

(REFERENCE COPY - Not for submission)

#### FCC Form 399: Reimbursement Request

Channel: 21 (UHF) 65942 Service: DTV Call Facility Sign:

File 0000027913

Number:

ID:

FRN: 0003857380 Date 08/01

> Submitted: /2018

#### **Applicant** Information

#### **Applicant Name, Type, and Contact 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** Contact Information

#### **Preparer Contact Name and 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 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.	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**

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

#### Primary Transmitter

#### **Existing Transmitter Information**

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

#### **Other Transmitter Costs**

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
		'

	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	Yes
	Description	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

#### Primary Transmitter

#### Other Transmitter Cost Not Listed

Name	Description
INAILIE	Description

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.
8-Pole MAsk Filter	A more rigid mask filter to protect adjacent land mobile stations on Ch. 20 in Philadelphia.
Motorized Switch	To enable switching between main and interim antenna, (See budget revision 051418)
Remote Control Interface	License required to interface transmitter into current remote control system
Additional Rigid Coax Line	Additional rigid interconnection coax lines from transmitter to filter to antenna switch as identified by manufacturer. (See budget revision 051418)
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.

#### **Antennas**

Section	Question	Response
Antenna Related Expenses	Do you have antenna related expenses?	Yes

#### **Existing Antenna Information**

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	Class	Full Power
Manufacturer and Type	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

#### **New Antenna Costs**

Section	Question	Response
New Antenna	Use	Primary (Main)
Description	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	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.

#### **Other Antenna Costs**

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

#### **Other Antenna Cost Not Listed**

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

#### Interim Antenna

#### **New Antenna Costs**

Section	Question	Response
New Antenna Description	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	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 Type	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.

#### Interim Antenna

#### **Other Antenna Costs**

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	В
	Feed Line Size	6 1/8 inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

#### Interim Antenna

**Other Antenna Cost Not Listed** 

Information not provided.

Transmission <sup>Seffien</sup>	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

# Primary Transmission Line

#### **Existing Transmission Line**

Section	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	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

#### **New Transmission Line**

# Primary Transmission Line

New Transmission Line

Costs

Question	Response
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.

#### Other Transmission Line Expenses Not Listed

Primary
Transmission of provided.

# Tower Equipment And Rigging Costs

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

#### Primary Tower

#### **Existing Tower**

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	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?	Yes
Existing Tower Structure	Do you have a tower registration number?	Yes
Registration	ASR Number	1225569
Coordinates (NAD83 ( North American Datum of	Latitude (NAD83)	39° 00' 36.7 N-
1983))	Longitude (NAD83)	076° 36' 31.8" W-
	Overall Structure Height	902.88 feet
	Support Structure Height	786.08 feet
	Ground Elevation Above Mean Sea Level (AMSL)	146.00 feet

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

#### Primary Tower

#### **Tower Modification Costs**

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

#### Primary Tower

#### **Tower Rigging Costs**

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

#### Primary Tower

Other Tower Expenses Not Listed

Information not provided.

#### Outside Professional

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	No
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting Services	Prepare and file Form FCC Construction Permit Application	Yes

	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	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	Yes
	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 Expenses

Section	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	No
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	No
	FCC Special Temporary Authority Application	No
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?	No
	Does this relocation require MVPD  Notification of a Channel Change?	Yes

Other Expenses Not Listed

**Expenses** Information not provided.

## **Cost Information**

#### **Transmitters**

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter HPTV- PRLX-U48	\$2,177,220.00	\$2,178,860.00		\$1,021,926.59	
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 system layout, plumbing, and remote control.	\$2,231.59	N/A
CIF Mask Filter	\$40,690.00	\$40,690.00	Constant Impedance mask Filter. Current mask filter is a CIF.	N/A	N/A

