

(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility 74167 Service: DTV Call WVEC Channel:

ID: Sign:

**11 (High VHF)** File **0000028089** 

Number:

FRN: **0004336020** Date **11/26** 

Submitted: /2019

# Applicant Information

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

Applicant	Address	Phone	Email	Applicant Type
WVEC TELEVISION, INC.	Denise Branson, Sr. Paralegal TEGNA Inc. 8350 Broad Street, Suite 2000 Tysons, VA 22102 United States	+1 (703) 873-6606	dbranson@TEGNA.com	Corporation

# 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
Operations TEGNA Suite 2000 Tysons, VA 22102 United States	Regional Head of Technology and Operations	8350 Broad Street Suite 2000 Tysons, VA 22102	+1 (404) 873- 9199	gadavis@tegna. 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	WVEC will be transitioning from channel 13 to channel 11 which requires a new primary antenna, transmitter and transmission line as well as an interim antenna and line.

#### **Transmitters**

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

## Auxiliary Transmitter

#### **Add Transmitter Information**

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Backup full power transmitter
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter	Manufacturer	
Manufacturer and Type	Model	PTCD20P2I
	Year	1994
	Туре	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	8 kW

## Auxiliary Transmitter

#### **New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	VAXTE-12
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	8.6 kW
	Justification for New Transmitter	Old transmitter cannot be re- tuned per manufacturers notification.

## Auxiliary Transmitter

### **Other Transmitter Costs**

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	Yes
	Size	3 inches
	Length	100.0 feet
	Other Electrical Service	Yes

	Description	Additional electrical services required for transmitter installation.
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Heating and Cooling
	Size	5 tons
	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

Auxiliary Transmitter **Other Transmitter Cost Not Listed** 

**Transmitter** Information not provided.

## Primary Transmitter

## **Existing Transmitter Information**

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter  Manufacturer and Type	Manufacturer	
	Model	PTCD20P2I
	Year	1994
	Туре	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	8 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?	No
	Manufacturer	
	Model	VAXTE-12
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	9.6 kW
	Justification for New Transmitter	Old transmitters not re-tuneble per manufacturer's notification.

## 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	Yes
	Size	3 inches
	Length	100.0 feet
	Other Electrical Service	Yes
		1

	Description	Additional electrical services required for transmitter installation.
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Heating and Cooling
	Size	5 tons
	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 Transmitte **Other Transmitter Cost Not Listed** 

**Transmitter** Information not provided.

#### **Antennas**

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

### **Add Antenna Information**

Section	Question	Response
Existing Antenna Description	Type of change	Purchase New
	Antenna Use	Auxiliary (Backup)
	Description of Use	Full Power Backup Antenna
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this antenna currently shared with any other stations?	No
	Is this antenna directional?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna	Class	Full Power
Manufacturer and Type	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	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)	35.0 kW
Manufacturer	
Model	TLS-V8BB-
Year	2017

#### **New Antenna Costs**

Section	Question	Response
New Antenna Description	Use	Auxiliary (Backup)
	Description of Use	Full Power backup antenna
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna	Class	Full Power
Manufacturer and Types	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	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)	35.0 kW
	Manufacturer	

Model	TLS-V8BB-
Year	2019
Justification for New Antenna	Old antenna cannot be re-tuned

#### **Other Antenna Costs**

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	
	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?	No
	Broadband or Single Channel?	N/A
	Feed Line Size	N/A
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

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

Name	Description	
XFMR	XFMR	
Trans Test 6-75	Trans Test 6-75	
Shipping	\$5,400	
Flex Line	Flex Line	
Reducer	Reducer	

### **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	Class	Full Power
Manufacturer and Type	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Circular
	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)	35.0 kW

Manufacturer	
Model	TCL-12A13
Year	1999

#### **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?	No
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna	Class	Full Power
Manufacturer and Types	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Circular
	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)	35.0 kW
	Manufacturer	
		1

Model	THV-12A11 /VP-R O4 (SP)
Year	2019
Justification for New Antenna	Station's licensed circularly polarized, top-mount, main antenna cannot be re-tuned and must be replaced for new channel assignment.

