	\$3,584,041.00	\$3,565,627.80	\$1,279,854.76

Reimbursem	entestiatus	Response
	The facility has ceased operating on its pre- auction channel.	No
	Construction of final facilities or all necessary modifications are complete.	No
	All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out procedures with the Fund Administrator.	No

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.	
		 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).
- The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
- 7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.	
I declare, under penalty of perjury, that I an authorized representative of the abov named applicant for the Authorization(s) specified above.	e- Davenport

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).	
		 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).
- The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

8.	The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.	
9.	The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.	
an au name	are, under penalty of perjury, that I am thorized representative of the above- d applicant for the Authorization(s) ied above.	HOlly Davenport Fiscal Accounts Clerk 04/06/2018

Attachments

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