Additional Rigid Coax	\$7,610.00	\$7,610.00	Additional rigid interconnection	N/A	N/A
Line			coax lines as		
			identified by		
			vendor to		
			interconnect		
			between		
			transmitter and		
			antenna		
			switch. NOTE:		
			These will be		
			cut to desired		
			length for		
			interconnection		
			purposes		
			inside building.		
			(See revision		
			051418)		
Remote	\$2,940.00	\$2,940.00	License	N/A	N/A
Control			required to		
Interface			interface		
			transmitter into		
			current remote		
			control system.		
0 D J	445.000.00	<b>#</b> 45.000.00		<b>N1/A</b>	<b></b>
8-Pole	\$15,000.00	\$15,000.00	A more rigid	N/A	N/A
MAsk Filter			mask filter to		
			protect		
			adjacent land		
			mobile stations		
			on Ch. 20 in		
			Philadelphia.		
Rigid Coax	A= 000 00	<b>#7</b> 000 00	D: : I	00.00	N1/A
Nigiu Coax	\$7,830.00	\$7,830.00	Rigid	\$0.00	N/A
_	\$7,830.00	\$7,830.00	Rigid interconnection	\$0.00	N/A
_	\$7,830.00	\$7,830.00	=	\$0.00	N/A
_	\$7,830.00	\$7,830.00	interconnection	\$0.00	N/A
-	\$7,830.00	\$7,830.00	interconnection coax lines from	\$0.00	N/A
-	\$7,830.00	\$7,830.00	interconnection coax lines from transmitter to	\$0.00	IV/A
-	\$7,830.00	\$7,830.00	interconnection coax lines from transmitter to filter to	\$0.00	IV/A
_	\$7,830.00	\$7,830.00	interconnection coax lines from transmitter to filter to antenna	\$0.00	IV/A
-	\$7,830.00	\$7,830.00	interconnection coax lines from transmitter to filter to antenna switch. NOTE:	\$0.00	IV/A
-	\$7,830.00	\$7,830.00	interconnection coax lines from transmitter to filter to antenna switch. NOTE: The full length	\$0.00	IV/A
Line	\$7,830.00	\$7,830.00	interconnection coax lines from transmitter to filter to antenna switch. NOTE: The full length will not be	\$0.00	IV/A
-	\$7,830.00	\$7,830.00	interconnection coax lines from transmitter to filter to antenna switch. NOTE: The full length will not be used. These will be cut to	\$0.00	N/A
_	\$7,830.00	\$7,830.00	interconnection coax lines from transmitter to filter to antenna switch. NOTE: The full length will not be used. These	\$0.00	IV/A
_	\$7,830.00	\$7,830.00	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	\$0.00	IV/A
_	\$7,830.00	\$7,830.00	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	\$0.00	IV/A

Coolant	\$3,000.00	\$3,000.00	The coolant	N/A	N/A
Coolant	φ3,000.00	ψ5,000.00	used for the	1 1/7	111/71
			transmitter		
			heat		
			exchanger is		
			not included in		
			the transmitter		
			price. Cost		
			reflects what is		
			need for two		
			transmitter		
			cabinets.		
0.1	4.0	0.40.005.77			
Other	\$42,600.00	\$42,600.00	Electrical	N/A	N/A
Electrical			contractor to		
Service:			connect		
Electrical			transmitter into		
contractor			existing		
to connect			electrical		
transmitter			panel. Includes		
into			material and		
existing			labor for three		
electrical			transmitter		
panel and			cabinets.		
wire heat			Attached quote		
exchanger			is for each		
into			cabinet.		
transmitter.					
Includes					
material					
and labor.					
UHF -	\$1,999,000.00	\$2,000,640.00	See attached	\$1,019,695.00	N/A
Liquid			quote. An		
Cooled			increase of		
Solid State			power is part a		
Transmitter			multi-station		
68.5 - 75			agreement		
kW			provided to the		
			FCC to		
			accommodate		
			moving WETA		

Motorized	\$43,250.00	\$43,250.00	Motorized	N/A	N/A
Switch			switch to		
			switch		
			between main		
			and interim		
			antenna.		
			Inadvertently		
			omitted from		
			initial quote.		
			(See revision		
			051418)		
Sub-total	\$2,177,220.00	\$2,178,860.00	N/A	\$1,021,926.59	N/A
Total for	\$3,718,991.50	\$3,631,443.30	N/A	\$1,490,185.32	N/A
all					
systems					

#### Components

Actual Information Description	File Name	
Site Design and Survey	Component Description: Amount:	Site Survey \$2,231.59
CIF Mask Filter	Information not provided.	
Additional Rigid Coax Line	Information not provided.	
Remote Control Interface	Information not provided.	
8-Pole MAsk Filter	Information not provided.	
Rigid Coax Line	Information not provided.	
Coolant	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.	