#### **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
Shipping	\$6,800
New Top Plate	Existing top-plate and/or bolt pattern may not work for new top-mount antenna
Misc Antenna Items	Misc Antenna Items: Items 3 and 5-8 on attached Dielectric Quote 800056CMZ-3

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

## Primary Transmission

## **Add Transmission Line**

Line Section	Question	Response
Existing Transmission Line Description	Type of change	Utilize Existing
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmission currently shared with any other stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	Dielectric
	Туре	Rigid
	Diameter	4 1/16 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1300 feet per run

## Primary Transmissio

## Other Transmission Line Expenses Not Listed

on Line	Description	
TX Line Sweep	Sweep required to verify post-transition channel measures well on existing line.	

## Auxiliary Transmission

#### **Add Transmission Line**

Section	Question	Response
Existing Transmission Line Description	Type of change	Utilize Existing
	Use	Auxiliary (Backup)
	Description of Use	Used for maintenand a and primary facility repair
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmission currently shared with any other stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission	Manufacturer	Dielectric
Line Manufacturer and Type	Туре	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	1250 feet per run

## Auxiliary Transmis

## Other Transmission Line Expenses Not Listed

Transmission	Naine	Description
	TX Line Sweep	Sweep required to verify post-transition channel measures well on existing line.

#### 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?	No
	Is tower compliant with Rev G?	No
Existing Tower Structure	Do you have a tower registration number?	Yes
Registration	ASR Number	1043102
Coordinates (NAD83 ( North American Datum of 1983))	Latitude (NAD83)	36° 49' 00.0" N-
	Longitude (NAD83)	076° 28' 05.0" W-
	Overall Structure Height	1225.05 feet
	Support Structure Height	1095.79 feet
	Ground Elevation Above Mean Sea Level (AMSL)	23.95 feet

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	WVEC TELEVISION INC
Date Constructed	06/24/1999

### Primary Tower

#### **Tower Modification Costs**

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for undocumented /poorly documented tower
Tower Reinforcements	Please select whether tower reinforcements are needed:	Major 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	750
	Explanation	It will be necessary to schedule and coordinate multiple vendors, complete progress reports, and update Schedule 399s. Station does not have available personnel or personnel trained in project management for such complex projects.
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	2
	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting	Prepare and file Form FCC Construction Permit Application	Yes
Services	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
RF Field Engineering Services	Comprehensive coverage verification via field study	Yes
	RF exposure measurements	Yes
	Additional Field Engineering Service	Yes

Justification  \$2,500 per site visit including expenses x 20 days. It is necessary to survey the site, plan the equipment, develop specifications for purchasing, & oversee multiple vendor RF projects.  Station does not have available personnel trained in such services.

#### Outside Professional

# Other Professional Services Expenses Not Listed

Şervices Costs	Description
Other Legal Services	Other Legal Services related to the DTV Repack
Pre filing site review	Outside engineering firm to review all sites before filling.
Other Engineering Services	Fewer Proj Mgt "PM" tasks are req'd & Other Engineering Services "OES" are req'd, so the PM total was reduced to 750 hrs (\$112,500.00 at \$150/hr), a new OES comp was created & funded with \$ from PM. See attachment titled "KGA quote to WVEC for OES.pdf"

# Other Expenses

Section	Question	Response
AM Pattern Disturbance	Is an Impact Study needed?	Yes
	Is Remediation needed?	Yes
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	Yes
	Non-zoning permits	Yes
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	Yes
	FCC License to Cover Application	Yes
	FCC Special Temporary Authority Application	Yes
Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
	Does this relocation require Equipment Storage?	Yes
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD  Notification of a Channel Change?	Yes

