



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **16817** | Service: **DTV** | Call **WTVS** | Channel: **20 (UHF)** |  
ID: | Sign:  
File **0000027891**  
Number:  
FRN: **0002770360** | Date **04/16**  
Submitted: **/2021**

## Applicant Information

### Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
<b>DETROIT EDUCATIONAL TELEVISION FOUNDATION</b> Doing Business As: WTVS	John Mark RILEY BROADCASTCAST CENTER 1 CLOVER COURT WIXOM, MI 48393 United States	+1 (248) 305-3788	jmark@dptv.org	Not-for-Profit

## Reimbursement Contact Information

### Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

## Preparer Contact Information

### Preparer Contact Name and Information

Applicant	Address	Phone	Email
<b>John Mark</b> <i>VP Engineering</i> <i>Detroit Educational Television Foundation</i>	John Mark 1 Clover Court Wixom, MI 48393 United States	+1 (248) 305-3760	jmark@dptv.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	3 stations Install and operate from a new side mount Broadband Antenna installed before implementation of Phase 3 due to WMYD early transition. Install new transmitter filters coax and antenna to operate on post transition assigned frequency of channel 20

**Transmitters**

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

**Primary  
Transmitter**

**Existing Transmitter Information**

Section	Question	Response
<b>Existing Transmitter Description</b>	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
<b>Existing Transmitter Manufacturer and Type</b>	Manufacturer	
	Model	Visionary DT Dual HP25SDW
	Year	1999
	Type	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	60 kW

**Primary  
Transmitter**

**New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	ULXTE-60
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	38 kW
	Justification for New Transmitter	Current Transmitter Manufacture no longer in business Parts unavailable SS transmitter lower cost than IOT See Attached

**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	150 kVA
	Rigid Conduit and Wiring	Yes

	Size	2 inches
	Length	200.0 feet
	Other Electrical Service	Yes
	Description	Generator replacement Electrical installation for Transmitter
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	10 tons
	Other Size	N/A
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	Yes
	Size	1500.0 square feet
<b>Channel 14 Costs</b>	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

**Primary Transmitter**

**Other Transmitter Cost Not Listed**

Name	Description
electrical Sub panel	power distribution for new combiner room
Transmitter Installation Costs	Transmitter Installation Costs
Internal Transmission Line	Internal Transmission Line
Transmitter Electrical Installation	Engineering, planning, and installation labor for transmitter electrical components as required due to the repack

<b>10 ton Heating and cooling unit</b>	antenna combiner room heating and cooling
<b>Primary Transmitter - Other Parts</b>	Primary Transmitter - Other Parts
<b>HVAC ice shield</b>	protection for external portion of HVAC

**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	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?	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	Top Mount
	Antenna position in stack	Bottom
	Polarization	Horizontal
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power) .....	600.0 kW

Manufacturer	
Model	TFU-18GBH-R04
Year	1999

Primary  
Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	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	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	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) .....	345.0 kW
	Manufacturer	

Model	TFU-24GTH-VP-R 06
Year	2019
Justification for New Antenna	Current antenna does not support new channel Vertical upgrade will be a separate line item on invoice

## Primary Antenna

### Other Antenna Costs

Section	Question	Response
<b>Combiner for Shared Antenna</b>	Do you need a Combiner for a Shared Antenna?	No
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
<b>Elbow Complex</b>	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Single Channel
	Feed Line Size	6 1/8 inches inches
<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for a high power antenna?	No

<b>Pattern Scatter Analysis</b>	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
<b>Sweep Test</b>	Do you require the sweep testing of transmission line and antenna?	Yes

**Primary  
Antenna**

**Other Antenna Cost Not Listed**

Information not provided.

**Interim  
Antenna**

**New Antenna Costs**

Section	Question	Response
<b>New Antenna Description</b>	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Ownership	Leased
	Owner	American Tower
	Is antenna shared?	Yes
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
<b>New Antenna Manufacturer and Type</b>	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	Broadband Slot
	Number of Stations Supported	3
	Number of Panels/Bays	24
	Lower Limit	470.00 MHz
	Upper Limit	698.00 MHz
	Design power capacity in use	100.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power) .....	60.0 kW
	Manufacturer	
	Model	TFU-24WB /VP

Year	2018
Justification for New Antenna	Candelabra will need extensive upgrades for repack of 3 stations 1 in phase 3 two in phase 8

## Interim Antenna

### Other Antenna Costs

Section	Question	Response
<b>Combiner for Shared Antenna</b>	Do you need a Combiner for a Shared Antenna?	Yes
	Type	New
	Number of channels supported	3
	Frequencies of channels supported	RF channel
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	No
<b>Elbow Complex</b>	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	B
	Feed Line Size	7 3/16 inches
<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for an antenna?	Yes
<b>Pattern Scatter Analysis</b>	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
<b>Sweep Test</b>	Do you require the sweep testing of transmission line and antenna?	Yes

Enter a list of RF channel numbers.

RF Channel Number
21
43
44

**Interim  
Antenna**

**Other Antenna Cost Not Listed**

Name	Description
combiner installation	installation of combiner by manufacture
Ice Shield for new Side-Mount Antenna Interim	Ice shield to protect interim antenna

**Transmission Line**

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

**Primary**  
**Transmission Line**

**Existing Transmission Line**

Section	Question	Response
<b>Existing Transmission Line Description</b>	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	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
<b>Existing Transmission Line Manufacturer and Type</b>	Manufacturer	
	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	1200 feet per run

**Primary** **New Transmission Line**  
**Transmission Line**

Section	Question	Response
<b>New Transmission Line Costs</b>	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	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	1200 feet per run
	Justification for New Transmission Line	Cannel reassignment is forbidden channel on current coax

**Primary** **Other Transmission Line Expenses Not Listed**  
**Transmission Line**

Information not provided.

**Interim**  
**Transmission Line**

**New Transmission Line**

Section	Question	Response
<b>New Transmission Line Costs</b>	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Type	Rigid
	Diameter	7 3/16 inches
	Segment Length	Broadband
	Other Segment Length	
	Number of parallel runs	1
	Length	995 feet per run
	Justification for New Transmission Line	no current interim coax cost for coax, 3 elbows and nitrogen generator for pressurization of line

**Interim**  
**Transmission Line**

**Other Transmission Line Expenses Not Listed**

Information not provided.