JHF - Liquid Cooled Solid State Transmitter 68.5 - 75 kW	Component Description:  Amount:	System WMPT PRLX u48 D21 Line 1 of invoice. \$1,019,695.00
Motorized Switch	Information not provided.	

## **Cost Information**

#### **Antennas**

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost
Interim Antenna TUA-O4-8 /32H-1-R SM	\$271,740.00	\$266,348.00		\$238,265.55	
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	\$1,906.20	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$21,750.00	N/A	\$20,721.15	N/A
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	\$13,700.00	\$10,298.00	N/A	\$9,268.20	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$5,760.00	N/A

UHF – Broadband Panel, Side Mount Auxiliary /Interim, 516 horizontally polarized	\$222,900.00	\$222,900.00	See attached narrative regarding Interim facility.	\$200,610.00	N/A
Primary Antenna TFU-20GTH /VP-R O4	\$469,981.00	\$394,119.00		\$5,760.00	
Mounting Pole	\$122,215.00	\$122,215.00	Mounting pole to bring Center of Radiation to current height.	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
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
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

Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$5,760.00	N/A
Wedding Cake Adaptor	\$18,330.00	\$18,330.00	Joins antenna to mounting pole	N/A	N/A
Sub-total	\$741,721.00	\$660,467.00	N/A	\$244,025.55	N/A
Total for all systems	\$3,718,991.50	\$3,631,443.30	N/A	\$1,490,185.32	N/A

#### Components

Actual Information Description	File Name	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Component Description: Amount:	line 6 on invoice MAN00410 for dielectric \$953.10
	Component Description: Amount:	trans test 6-75 \$953.10

Side mount brackets for high power antennas (if not included in antenna base cost)

Component Description: side mount

brackets 45% with order 45% prior to shipping 10% Net

30

**Amount:** \$9,787.50

**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:** 6-75 pressure

cap, includes
gague, allows
atenna to be
capped and
pressurized after
installed on tower.

**Amount:** \$372.60

Component Description: Line item 2
Amount: \$9,787.50

Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)

Component Description: Line 3 on invoice

MAN00410 dielectric \$4,634.10

complex

**Amount:** 

**Component Description:** 

broadband antenna input 45% with order 45% prior to shipping 10% net

30

**Amount:** \$4,634.10

Component Description:	line 21 on invoice.
	Other charges are
	added to other 399 lines.
Amount:	\$2,880.00
Amount.	Ψ2,000.00
Component Description:	line 7 on invoice
	MAN00410
Amount:	\$2,880.00
Component Description:	UHF Broadband
	panel 45% with
	order 45% prior to
	shipping 10% net
Amount	\$100,305,00
Amount.	\$100,305.00
Component Description:	Line 1 of Dielctric
	invoice
	MAN00410.
Amount:	\$100,305.00
Information not provided.	
Information not provided.	
Information not provided.	
Information not provided.	
	Amount:  Component Description:  Amount:  Component Description:  Amount:  Information not provided.  Information not provided.  Information not provided.

antenna		
	Component Description:	repack sweep
		includes 1 on site
		engineer for one
		day ,travel
		expenses and
		report
	Amount:	\$2,880.00
	Component Description	ropack swoon on
	Component Description:	repack sweep on
		site field engineer 45% with order
		45% prior to
		shipping 10% net
	<b>A</b>	30
	Amount:	\$2,880.00

#### **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	\$271,150.00	\$179,550.80		\$161,339.18	
Rigid Transmission Line - copper, 7 3 /16"	\$271,150.00	\$179,550.80	N/A	\$161,339.18	N/A
Sub-total	\$271,150.00	\$179,550.80	N/A	\$161,339.18	N/A
Total for all systems	\$3,718,991.50	\$3,631,443.30	N/A	\$1,490,185.32	N/A

<b>Actual Information</b>		
Description	File Name	

Rigid Transmission Line - copper, 7 3/16"