# Other Expenses

## Other Expenses Not Listed

Name	Description
Internal labor	Local and Corporate labor Costs

# **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 VAXTE-12	\$386,700.00	\$406,381.40		\$278,484.34	
High VHF - Air Cooled Solid State Transmitter 6.5 . 12.5 kW	\$331,500.00	\$351,481.40	Per Gates AIR Quote. Includes TAX	\$278,484.34	N/A
3" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$4,900.00	N/A	N/A	N/A
Other Electrical Service: Additional electrical services required for transmitter installation.	\$25,000.00	\$25,000.00	Additional electrical services required for transmitter installation.	N/A	N/A

Other	\$25,000.00	\$25,000.00	Additional	N/A	N/A
HVAC			HVAC is		
Service			required for		
Type: H Size:5			operation		
			of new air- cooled		
(Other)			solid-state		
			transmitter		
			while still		
			operating		
			with main		
			air-cooled		
			transmitter		
			during		
			testing		
			period.		
Auxiliary Transmitter VAXTE-12	\$386,700.00	\$406,381.40		\$254,971.68	
Other	\$25,000.00	\$25,000.00	Additional	N/A	N/A
HVAC			HVAC is		
Service			required for		
Type: H			operation		
Size:5			of new air-		
(Other)			cooled		
			solid-state transmitter		
			while still		
			operating		
			with main		
			air-cooled		
			transmitter		
			during		
			testing		
			period.		
Other	\$25,000.00	\$25,000.00	Additional	N/A	N/A
Electrical			electrical		
Service:			services		
Additional			required for		
electrical			transmitter		
services			installation.		
required					
for					
for transmitter installation.					

3" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$4,900.00	N/A	N/A	N/A
High VHF - Air Cooled Solid State Transmitter 6.5 . 12.5 kW	\$331,500.00	\$351,481.40	Per Gates Air quote. Includes TAX	\$254,971.68	N/A
Sub-total	\$773,400.00	\$812,762.80	N/A	\$533,456.02	N/A
Total for all systems	\$2,573,262.00	\$2,549,322.80	N/A	\$1,203,301.56	N/A

## Components

Actual Information Description	File Name	
High VHF - Air Cooled Solid State Transmitter 6.5 . 12.5 kW	Component Description: Amount:	Gates US0331558 v191126jgv1 \$134,112.94
	Component Description:  Amount:	Gates inv #JW30004556-1 Primary Transmitter 50 pct pmt 1 UL20181207jgv1 \$144,371.40
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
Other Electrical Service: Additional electrical services required for transmitter installation.	Information not provided.	
Other HVAC Service Type: H Size:5 (Other)	Information not provided.	

Other HVAC Service	Information not provided.	
Type: H Size:5 (Other)		
Other Electrical Service:	Information not provided.	
Additional electrical		
services required for transmitter installation.		
transmitter installation.		
3" Rigid Conduit and	Information not provided.	
Wiring (Cost per foot)		
High VHF - Air Cooled		
Solid State Transmitter 6.5	Component Description:	Gates US0331557
. 12.5 kW	Component Description.	v191126jgv1
	Amount:	\$110,600.28
	Component Description:	Gates inv
		#JW30004555-1
		Aux Transmitter 5
		pct pmt 1
		UL20181207jgv1
	Amount:	\$144,371.40

# **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
Primary Antenna THV-12A11 /VP-R O4 (SP)	\$446,908.00	\$445,978.00		\$369,157.40	
Misc Antenna Items	\$22,078.00	\$22,078.00	Misc Antenna Items: Items 3 and 5-8 on attached Dielectric Quote 800056CMZ- 3	\$19,870.20	N/A
New Top Plate	\$25,000.00	\$25,000.00	Existing top- plate and/or bolt pattern may not work for new top- mount antenna	\$20,871.00	N/A
Shipping	\$6,800.00	\$6,800.00	N/A	N/A	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$11,700.00	N/A	\$9,268.20	N/A