**Tower  
Equipment  
And  
Rigging  
Costs**

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

**Primary  
Tower**

**Existing Tower**

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	Candelabra
	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?	No
	Is tower compliant with Rev G?	Yes
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1003429
Coordinates (NAD83 ( North American Datum of 1983))	Latitude (NAD83)	42° 26' 52.5" N-
	Longitude (NAD83)	083° 10' 23.1" W-
	Overall Structure Height	1086.93 feet
	Support Structure Height	1012.13 feet
	Ground Elevation Above Mean Sea Level (AMSL)	662.07 feet

Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	American Tower, LLC
Date Constructed	06/11/1999

**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
74211	WMYD	DTV
72123	WWJ-TV	DTV
6056	WRCJ-FM	FM

**Other Types of Users**

Users
T-Mobil
W232CA
W268CN
W224CC
W292DK
WHNE-LD

**Primary  
Tower**

**Tower Modification Costs**

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

**Primary Tower**

**Tower Rigging Costs**

Section	Question	Response
<b>Tower Rigging Costs</b>	Complex Tower	Candelabra
<b>Helicopter Services Required</b>	Are helicopter services required?	Yes

**Primary Tower**

**Other Tower Expenses Not Listed**

Information not provided.

**Outside  
Professional Services Costs**

Section	Question	Response
<b>Outside Project Management Services</b>	Do you require outside project management services?	Yes
	Number of Hours	690
	Explanation	Project management fees charged by tower owner
<b>Outside RF consulting Engineering Services</b>	Perform engineering study for new channel assignment and antenna development	Yes
	Prepare engineering section of Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	2
	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
<b>Attorney and Other Outside Consulting Services</b>	Prepare and file Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	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	2
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	Yes
	FAA Consultation (including preparation of FAA Form 7460)	Yes
	Negotiation of Lease and other Matter for Shared Locations	Yes
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
<b>RF Field Engineering Services</b>	Comprehensive coverage verification via field study	No
	RF exposure measurements	Yes
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

**Outside Professional Services Costs**

**Other Professional Services Expenses Not Listed**

Name	Description
<b>RF System Test</b>	RF System Test
<b>Site Coordination meeting</b>	Coordination meeting of tenants tower owner and all contractors and vendors involved with the deliveries and construction. Travel and Logistical expenses incurred

## Other Expenses

Section	Question	Response
<b>AM Pattern Disturbance</b>	Is an Impact Study needed?	No
	Is Remediation needed?	No
<b>Facility Expenses</b>	Name	N/A
	Other Distributed Transmission System Expenses Not listed	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
<b>Permit and Filing Costs</b>	Local Zoning	Yes
	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
<b>Other Miscellaneous Expenses</b>	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
	Does this relocation require Equipment Storage?	Yes
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD Notification of a Channel Change?	Yes

**Other  
Expenses**

**Other Expenses Not Listed**

Name	Description
Interim antenna tower lease	Tower rental space for interim antenna
Lift equipment rental	fork lift and/or crane for lifting heavy equipment
Site Security	Due to high value equipment stored outside additional security measures needed
tower owner permits	Permits for combiner room electrical and construction permits
Internal Labor	Internal Labor related to repack expenses
Employee time	Employee's time spent working on paperwork accounting, transmitter work, and supervision
Interim antenna connection	Coax, switches, forward/reverse power meters to interconnect with interim antenna

## Cost Information

### Transmitters

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Primary Transmitter ULXTE-60</b>	<b>\$1,771,335.25</b>	<b>\$1,240,879.52</b>		<b>\$1,143,464.92</b>	
HVAC ice shield	<i>\$1,500.00</i>	\$1,500.00	American tower charge	\$0.00	N/A
Primary Transmitter - Other Parts	<i>\$723.77</i>	\$723.77	Estimated Cost Justification WTVS-110-1st Primary Transmitter - Other Parts V0	\$723.77	see submitted invoice
10 ton Heating and cooling unit	<i>\$19,219.00</i>	\$19,219.00	see Justifying Quote WTVS Kropf Mechanical Service Company	\$19,219.00	N/A
Transmitter Electrical Installation	<i>\$28,500.00</i>	\$28,500.00	Please see attached WTVS Transmitter Electrical Installation Revision Justification Letter	\$14,321.94	N/A
Internal Transmission Line	<i>\$576.00</i>	\$576.00	Please see Primary Transmitter - Internal Transmission Line Revision Justification Cover Letter	\$576.00	N/A
Transmitter Installation Costs	<i>\$2,367.21</i>	\$2,367.21	see Estimated Cost Justification WTVS-110-1st Primary Transmitter - Installation V1	\$2,195.88	N/A

electrical Sub panel	<b>\$1,700.00</b>	\$1,700.00	American Tower Charge	\$833.34	X
Other -- Building Addition Size: 1500.0	<b>\$8,399.27</b>	\$8,399.27	see Estimated Cost Justification WTVS-110-1st Primary Transmitter - Building Addition, 1,500 sq. ft. v0	\$6,524.42	N/A
10 Ton system	\$38,900.00	\$15,864.00	Replace 5 ton unit with 10 ton unit due to increased heat load of transmitter Available wall space will not support 2 5 ton units	\$0.00	N/A
Other Electrical Service: Generator replacement Electrical installation for Transmitter	<b>\$127,500.00</b>	\$127,500.00	Electrical costs for 230KW generator and installation replacement due to inadequate power for new transmitter also transmitter electrical installation and decommissioning cost	\$109,308.67	N/A
2" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$1,667.00	American tower charge	\$624.84	N/A
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$14,987.00	Please see attached WTVS Transformer Revision Justification Letter	\$7,493.50	N/A

UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	\$1,473,000.00	\$1,011,826.27	see Estimated Cost Justification WTVS-110-1st Primary Transmitter - UHF Liquid Cooled Solid State, 35-50 kW v0	\$980,346.22	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$6,050.00	American tower charge	\$1,297.34	N/A
<b>Sub-total</b>	\$1,771,335.25	\$1,240,879.52	N/A	\$1,143,464.92	N/A
<b>Total for all systems</b>	\$4,277,748.82	\$3,476,616.52	N/A	\$2,864,318.09	N/A

## Components

Actual Information	
Description	File Name
HVAC ice shield	Information not provided.
Primary Transmitter - Other Parts	<div> <b>Component Description:</b> Deluxe D-Sub Cable  <b>Amount:</b> \$28.76 </div> <div> <b>Component Description:</b> supply costs for the installation of the primary transmitter  <b>Amount:</b> \$681.87 </div> <div> <b>Component Description:</b> Male to Female Straight - Through Extension Cable  <b>Amount:</b> \$13.14 </div>
10 ton Heating and cooling unit	<div> <b>Component Description:</b> Completed the installation of one  <b>Amount:</b> \$19,219.00 </div>