**Component Description:** Line copper 7 3/16

45% upon

ordering 45% prior

to shipment Balance Net 30

**Amount:** \$77,780.59

Component Description: 45% prior to

shipping. This covers line items 1,5, and 6. the additional amount

will be on a

seperate line item

on the 399

**Amount:** \$80,669.59

Component Description: rigid transmission

line copper tlscr's

45% upon

ordering 45% prior to shipping 10%

net 30

**Amount:** \$2,011.50

Component Description: Rigid

Transmission line copper 45% upon ordering 45% prior to shipment 10%

net 30

**Amount:** \$877.50

### **Tower Equipment and Rigging Costs**

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower 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	\$3,718,991.50	\$3,631,443.30	N/A	\$1,490,185.32	N/A

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**

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

Description Outside Professional	Predetermined Cost Estimate \$214,690.00	Estimated Cost \$146,250.00	Estimated Cost Justification	Actual Cost \$8,101.50	Actual Cos Justification
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.	\$261.25	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	\$2,250.00	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	N/A	\$3,500.00	N/A

Attorney Fees - Negotiation of	\$4,210.00	\$5,000.00	Fees related to multi-party	\$2,090.25	N/A
lease and other			resolution		
matters for			agreement		
shared			with Maryland		
locations			Public TV,		
			WETA and		
			HME Equity		
			Fund II, LLC.		
			Involved		
			several		
			stations		
			moving		
			channels to		
			accommodate		
			WETA		
			moving from		
			ch 14 to 31.		
Comprehensive	\$84,200.00	\$20,000.00	Needed to	N/A	N/A
coverage			confirm new		
verification via			main antenna		
field study, if			pattern		
needed			performance		
			and		
			coverage.		
			Inadvertently		
			omitted from		
			initial submission.		
			(See revision		
			051418)		
			031418)		
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	N/A	N/A
	ФО 050 00	Φ4 <b>5</b> 00 00	N1/A	<b>\$1/</b> A	A 1/-
Prepare request for Special Temporary	\$2,050.00	\$1,500.00	N/A	N/A	N/A

Prepare engineering section of FCC Form 2100 (main), License to Cover Application         \$3,155.00         \$3,000.00         N/A         N/A           Prepare engineering section of FCC Form 2100 (main), Construction Permit Application         \$7,360.00         \$7,000.00         N/A         N/A           Perform engineering study for new channel assignment and antenna development         \$2,630.00         \$2,500.00         N/A         N/A           Project weimbursement form         \$63,200.00         \$60,000.00         N/A         N/A           Sub-total         \$214,690.00         \$146,250.00         N/A         \$1,490,185.32						
engineering section of FCC Form 2100 (main), Construction Permit Application  Perform \$7,360.00 \$7,000.00 N/A N/A engineering study for new channel assignment and antenna development  Prepare and or review reimbursement form  Project \$63,200.00 \$60,000.00 N/A N/A N/A management of the transition  Sub-total \$214,690.00 \$146,250.00 N/A \$8,101.50  Total for all \$3,718,991.50 \$3,631,443.30 N/A \$1,490,185.32	ngineering ection of FCC form 2100 main), License o Cover	\$1,580.00	\$1,500.00	N/A	N/A	N/A
engineering study for new channel assignment and antenna development  Prepare and or \$2,630.00 \$2,500.00 N/A N/A review reimbursement form  Project \$63,200.00 \$60,000.00 N/A N/A N/A management of the transition  Sub-total \$214,690.00 \$146,250.00 N/A \$8,101.50  Total for all \$3,718,991.50 \$3,631,443.30 N/A \$1,490,185.32	ngineering ection of FCC form 2100 main), Construction Permit	\$3,155.00	\$3,000.00	N/A	N/A	N/A
review reimbursement form  Project \$63,200.00 \$60,000.00 N/A N/A management of the transition  Sub-total \$214,690.00 \$146,250.00 N/A \$8,101.50  Total for all \$3,718,991.50 \$3,631,443.30 N/A \$1,490,185.32	ngineering tudy for new hannel ssignment nd antenna	\$7,360.00	\$7,000.00	N/A	N/A	N/A
management of the transition         Sub-total       \$214,690.00       \$146,250.00       N/A       \$8,101.50         Total for all       \$3,718,991.50       \$3,631,443.30       N/A       \$1,490,185.32	eview eimbursement	\$2,630.00	\$2,500.00	N/A	N/A	N/A
<b>Total for all</b> \$3,718,991.50 \$3,631,443.30 N/A \$1,490,185.32	nanagement of	\$63,200.00	\$60,000.00	N/A	N/A	N/A
	ub-total	\$214,690.00	\$146,250.00	N/A	\$8,101.50	N/A
systems	otal for all	\$3,718,991.50	\$3,631,443.30	N/A	\$1,490,185.32	N/A