High VHF - High Power Top Mount One Station elliptically or circularly polarized	\$374,000.00	\$374,000.00	Per Widelity Estimate	\$313,388.00	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$5,760.00	N/A
Auxiliary Antenna TLS-V8BB- R	\$129,636.00	\$116,469.00		\$49,981.05	
Reducer	\$1,330.00	\$1,330.00	See attached PDF titled "Die MAN01456 v191007jgv1. pdf"	\$598.50	N/A
Flex Line	\$6,700.00	\$6,700.00	See attached PDF titled "Die MAN01456 v191007jgv1. pdf"	\$3,015.00	N/A
Trans Test 6-75	\$2,118.00	\$2,118.00	See attached PDF titled "Die MAN01456 v191007jgv1. pdf"	\$953.10	N/A
XFMR	\$1,858.00	\$1,858.00	See attached PDF titled "Die MAN01456 v191007jgv1. pdf"	\$836.10	N/A

Shipping	\$5,400.00	\$5,400.00	N/A	N/A	N/A
High VHF - High Power Side Mount One Station horizontally polarized	\$82,350.00	\$82,350.00	See attached PDF titled "Die MAN01456 v191007jgv1. pdf"	\$37,057.50	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	See attached PDF titled "Die MAN01456 v191007jgv1. pdf"	\$2,880.00	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$10,313.00	See attached PDF titled "Die MAN01456 v191007jgv1. pdf"	\$4,640.85	N/A
Sub-total	\$576,544.00	\$562,447.00	N/A	\$419,138.45	N/A
Total for all systems	\$2,573,262.00	\$2,549,322.80	N/A	\$1,203,301.56	N/A

### Components

Actual Information Description	File Name	
Misc Antenna Items		
	<b>Component Description:</b>	Die MAN00916
		Reducer 45 pct
		pmt 1 v190531jgv1
	Amount:	\$598.50

Component Description: Die MAN00916 TL

Flg 45 pct pmt 1 v190531jgv1

**Amount:** \$773.55

Component Description: Die MAN00916

Xfrmr 45 pct pmt 1

v190531jgv1

**Amount:** \$836.10

Component Description: Die MAN00916

**Test Transition 45** 

pct pmt 1 v190531jgv1

**Amount:** \$953.10

**Component Description:** Die MAN00916

Feed-thru 45 pct pmt 1 v190531jgv1

**Amount:** \$6,773.85

Component Description: Die MAN01198

v190809pmv1

**Amount:** \$773.55

Component Description: Die MAN01198

v190809pmv1

**Amount:** \$6,773.85

Component Description: Die MAN01198

v190809pmv1

**Amount:** \$953.10

Component Description: Die MAN01198

v190809pmv1

**Amount:** \$598.50

	Component Description: Amount:	Die MAN01198 v190809pmv1 \$836.10
New Top Plate		
	Component Description:	Die MAN00916 Top Plate 45 pct pmt 1 v190531jgv1
	Amount:	\$10,435.50
	Component Description:	Die MAN01198 v190809pmv1
	Amount:	\$10,435.50
Shipping	Information not provided.	
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Component Description:	Die MAN00916 Elbow complex 45 pct pmt 1
	Amount:	v190531jgv1 \$4,634.10
	Component Description:	Die MAN01198 v190809pmv1
	Amount:	\$4,634.10

High VHF - High Power Top		
Mount One Station	Component Description:	Die MAN00916
elliptically or circularly		Antenna 45 pct
polarized		pmt 1 v190531jgv1
	Amount:	\$141,024.60
	Component Description:	Die MAN01198
		v190809pmv1
	Amount:	\$141,024.60
	Component Description:	Die 533002
		v190809pmv1
	Amount:	\$31,338.80
Sweep test of existing antenna		D: MANIGOGAG
	Component Description:	Die MAN00916
		Sweep 45 pct pmt
	Amount:	1 v190531jgv1 \$2,880.00
	Amount.	φ2,000.00
	Component Description:	Die MAN01198
	Component Description.	v190809pmv1
	Amount:	\$2,880.00
Reducer	O	D: MANIOLATO
	Component Description:	Die MAN01456 Aux ant reducer 45
		pct pmt 1
		v191007iav1
	Amount:	v191007jgv1 \$598.50
	Amount:	v191007jgv1 \$598.50
Flex Line	Amount:	· -
Flex Line	Amount:  Component Description:	· -
Flex Line		\$598.50
Flex Line		\$598.50 Die MAN01456
Flex Line		\$598.50  Die MAN01456 Aux ant flex line 45