Transmitter Electrical Installation	<div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> Universal Computer Power Cord  \$71.94 </div> </div> <div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> Electrical Installation  \$7,125.00 </div> </div> <div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> Electric Installation  \$7,125.00 </div> </div>
Internal Transmission Line	<div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> Trans Line Assy.  \$576.00 </div> </div>

Transmitter Installation  
Costs

**Component Description:** COUPLING ASSY  
**Amount:** \$129.17

**Component Description:** Installation  
**Amount:** \$727.92

**Component Description:** Installation  
**Amount:** \$77.16

**Component Description:** Installation  
**Amount:** \$79.80

**Component Description:** HAMMER SET  
**Amount:** \$35.24

**Component Description:** Installation  
**Amount:** \$26.60

**Component Description:** WTVS-110-1st  
Primary Transmitter  
- Installation  
**Amount:** \$335.00

**Component Description:** OXYGEN IND SZ  
300  
**Amount:** \$403.62

**Component Description:** ELBOW ASSY, 90"  
**Amount:** \$381.37

electrical Sub panel	<div> <div> <b>Component Description:</b> </div> <div> WTVS-110-1st Primary Transmitter - Electrical Sub Panel </div> </div> <div> <b>Amount:</b> </div> <div> \$833.34 </div>
Other -- Building Addition Size: 1500.0	<div> <div> <b>Component Description:</b> </div> <div> 25% downpayment on component </div> </div> <div> <b>Amount:</b> </div> <div> \$1,250.00 </div>
	<div> <div> <b>Component Description:</b> </div> <div> WTVS-110-1st Primary Transmitter - Building Addition, 1,500 sq. ft. </div> </div> <div> <b>Amount:</b> </div> <div> \$2,500.00 </div>
	<div> <div> <b>Component Description:</b> </div> <div> CAPITAL CONTRIBUTION - DETROIT - OAK PARK </div> </div> <div> <b>Amount:</b> </div> <div> \$2,730.82 </div>
	<div> <div> <b>Component Description:</b> </div> <div> 1/4" MIP X CLOSE </div> </div> <div> <b>Amount:</b> </div> <div> \$43.60 </div>
10 Ton system	Information not provided.

Other Electrical Service: Generator replacement Electrical installation for Transmitter	<div> <b>Component Description:</b> Remove and replace (1) 150kw generator         </div> <div> <b>Amount:</b> \$81,669.00         </div>
	<div> <b>Component Description:</b> Remove and replace (1) 150 KW generator         </div> <div> <b>Amount:</b> \$27,223.00         </div>
	<div> <b>Component Description:</b> Moving credit to disposal cost category as instructed. Please reject this line item.         </div> <div> <b>Amount:</b> N/A         </div>
	<div> <b>Component Description:</b> 25% deposit on component         </div> <div> <b>Amount:</b> \$416.67         </div>
2" Rigid Conduit and Wiring (Cost per foot)	<div> <b>Component Description:</b> 25% deposit for this component         </div> <div> <b>Amount:</b> \$208.34         </div>
	<div> <b>Component Description:</b> Broadcast Repack         </div> <div> <b>Amount:</b> \$416.50         </div>
Transformer 3 phase/480v - 150 KVA	<div> <b>Component Description:</b> Transformer         </div> <div> <b>Amount:</b> \$3,746.75         </div>
	<div> <b>Component Description:</b> Transmitter Replacement         </div> <div> <b>Amount:</b> \$3,746.75         </div>
UHF - Liquid Cooled Solid	

State Transmitter 35 - 50  
kW

<b>Component Description:</b>	Transmitter
<b>Amount:</b>	\$51,449.46
<b>Component Description:</b>	2nd PROGRESS INVOICE FOR THE TRANSMITTER REPLACEMENT PROJECT
<b>Amount:</b>	\$7,392.79
<b>Component Description:</b>	RIGID TRANSMISSION LINE - COPPER
<b>Amount:</b>	\$618.75
<b>Component Description:</b>	A. Transmitter
<b>Amount:</b>	\$316,217.64
<b>Component Description:</b>	ULXTE-60 Transmitter
<b>Amount:</b>	\$185,777.41
<b>Component Description:</b>	Invoice moved to correct budget categories
<b>Amount:</b>	N/A
<b>Component Description:</b>	ULXTE-60 Transmitter
<b>Amount:</b>	\$316,217.64
<b>Component Description:</b>	BPME6-UH, BPME 6-1/8" Flanged
<b>Amount:</b>	\$7,679.10

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

<b>Component Description:</b>	Transmitter
<b>Amount:</b>	\$80,602.03

<b>Component Description:</b>	CONTRACT AMOUNT
<b>Amount:</b>	\$14,350.71

<b>Component Description:</b>	OTHER
<b>Amount:</b>	\$40.69

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

<b>Component Description:</b>	Invoice moved to correct budget categories per NMI message.
<b>Amount:</b>	N/A

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

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

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Switchgear - industrial 800 amp	<table><tr><td data-bbox="687 174 1007 212"><b>Component Description:</b></td><td data-bbox="1139 174 1362 248">Cable DSC to W/G Switch 80 FT</td></tr><tr><td data-bbox="687 255 807 293"><b>Amount:</b></td><td data-bbox="1139 255 1259 293">\$1,297.34</td></tr></table>	<b>Component Description:</b>	Cable DSC to W/G Switch 80 FT	<b>Amount:</b>	\$1,297.34
<b>Component Description:</b>	Cable DSC to W/G Switch 80 FT				
<b>Amount:</b>	\$1,297.34				

**Cost  
Information**

**Antennas**

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna TFU-24WB /VP	\$268,038.89	\$253,463.22		\$243,771.00	
Ice Shield for new Side- Mount Antenna Interim	<i>\$744.81</i>	\$744.81	Please see American Towers LLC Project Cost Estimation	\$744.81	N/A
combiner installation	<i>\$15,962.33</i>	\$15,962.33	see Estimated Cost Justification WTVS-280- Interim Antenna - Combiner Installation v0	\$15,962.33	a
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$22,000.00	N/A	N/A	N/A