Actual Information Description	File Name	
Progress Reporting		
	Component Description:  Amount:	attorney feed for FCC repacking \$261.25
	, and and	Ψ201.20

Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Component Description: Amount:	Attorney fees for FCC repacking \$2,250.00
Attorney Fees - Prepare and File request for Special Temporary Authorization	Component Description: Amount:	attorney fee for FCC repacking \$3,500.00
Attorney Fees - Negotiation of lease and other matters for shared locations	Component Description:  Amount:	Page 5 of invoice. Legal fees for repacking filing. This charge is for only the Annapolis WMPT location. \$348.00
	Component Description:  Amount:	Only submitting for items related to the FCC repacking for the WMPT Annapolis location. \$1,742.25
Comprehensive coverage verification via field study, if needed	Information not provided.	
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.	
Prepare request for Special Temporary Authorization	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	

Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Information not provided.
Perform engineering study for new channel assignment and antenna development	Information not provided.
Prepare and or review reimbursement form	Information not provided.
Project management of the transition	Information not provided.

### **Other Expenses**

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$91,110.50	\$86,560.50		\$49,792.50	
DTV Medical Facility Notification	\$11,550.00	\$7,000.00	N/A	N/A	N/A
MVPD Notification of Channel Change	\$1,000.50	\$1,000.50	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.	N/A	N/A
			No on-site storage is available. Obtained estimate from manufacturer for 60 days of storage.		
Equipment Delivery and Handling Charges	\$27,575.00	\$27,575.00	See attached transmitter quote. Estimating \$10,000 for two antennas and mounting pole.	\$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
Sub-total	\$91,110.50	\$86,560.50	N/A	\$49,792.50	N/A
Total for all systems	\$3,718,991.50	\$3,631,443.30	N/A	\$1,490,185.32	N/A

Actual Information		
Description	File Name	

DTV Medical Facility Notification	Information not provided.	
MVPD Notification of Channel Change	Information not provided.	
Equipment Storage	Information not provided.	
Equipment Delivery and Handling Charges	Component Description:	50% deposit on check out and
		proof parallax.
		45% due upon
		installation, 5%
		due upon proof.
		Line 4 on invoice
	Amount:	\$6,550.00
	<b>Component Description:</b>	50% for shipping,
		Offloading, and
		placement. 45%
		due upon
		installation, 5%
		due upon proof
		Invoice line 2.
	Amount:	\$8,787.50
	Component Description:	50% deposit on
		Installation, 45%
		due upon
		installation, 5%
		due upon proof.
		Line 3 of invoice
	Amount:	\$13,882.50

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 Line 5 on invoice

\$20,572.50

Amount:

### **Grand Total**

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$3,718,991.50	\$3,631,443.30	\$1,490,185.32

Reimbursem	envestiatus	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

Section Question Response

### Submission of Estimated Expenses Statements

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.

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

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

8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above.

### Tammy Conrad

Fiscal accounts clerk

08/01/2018

Section Question Response

# Submission of Actual Cost Documentation Statements

WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).

- 1. The Authorized
  Person signing
  below certifies and
  represents that he
  /she is authorized to
  submit this TV
  Broadcaster
  Relocation Fund
  Reimbursement
  Form on behalf of
  the above-named
  entity.
- The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.
- The above-named entity acknowledges that all certifications and attached documentation are considered material representations.

- 4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
- 5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- 6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

- 8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
- 9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Tammy Conrad Fiscal Accounts Clerk

08/01/2018

#### **Attachments**