Trans Test 6-75		
	Component Description:	Die MAN01456
		Aux ant trans test
		45 pct pmt 1
	Amount:	v191007jgv1 \$953.10
	Amount:	<b>\$953.10</b>
XFMR		
	<b>Component Description:</b>	Die MAN01456
		Aux ant XFMR 45
		pct pmt 1
		v191007jgv1
	Amount:	\$836.10
Shipping	Information not provided.	
High VHF - High Power		
Side Mount One Station	<b>Component Description:</b>	Die MAN01456
horizontally polarized		Aux ant 45 pct pmt
		1 v191007jgv1
	Amount:	\$37,057.50
Sweep test of existing		
antenna	Component Description:	Die MAN01456
		Aux ant sweep 45
		pct pmt 1
		v191007jgv1
	Amount:	\$2,880.00
Side mount brackets for		
high power antennas (if not	Component Description:	Die MAN01456
included in antenna base	,	Aux ant side mt
cost)		bkts 45 pct pmt 1
		v191007jgv1
	Amount:	\$4,640.85

#### **Transmission Line**

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

Description Primary Transmission Line	Predetermined Cost Estimate \$6,400.00	Estimated Cost \$6,400.00	Estimated Cost Justification	Actual Cost \$1,990.98	Actual Cost Justification
TX Line Sweep	\$6,400.00	\$6,400.00	Sweep required to verify post-transition channel measures well on existing line.	\$1,990.98	N/A
Auxiliary Transmission Line	\$6,400.00	\$6,400.00		\$1,990.98	
TX Line Sweep	\$6,400.00	\$6,400.00	Sweep required to verify post-transition channel measures well on existing line.	\$1,990.98	N/A
Sub-total	\$12,800.00	\$12,800.00	N/A	\$3,981.96	N/A
Total for all systems	\$2,573,262.00	\$2,549,322.80	N/A	\$1,203,301.56	N/A

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

TX Line Sweep		
	Component Description:	Modern inv #2098
		Line sweep Main
		UL20181221jgv1
	Amount:	\$1,990.98
TX Line Sweep		
	Component Description:	Modern inv #2098
		Line sweep Aux
		UL20181221jgv1
	Amount:	\$1,990.98

### **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	\$657,800.00	\$625,000.00		\$216,815.00	
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	N/A	N/A
Tall Tower (greater than 500')	\$210,500.00	\$200,000.00	N/A	N/A	N/A
Major tower reinforcement /modifications	\$421,000.00	\$400,000.00	N/A	\$216,815.00	N/A
Sub-total	\$657,800.00	\$625,000.00	N/A	\$216,815.00	N/A
Total for all systems	\$2,573,262.00	\$2,549,322.80	N/A	\$1,203,301.56	N/A

Actual Information Description	File Name
Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	Information not provided.

Tall Tower (greater than 500')	Information not provided.	
Major tower reinforcement /modifications	Component Description:	TCI 8751-A
		v191015pmv1
	Amount:	\$216,815.00

### **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 Co
Outside Professional Services	\$385,610.00	\$371,250.00		\$26,640.13	
Other Engineering Services	\$37,500.00	\$37,500.00	Fewer Project Management "PM" tasks are required & Other Engineering Services "OES" are required, therefore the PM total has been reduced to 750 hrs (\$112,500.00 at \$150/hr), & a new OES category has been created & funded with the money removed from PM.	\$700.00	N/A
Pre filing site review	\$19,500.00	\$19,500.00	N/A	N/A	N/A
Other Legal Services	\$10,000.00	\$10,000.00	Other Legal Services related to the DTV Repack	\$424.09	N/A