New combiner, cost per channel (without antenna)	\$84,200.00	\$81,954.33	see Estimated Cost Justification WTVS-280-Interim Antenna - New Combiner v0	\$81,954.33	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$3,333.33	X
UHF - High Power, Side Mount, basic slot antenna, 24 bay,, 60 - 65 kW input, elliptically or circularly polarized	<b>\$120,401.75</b>	\$120,401.75	American Tower cost estimate and PO #13-1652	\$136,516.20	The actual amount reimbursed for invoice 460199507 is \$15,000 (not \$97,901.75)
Elbow complex, broadband, at antenna input, per 7 3/16. feedline (if needed)	\$16,850.00	\$6,000.00	N/A	\$5,260.00	N/A
<b>Primary Antenna TFU-24GTH-VP-R 06</b>	<b>\$308,530.00</b>	<b>\$293,100.00</b>		<b>\$222,662.50</b>	

Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$11,700.00	N/A	\$10,773.00	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$6,400.00	N/A
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	\$289,500.00	\$275,000.00	N/A	\$205,489.50	N/A
<b>Sub-total</b>	\$576,568.89	\$546,563.22	N/A	\$466,433.50	N/A
<b>Total for all systems</b>	\$4,277,748.82	\$3,476,616.52	N/A	\$2,864,318.09	N/A

## Components

Actual Information	
Description	File Name
Ice Shield for new Side-Mount Antenna Interim	<p><b>Component Description:</b> WTVS-280-Interim Antenna - Ice Shield</p> <p><b>Amount:</b> \$744.81</p>

combiner installation	<div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> WTVS-280-Interim Antenna - Combiner Installation \$4,166.50 </div> </div> <div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> WTVS-280-Interim Antenna - Combiner Installation \$9,712.50 </div> </div> <div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> 25% downpayment on component \$2,083.33 </div> </div>
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.
New combiner, cost per channel (without antenna)	<div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> WTVS-280-Interim Antenna - New Combiner \$24,454.16 </div> </div> <div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> PARTIAL PAYMENT FOR NEW COMBINER N/A </div> </div> <div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> WTVS-280-Interim Antenna - New Combiner \$38,333.50 </div> </div> <div> <div> <b>Component Description:</b>  <b>Amount:</b> </div> <div> 25% downpayment on component \$19,166.67 </div> </div>

Sweep test of existing antenna		
	<b>Component Description:</b>	WTVS-280-Interim Antenna - Sweep Test
	<b>Amount:</b>	\$833.16
	<b>Component Description:</b>	WTVS-280-Interim Antenna - Sweep Test
	<b>Amount:</b>	\$1,666.84
	<b>Component Description:</b>	WTVS-280-Interim Antenna - Sweep Test
	<b>Amount:</b>	\$833.33

UHF - High Power, Side Mount, basic slot antenna, 24 bay,, 60 - 65 kW input, elliptically or circularly polarized	<b>Component Description:</b>	CAPITAL CONTRIBUTION - DETROIT - OAK PARK T1 MI / 282678 / ASSET#282678-BT1 / OAA711327 / FID 1003429 / WTVS Channel 20 Phase 8 / MILESTONE 1 / BROADCAST REPACK / TAX ID: 65-0723837
	<b>Amount:</b>	\$97,901.75
	<b>Component Description:</b>	WTVS-280-Interim Antenna - UHF High Power Side Mount, E-POL
	<b>Amount:</b>	\$16,114.45
	<b>Component Description:</b>	WTVS-280-Interim Antenna - UHF High Power Side Mount, E-POL
	<b>Amount:</b>	\$22,500.00
	<b>Component Description:</b>	PARTIAL PAYMENT ON UHF HIGH POWER SIDE MOUNT ANTENNA
	<b>Amount:</b>	N/A

<p>Elbow complex, broadband, at antenna input, per 7 3/16. feedline (if needed)</p>	<table> <tr> <td data-bbox="699 98 1114 331"> <p><b>Component Description:</b></p> </td><td data-bbox="1137 98 1426 331"> <p>WTVS-280-Interim Antenna - Elbow Complex, Broadband, 7 3/16"</p> </td></tr> <tr> <td data-bbox="699 331 1114 443"> <p><b>Amount:</b></p> </td><td data-bbox="1137 331 1426 443"> <p>\$2,760.00</p> </td></tr> <tr> <td data-bbox="699 454 1114 566"> <p><b>Component Description:</b></p> </td><td data-bbox="1137 454 1426 566"> <p>25% downpayment for compenent</p> </td></tr> <tr> <td data-bbox="699 566 1114 678"> <p><b>Amount:</b></p> </td><td data-bbox="1137 566 1426 678"> <p>\$833.33</p> </td></tr> <tr> <td data-bbox="699 689 1114 922"> <p><b>Component Description:</b></p> </td><td data-bbox="1137 689 1426 922"> <p>WTVS-280-Interim Antenna - Elbow Complex, Broadband, 7 3/16"</p> </td></tr> <tr> <td data-bbox="699 922 1114 943"> <p><b>Amount:</b></p> </td><td data-bbox="1137 922 1426 943"> <p>\$1,666.67</p> </td></tr> </table>	<p><b>Component Description:</b></p>	<p>WTVS-280-Interim Antenna - Elbow Complex, Broadband, 7 3/16"</p>	<p><b>Amount:</b></p>	<p>\$2,760.00</p>	<p><b>Component Description:</b></p>	<p>25% downpayment for compenent</p>	<p><b>Amount:</b></p>	<p>\$833.33</p>	<p><b>Component Description:</b></p>	<p>WTVS-280-Interim Antenna - Elbow Complex, Broadband, 7 3/16"</p>	<p><b>Amount:</b></p>	<p>\$1,666.67</p>
<p><b>Component Description:</b></p>	<p>WTVS-280-Interim Antenna - Elbow Complex, Broadband, 7 3/16"</p>												
<p><b>Amount:</b></p>	<p>\$2,760.00</p>												
<p><b>Component Description:</b></p>	<p>25% downpayment for compenent</p>												
<p><b>Amount:</b></p>	<p>\$833.33</p>												
<p><b>Component Description:</b></p>	<p>WTVS-280-Interim Antenna - Elbow Complex, Broadband, 7 3/16"</p>												
<p><b>Amount:</b></p>	<p>\$1,666.67</p>												
<p>Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)</p>	<table> <tr> <td data-bbox="699 954 1114 1187"> <p><b>Component Description:</b></p> </td><td data-bbox="1137 954 1426 1187"> <p>WTVS-210-Primary Antenna - Elbow Complex, 6 1/8"</p> </td></tr> <tr> <td data-bbox="699 1187 1114 1299"> <p><b>Amount:</b></p> </td><td data-bbox="1137 1187 1426 1299"> <p>\$5,386.50</p> </td></tr> <tr> <td data-bbox="699 1310 1114 1422"> <p><b>Component Description:</b></p> </td><td data-bbox="1137 1310 1426 1422"> <p>WTVS-210-Primary Antenna - Elbow Complex, 6 1/8"</p> </td></tr> <tr> <td data-bbox="699 1422 1114 1489"> <p><b>Amount:</b></p> </td><td data-bbox="1137 1422 1426 1489"> <p>\$5,386.50</p> </td></tr> </table>	<p><b>Component Description:</b></p>	<p>WTVS-210-Primary Antenna - Elbow Complex, 6 1/8"</p>	<p><b>Amount:</b></p>	<p>\$5,386.50</p>	<p><b>Component Description:</b></p>	<p>WTVS-210-Primary Antenna - Elbow Complex, 6 1/8"</p>	<p><b>Amount:</b></p>	<p>\$5,386.50</p>				
<p><b>Component Description:</b></p>	<p>WTVS-210-Primary Antenna - Elbow Complex, 6 1/8"</p>												
<p><b>Amount:</b></p>	<p>\$5,386.50</p>												
<p><b>Component Description:</b></p>	<p>WTVS-210-Primary Antenna - Elbow Complex, 6 1/8"</p>												
<p><b>Amount:</b></p>	<p>\$5,386.50</p>												

Sweep test of existing antenna	<div> <b>Component Description:</b> WTVS-210-Primary Antenna - Sweep Test         </div> <div> <b>Amount:</b> \$640.00         </div>
	<div> <b>Component Description:</b> WTVS-210-Primary Antenna - Sweep Test         </div> <div> <b>Amount:</b> \$2,046.67         </div>
	<div> <b>Component Description:</b> WTVS-210-Primary Antenna - Sweep Test         </div> <div> <b>Amount:</b> \$2,880.00         </div>
	<div> <b>Component Description:</b> 25% downpayment on component         </div> <div> <b>Amount:</b> \$833.33         </div>
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	<div> <b>Component Description:</b> Installation of a Dielectric TFU 24 GTH Top Mount Antenna with 1100 FT of 6 inch 50 OHM line.         </div> <div> <b>Amount:</b> \$18,899.26         </div>
	<div> <b>Component Description:</b> UHF - High Power Top Mount         </div> <div> <b>Amount:</b> \$93,295.12         </div>
	<div> <b>Component Description:</b> UHF - High Power Top Mount         </div> <div> <b>Amount:</b> \$93,295.12         </div>

Cost  
Information

Transmission Line

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Transmission Line	\$331,335.00	\$123,668.30		\$123,668.30	
Rigid Transmission Line - copper, 7 3/16" broadband	\$331,335.00	\$123,668.30	see Estimated Cost Justification WTVS-380-Interim Transmission Line - Rigid, Copper, 7 3_16 v0	\$123,668.30	N/A
Primary Transmission Line	\$242,400.00	\$230,400.00		\$181,526.54	
Rigid Transmission Line - copper, 6 1/8"	\$242,400.00	\$230,400.00	N/A	\$181,526.54	N/A
Sub-total	\$573,735.00	\$354,068.30	N/A	\$305,194.84	N/A
Total for all systems	\$4,277,748.82	\$3,476,616.52	N/A	\$2,864,318.09	N/A

Components

Actual Information Description	File Name
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Rigid Transmission Line - copper, 7 3/16" broadband		
	<b>Component Description:</b>	WTVS-380-Interim Transmission Line - Rigid, Copper, 7 3 /16"
	<b>Amount:</b>	\$44,913.05
	<b>Component Description:</b>	PARTIAL PAYMENT FOR RIGID TRANSMISSION LINE
	<b>Amount:</b>	\$26,251.75
	<b>Component Description:</b>	WTVS-380-Interim Transmission Line - Rigid, Copper, 7 3 /16"
	<b>Amount:</b>	\$52,503.50

Rigid Transmission Line - copper, 6 1/8"		
	<b>Component Description:</b>	WTVS-310-Primary Transmission Line - Rigid, Copper, 6 1/8"
	<b>Amount:</b>	\$3,054.92
	<b>Component Description:</b>	WTVS-310-Primary Transmission Line - Rigid, Copper, 6 1 /8"
	<b>Amount:</b>	\$88,085.81
	<b>Component Description:</b>	Transition WR1500 X 6-50 CH20
	<b>Amount:</b>	\$2,300.00
	<b>Component Description:</b>	WTVS-310-Primary Transmission Line - Rigid, Copper, 6 1 /8"
	<b>Amount:</b>	\$88,085.81

## Cost Information

### Tower Equipment and Rigging Costs

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Primary Tower</b>	<b>\$911,367.50</b>	<b>\$881,067.50</b>		<b>\$640,663.29</b>	
<b>GTOWER</b>					
Minor tower reinforcement /modifications	\$158,000.00	\$150,000.00	N/A	\$4,166.66	N/A
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$25,000.00	N/A	\$14,600.00	Please remove \$14,600 entry for Tower Mapping & Structural Engineering as FCC did not like two invoices attached in one request.
Tower Helicopter Lift	<i>\$306,067.50</i>	\$306,067.50	see Estimated Cost Justification WTVS-410- Exisng Primary Tower - Helicopter Lift V1	\$306,067.48	N/A
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$400,000.00	N/A	\$315,829.15	N/A

<b>Sub-total</b>	\$911,367.50	\$881,067.50	N/A	\$640,663.29	N/A
<b>Total for all systems</b>	\$4,277,748.82	\$3,476,616.52	N/A	\$2,864,318.09	N/A

## Components

Actual Information	
Description	File Name
Minor tower reinforcement /modifications	<b>Component Description:</b>
	WTVS-410-Existing Primary Tower - Minor Tower Reinforcement /Modifications
	<b>Amount:</b>
	\$2,000.00
	<b>Component Description:</b>
	25% downpayment on component
	<b>Amount:</b>
	\$1,000.00
	<b>Component Description:</b>
	WTVS-410-Existing Primary Tower - Minor Tower Reinforcement /Modifications
	<b>Amount:</b>
	\$1,166.66

Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	<div> <b>Component Description:</b> Broadcast Tower Mapping Detroit OakPark Broadcast Repack Line 2         </div> <div> <b>Amount:</b> \$8,267.00         </div>
	<div> <b>Component Description:</b> Broadcast structural         </div> <div> <b>Amount:</b> \$6,333.00         </div>
	<div> <b>Component Description:</b> TOWER MAPPING &amp; STRUCTURAL ENGINEERING         </div> <div> <b>Amount:</b> N/A         </div>
Tower Helicopter Lift	<div> <b>Component Description:</b> Install Services Additional Dollars added for the install to be a helicopter lift (Antenna order 1697850)         </div> <div> <b>Amount:</b> \$23,273.74         </div>
	<div> <b>Component Description:</b> Other         </div> <div> <b>Amount:</b> \$104,731.87         </div>
	<div> <b>Component Description:</b> Other         </div> <div> <b>Amount:</b> \$104,731.87         </div>
	<div> <b>Component Description:</b> WTVS-410- Existing Primary Tower - Helicopter Lift         </div> <div> <b>Amount:</b> \$73,330.00         </div>
Complex Tower (includes, for example, those with candelabras and/or stacked	

antennas)

<b>Component Description:</b>	WTVS-410- Existing Primary Tower - Tower Rigging, Complex Tower
<b>Amount:</b>	\$106,363.12

<b>Component Description:</b>	25% downpayment on component
<b>Amount:</b>	\$13,750.00

<b>Component Description:</b>	Tower Permit Drawing Package
<b>Amount:</b>	\$9,400.00

<b>Component Description:</b>	WTVS-410- Existing Primary Tower - Tower Rigging, Complex Tower
<b>Amount:</b>	\$27,500.00

<b>Component Description:</b>	WTVS-410- Existing Primary Tower - Tower Rigging, Complex Tower
<b>Amount:</b>	\$23,636.25

<b>Component Description:</b>	WTVS-410- Existing Primary Tower - Tower Rigging, Complex Tower
<b>Amount:</b>	\$106,363.12

**Component Description:**

WTVS-410-  
Existing Primary  
Tower - Tower  
Rigging, Complex  
Tower

**Amount:**

\$28,816.66

## Cost Information

### Outside Professional Services

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Outside Professional Services</b>	<b>\$182,430.00</b>	<b>\$192,275.80</b>		<b>\$162,583.38</b>	
Site Coordination meeting	<i>\$2,500.00</i>	\$2,500.00	N/A	\$2,500.00	N/A
RF System Test	<i>\$5,000.00</i>	\$5,000.00	Please see American Towers LLC Project Cost Estimation	\$3,333.33	N/A
RF Exposure Measurements	\$21,050.00	\$20,000.00	N/A	\$2,500.00	N/A
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	\$2,105.00	\$2,000.00	N/A	\$300.00	N/A
ASR modification (prepare FCC Form 854)	\$2,105.00	\$2,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$7,360.00	\$7,000.00	N/A	\$827.20	N/A

Attorney Fees - Negotiation of lease and other matters for shared locations	\$4,210.00	\$4,000.00	N/A	\$1,073.10	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	\$563.20	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$903.40	N/A
Prepare request for Special Temporary Authorization	\$4,100.00	\$3,000.00	N/A	\$1,050.00	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	\$150.00	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
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,800.00	see Estimated Cost Justification WTVS-590-Transition Timing and Coordination v0	\$2,800.00	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	\$1,707.75	N/A
Project management of the transition	\$109,020.00	\$122,725.80	The estimated cost has been adjusted to include all invoices submitted for reimbursement at this time.	\$144,875.40	per submitted invoices
<b>Sub-total</b>	\$182,430.00	\$192,275.80	N/A	\$162,583.38	N/A
<b>Total for all systems</b>	\$4,277,748.82	\$3,476,616.52	N/A	\$2,864,318.09	N/A

## Components

**Actual Information**  
**Description**

**File Name**

Site Coordination meeting	<b>Component Description:</b>		WTVS-590-Site Coordination Meeting
	<b>Amount:</b>		\$1,250.00
	<b>Component Description:</b>		WTVS-590-Site Coordination Meeting
	<b>Amount:</b>		\$625.00
	<b>Component Description:</b>		25% downpayment for this component
	<b>Amount:</b>		\$625.00
RF System Test	<b>Component Description:</b>		WTVS-590-RF System Test
	<b>Amount:</b>		\$3,333.33
RF Exposure Measurements	<b>Component Description:</b>		WTVS-580-Field Engineering Service - Rf Exposure Measurements
	<b>Amount:</b>		\$1,666.67
	<b>Component Description:</b>		25% down payment for component
	<b>Amount:</b>		\$833.33

FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	<b>Component Description:</b>	FCC repack Review of WTVS 399
	<b>Amount:</b>	\$75.00
	<b>Component Description:</b>	FCC repack: Analysis of WTVS impact
	<b>Amount:</b>	\$225.00
ASR modification (prepare FCC Form 854)	Information not provided.	
Attorney Fees - Prepare and File request for Special Temporary Authorization	<b>Component Description:</b>	WTVS-550-Attorney - Special Temporary Authorization
	<b>Amount:</b>	\$827.20
Attorney Fees - Negotiation of lease and other matters for shared locations	<b>Component Description:</b>	Television Repacking Services - WTVS
	<b>Amount:</b>	\$60.00
	<b>Component Description:</b>	Television Repacking Services - WTVS
	<b>Amount:</b>	\$90.00
	<b>Component Description:</b>	Review, revise and file WTVS FCC 10 Week Report. EMail communications regarding same.
	<b>Amount:</b>	\$102.40

	<b>Component Description:</b>	Television Repacking Services- WTVS
	<b>Amount:</b>	\$90.00
	<b>Component Description:</b>	Invoice for legal services
	<b>Amount:</b>	\$90.00
	<b>Component Description:</b>	Legal Services - Television Repacking Services - WTVS
	<b>Amount:</b>	\$77.50
	<b>Component Description:</b>	Review and file FCC Transition Plan Progress Report. Email communications regarding same.
	<b>Amount:</b>	\$153.60
	<b>Component Description:</b>	Finalize and file Quarterly Transition Report.
	<b>Amount:</b>	\$409.60
	<b>Component Description:</b>	WTVS-550- Attorney - License to Cover Application (Main)
	<b>Amount:</b>	\$563.20
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application		