Additional Field Engineering Service, 20 Days	\$50,000.00	\$50,000.00	\$2,500 per site visit including expenses x 20 days. It is necessary to survey the site, plan the equipment, develop specifications for purchasing, & oversee multiple vendor RF projects. Station does not have available personnel trained in such services.	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	Per Widelity estimate	N/A	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	N/A	N//
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	N/A	N/ <i>i</i>

Attorney Fees - Negotiation of lease and other matters for shared locations	\$4,210.00	\$4,000.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
Prepare request for Special Temporary Authorization	\$4,100.00	\$3,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	N/A	N/A

Perform	\$7,360.00	\$7,000.00	N/A	N/A	N/A
engineering study for new channel assignment and antenna					
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Prepare and or review reimbursement form	\$2,630.00	\$14,200.00	Fewer PM tasks are needed & 399 work is needed, so the PM total has been reduced to \$150x672hrs (\$100800), & "Prepare & or review reimbursement form" has been increased with part of the \$ removed from PM	\$4,920.00	N/A
Project management of the transition	\$118,500.00	\$100,800.00	N/A	\$20,596.04	N/A
RF Exposure Measurements	\$21,050.00	\$20,000.00	N/A	N/A	N/A
Sub-total	\$385,610.00	\$371,250.00	N/A	\$26,640.13	N/A
Total for all systems	\$2,573,262.00	\$2,549,322.80	N/A	\$1,203,301.56	N/A

Actual Information Description	File Name	
Other Engineering Services		
	Component Description:	Osborn inv #29769
		Engineering Srvcs
		UL20181126jg v1
	Amount:	\$700.00
Pre filing site review	Information not provided.	
- To ming site review	information not provided.	

Other Legal Services		
	Component Description:	Covington
		60801032
		v190715jgv2
	Amount:	\$70.43
	<b>Component Description:</b>	Covington
		60805585
	Amazumt	v190513pmv1
	Amount:	\$34.53
	Component Description:	Covington
		60801029 v190712jgv2
	Amount:	\$144.71
		• • • • • • • • • • • • • • • • • • • •
	Component Description:	Covington
		60801029
		v190513pmv1
	Amount:	\$164.44
	Component Description:	Covington inv
	Component Description:	#60796723 Various
	Component Description:	#60796723 Various Legal
	Component Description:  Amount:	#60796723 Various Legal UL20181024jgv1
		#60796723 Various Legal
		#60796723 Various Legal UL20181024jgv1
	Amount:	#60796723 Various Legal UL20181024jgv1 \$174.42
	Amount:	#60796723 Various Legal UL20181024jgv1 \$174.42 Covington 60801032 v190530jgv2
	Amount:	#60796723 Various Legal UL20181024jgv1 \$174.42 Covington 60801032
Additional Field	Amount:  Component Description:	#60796723 Various Legal UL20181024jgv1 \$174.42 Covington 60801032 v190530jgv2
Additional Field Engineering Service, 20 Days	Amount:  Component Description:  Amount:	#60796723 Various Legal UL20181024jgv1 \$174.42 Covington 60801032 v190530jgv2
Engineering Service, 20	Amount:  Component Description:  Amount:	#60796723 Various Legal UL20181024jgv1 \$174.42 Covington 60801032 v190530jgv2

FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	Information not provided.
ASR modification (prepare FCC Form 854)	Information not provided.
Attorney Fees - Prepare and File request for Special Temporary Authorization	Information not provided.
Attorney Fees - Negotiation of lease and other matters for shared locations	Information not provided.
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Information not provided.
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.
Prepare request for Special Temporary Authorization	Information not provided.
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover 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	Information not provided.

Prepare and or review reimbursement form Osborn 33666 **Component Description:** v190618pmv1 Amount: \$612.50 Osborn 34581 **Component Description:** v190810jgv1 Amount: \$1,107.50 **Component Description:** Osborn inv #28994 Amend 399 Form UL20190326jgv1 Amount: \$3,200.00 Project management of the transition **Component Description:** Osborn 32828 v190613pmv1 Amount: \$525.00 **Component Description:** Osborn 32968 v190617pmv1 Amount: \$525.00 **Component Description:** Osborn 33666 v190618pmv1 \$825.00 Amount: **Component Description:** Osborn 34581 v190810jgv1 Amount: \$525.00

Component Description: Osborn inv #26016

Prof srvcs 170530 -

170728

UL20181107jg v1

**Amount:** \$14,408.54

Component Description: Osborn inv #29769

Form 387 2018 Q2

UL20181126jg v1

**Amount:** \$337.50

Component Description: Osborn inv #28584

Proj mgt thru 180330

UL20190326jgv1

**Amount:** \$450.00

Component Description: Inv 29210 WVEC

Proj Mgt 180428-

180525

UL20180706jg v1

**Amount:** \$1,275.00

Component Description: Osborn inv #28994

Proj mgt 180331-

180427

UL20190326jgv1

**Amount:** \$150.00

Component Description: Osborn inv #29769

Prof srvcs 180526 -

170629

UL20181126jg v1

**Amount:** \$1,575.00

RF Exposure Measurements 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	\$167,108.00	\$165,063.00		\$3,270.00	
Develop and air announcement of upcoming channel change	\$6,000.00	\$6,000.00	40 hours at \$150 per hour to shoot,write, produce and edit local informational spot.	\$3,270.00	N/A
Equipment Storage	\$15,000.00	\$15,000.00	2 flat bed trailer storage for 6 months per Dielectric.	N/A	N/A
Equipment Delivery and Handling Charges	\$25,000.00	\$25,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$25,000.00	\$25,000.00	N/A	N/A	N/A
Local Zoning	\$750.00	\$750.00	3 cents per hundred on construction for permit.	N/A	N/A
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A

FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
AM Pattern Disturbance Impact study	\$7,890.00	\$7,500.00	N/A	N/A	N/A
AM Pattern Disturbance Remedy	\$21,050.00	\$20,000.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 minor change CP application	\$1,110.00	\$1,070.00	N/A	N/A	N/A
Non-zoning permits	\$25,000.00	\$25,000.00	N/A	N/A	N/A
Internal labor	\$22,228.00	\$22,228.00	N/A	N/A	N/A
MVPD Notification of Channel Change	\$6,000.00	\$6,000.00	promotional campaign for MVPD notification	N/A	N/A
Sub-total	\$167,108.00	\$165,063.00	N/A	\$3,270.00	N/A
Total for all systems	\$2,573,262.00	\$2,549,322.80	N/A	\$1,203,301.56	N/A

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

Develop and air announcement of upcoming channel change	Component Description:  Amount:	2C Media inv #203806 Creation of channel change announcement UL20181016jgv1 \$3,270.00
Equipment Storage	Information not provided.	
Equipment Delivery and Handling Charges	Information not provided.	
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.	
Local Zoning	Information not provided.	
FCC Filing Fees - Special Temporary Authorization request	Information not provided.	
FCC Filing Fees - Form 2100 license to cover application	Information not provided.	
AM Pattern Disturbance Impact study	Information not provided.	
AM Pattern Disturbance Remedy	Information not provided.	
DTV Medical Facility Notification	Information not provided.	
FCC Filing Fees - Form 2100 minor change CP application	Information not provided.	
Non-zoning permits	Information not provided.	
Internal labor	Information not provided.	
MVPD Notification of Channel Change	Information not provided.	

### **Grand Total**

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$2,573,262.00	\$2,549,322.80	\$1,203,301.56

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

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. Jeffrey C Gehman Engineering Associate

11/26/2019

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. Jeffrey C Gehman Engineering Associate

11/26/2019

#### **Attachments**