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application		
	<b>Component Description:</b>	Television
	<b>Amount:</b>	Repacking Services \$90.00
	<b>Component Description:</b>	Television
	<b>Amount:</b>	Repacking Services-WTVS \$813.40
Prepare request for Special Temporary Authorization	<b>Component Description:</b>	Preparation of STA Application for Operation
	<b>Amount:</b>	\$1,050.00
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	<b>Component Description:</b>	Preparation of Application
	<b>Amount:</b>	\$150.00
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.	
Address transition timing and coordination issues w/ other stations and wireless		
	<b>Component Description:</b>	Legal Services
	<b>Amount:</b>	\$300.00
	<b>Component Description:</b>	WTVS-590-Transition Timing and Coordination
	<b>Amount:</b>	\$2,500.00

Prepare and or review reimbursement form	<b>Component Description:</b> Legal services <b>Amount:</b> \$90.00
	<b>Component Description:</b> Legal services to prepare and review reimbursement form in addition to review & filing reports <b>Amount:</b> \$1,617.75
Project management of the transition	<b>Component Description:</b> Project Management <b>Amount:</b> \$4,429.10
	<b>Component Description:</b> Project management <b>Amount:</b> \$6,397.90
	<b>Component Description:</b> Project Management <b>Amount:</b> \$3,779.45
	<b>Component Description:</b> Project Management <b>Amount:</b> \$2,590.10
	<b>Component Description:</b> project management <b>Amount:</b> \$1,152.50
	<b>Component Description:</b> Project Management <b>Amount:</b> \$4,210.05

<b>Component Description:</b>	project management
<b>Amount:</b>	\$4,293.90

<b>Component Description:</b>	Project management
<b>Amount:</b>	\$3,287.90

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$4,221.70

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$6,305.85

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$2,962.90

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$1,020.00

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$8,564.20

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$3,526.25

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$4,207.30

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$4,831.85

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$4,064.85

<b>Component Description:</b>	Project management
<b>Amount:</b>	\$3,512.30

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$6,813.90

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$4,760.70

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$3,642.90

<b>Component Description:</b>	25% downpayment for work being done by American Tower
<b>Amount:</b>	\$1,250.00

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$3,166.55

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$4,170.20

<b>Component Description:</b>	WTVS-510-Project Management
<b>Amount:</b>	\$2,500.00

<b>Component Description:</b>	Please deny this component
<b>Amount:</b>	N/A

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$2,591.50

<b>Component Description:</b>	WTVS-510-Project Management
<b>Amount:</b>	\$1,250.00

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$2,411.75

<b>Component Description:</b>	Project management
<b>Amount:</b>	\$8,295.55

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$2,802.70

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$5,909.75

<b>Component Description:</b>	CONSULTING WORK WITH STAFF TO CREATE A REPACK FACT SHEET.
<b>Amount:</b>	\$450.00

<b>Component Description:</b>	PO Line 1 - NTP Billable - Project Mgmt
<b>Amount:</b>	\$9,480.00

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$8,134.35

<b>Component Description:</b>	Project Management
<b>Amount:</b>	\$3,887.45

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## Cost Information

### Other Expenses

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Other Expenses</b>	<b>\$262,312.18</b>	<b>\$261,762.18</b>		<b>\$145,978.16</b>	
Interim antenna connection	<i>\$29,799.31</i>	\$29,799.31	Please see Estimated Cost Justification WTVS-610-Interim Antenna Connection v0	\$29,799.31	N/A
Employee time	<i>\$75,081.10</i>	\$75,081.10	See Attachment	\$58,289.50	Please remove this component. It was resubmitted under outside professional services for repack
Internal Labor	<i>\$274.50</i>	\$274.50	Please see WTVS Internal Labor Budget Justification Cover Letter	\$274.50	N/A
tower owner permits	<i>\$750.00</i>	\$750.00	N/A	\$750.00	N/A
Site Security	<i>\$5,000.00</i>	\$5,000.00	N/A	N/A	N/A
Lift equipment rental	<i>\$10,000.00</i>	\$10,000.00	N/A	N/A	N/A

Interim antenna tower lease	<b>\$65,148.39</b>	\$65,148.39	American Tower cost estimate; DPTV WTVS-610-Interim Antenna Tower Lease Budget Increase Justification	\$57,600.00	N/A
MVPD Notification of Channel Change	<b>\$2,000.00</b>	\$2,000.00	N/A	\$1,250.00	N/A
Develop and air announcement of upcoming channel change	<b>\$5,000.00</b>	\$5,000.00	N/A	N/A	N/A
Equipment Storage	<b>\$9,510.00</b>	\$9,510.00	See Estimated Cost Justification WTVS-610-Equipment Storage v0	\$9,510.00	N/A
Equipment Delivery and Handling Charges	<b>\$13,198.88</b>	\$13,198.88	Please see Estimated Cost Justification WTVS-610-Equipment Delivery and Handling V0	\$13,198.88	see submitted invoices
Disposal Costs (for equipment and other waste, net of any salvage value)	<b>\$25,000.00</b>	\$25,000.00	N/A	(\$28,444.03)	N/A

Local Zoning	<b>\$10,000.00</b>	\$10,000.00	Permits and inspections	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	\$3,750.00	N/A
<b>Sub-total</b>	\$262,312.18	\$261,762.18	N/A	\$145,978.16	N/A
<b>Total for all systems</b>	\$4,277,748.82	\$3,476,616.52	N/A	\$2,864,318.09	N/A

## Components

Actual Information	
Description	File Name
Interim antenna connection	<p><b>Component Description:</b> 50 Ohm 2 Way N Power Divider from 500 MHz to 1,000 MHz rated at 10 watts</p> <p><b>Amount:</b> \$151.66</p> <p><b>Component Description:</b> #2 Acid brush 1/2" x 6"</p> <p><b>Amount:</b> \$105.00</p> <p><b>Component Description:</b> 50 Ohm 2 Way N Power Divider From 500 MHz to 1,000 MHz Rated at 10 watts</p> <p><b>Amount:</b> \$583.04</p> <p><b>Component Description:</b> Hoist block and tackle</p> <p><b>Amount:</b> \$58.29</p>

<b>Component Description:</b>	Interim antenna connection
<b>Amount:</b>	\$315.53
<b>Component Description:</b>	Clevis Hanger 1 1/4 IN. 215LB Max Load
<b>Amount:</b>	\$66.73
<b>Component Description:</b>	Insulator Conductor Adapter 4 1/16" Thin-Stand
<b>Amount:</b>	\$336.84
<b>Component Description:</b>	Switch WR1500 H Plane 115 VAC 60000 SER
<b>Amount:</b>	\$20,095.80
<b>Component Description:</b>	18-8 stainless steel hex head screw
<b>Amount:</b>	\$66.89
<b>Component Description:</b>	Hot-water hose, medium-pressure
<b>Amount:</b>	\$111.66
<b>Component Description:</b>	BPME4M-UH BPME 4-1/16" Flanged
<b>Amount:</b>	\$7,032.75

	<b>Component Description:</b> N Male Right Angle to N Male Right Angle Cable Using LMR-400 Coax and Times Connectors <b>Amount:</b> \$875.12
Employee time	<b>Component Description:</b> Project Management <b>Amount:</b> \$4,896.97  <b>Component Description:</b> Employee Time <b>Amount:</b> \$5,822.18  <b>Component Description:</b> In-House Labor <b>Amount:</b> \$23,744.80  <b>Component Description:</b> Project Management <b>Amount:</b> \$5,558.54  <b>Component Description:</b> review and submit form 399 <b>Amount:</b> \$18,267.01  <b>Component Description:</b> this component should be removed <b>Amount:</b> \$450.00
Internal Labor	<b>Component Description:</b> FCC Repack Travel expense <b>Amount:</b> \$274.50

tower owner permits	<div> <div>Component Description:</div> <div>Amount:</div> </div> <div> <div>Building permit</div> <div>\$750.00</div> </div>
Site Security	Information not provided.
Lift equipment rental	Information not provided.
Interim antenna tower lease	<div> <div>Component Description:</div> <div>Amount:</div> </div> <div> <div>WTVS-610-Interim Antenna Tower Lease</div> <div>\$14,400.00</div> </div> <div> <div>Component Description:</div> <div>Amount:</div> </div> <div> <div>25% downpayment on this component</div> <div>\$14,400.00</div> </div> <div> <div>Component Description:</div> <div>Amount:</div> </div> <div> <div>WTVS-610-Interim Antenna Tower Lease</div> <div>\$28,800.00</div> </div>
MVPD Notification of Channel Change	<div> <div>Component Description:</div> <div>Amount:</div> </div> <div> <div>WTVS-610-MVPD Notification</div> <div>\$1,250.00</div> </div>
Develop and air announcement of upcoming channel change	Information not provided.

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Equipment Storage

**Component Description:** WTVS-610-  
Equipment Storage  
**Amount:** \$320.00

**Component Description:** WTVS-610-  
Equipment Storage  
**Amount:** \$6,310.00

**Component Description:** WTVS-610-  
Equipment  
Storage  
**Amount:** \$1,440.00

**Component Description:** WTVS-610-  
Equipment  
Storage  
**Amount:** \$1,440.00

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Equipment Delivery and Handling Charges	<b>Component Description:</b> Freight and Shipping <b>Amount:</b> \$5,127.23
	<b>Component Description:</b> Freight and Shipping <b>Amount:</b> \$7,218.47
	<b>Component Description:</b> FREIGHT AND SHIPPING <b>Amount:</b> \$61.72
	<b>Component Description:</b> FREIGHT AND SHIPPING <b>Amount:</b> \$126.17
	<b>Component Description:</b> FREIGHT AND SHIPPING <b>Amount:</b> \$611.92
	<b>Component Description:</b> FREIGHT AND SHIPPING <b>Amount:</b> \$53.37
Disposal Costs (for equipment and other waste, net of any salvage value)	<b>Component Description:</b> "Vendor Credit - WTVS/Detroit Public Television received \$15,626.00 for scrap copper from old transmission equipment." <b>Amount:</b> (\$15,626.00)
	<b>Component Description:</b> Roll Off Delivery <b>Amount:</b> \$98.68

	<b>Component Description:</b>	Refund check from vendor for generator salvage.
	<b>Amount:</b>	(\$7,000.00)
	<b>Component Description:</b>	ROLL OFF FINAL PULL
	<b>Amount:</b>	\$392.88
	<b>Component Description:</b>	Refund from vendor for salvaged generator.
	<b>Amount:</b>	(\$7,000.00)
	<b>Component Description:</b>	ROLL OFF FINAL PULL
	<b>Amount:</b>	\$404.88
	<b>Component Description:</b>	EQUIPMENT USE FEE
	<b>Amount:</b>	\$58.82
	<b>Component Description:</b>	Please disregard this invoice, submitting two separate invoices for checks.
	<b>Amount:</b>	N/A
	<b>Component Description:</b>	ROLL OFF DELIVERY
	<b>Amount:</b>	\$167.89
	<b>Component Description:</b>	Equipment use Fee
	<b>Amount:</b>	\$58.82
Local Zoning	Information not provided.	

DTV Medical Facility Notification	<table><tr><td data-bbox="703 174 1023 210"><b>Component Description:</b></td><td data-bbox="1155 174 1382 210">Medical Notification</td></tr><tr><td data-bbox="703 210 823 246"><b>Amount:</b></td><td data-bbox="1155 210 1270 246">\$3,750.00</td></tr></table>	<b>Component Description:</b>	Medical Notification	<b>Amount:</b>	\$3,750.00
<b>Component Description:</b>	Medical Notification				
<b>Amount:</b>	\$3,750.00				

**Cost  
Information**

**Grand Total**

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$4,277,748.82	\$3,476,616.52	\$2,864,318.09

**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.	Yes
All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out procedures with the Fund Administrator.	No

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	<p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p>	
		<ol style="list-style-type: none"> <li>1. The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity.</li> <li>2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> <li>3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.</li> </ol>	

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

<p>8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p><b>William Carignan</b> <i>Controller</i></p> <p>04/16/2021</p>

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	<p>WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).</p>	
		<ol style="list-style-type: none"> <li>1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity.</li> <li>2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.</li> <li>3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> </ol>	

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

<p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p><b>William Carignan</b> <i>Controller</i></p> <p>04/16/2021</p>

Certification	Section	Question	Response
	Submission of Final Allocation or Accounting Information Statements	<p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p>	
		<ol style="list-style-type: none"> <li>1. The Authorized Person signing below certifies 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 acknowledges that all certifications and attached documentation are considered material representations.</li> <li>2. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.</li> </ol>	

3. The above-named entity certifies that all costs identified as "actual costs" herein accurately represent the costs actually paid by the above-named entity, including any discounts, refunds, or rebates.
4. 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.
5. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
6. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

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

**William  
Carignan**  
*Controller*

04/16/2021

**Attachments**