

Applicant

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID: File Number:	72076 000002		Call Sign:	WFTV	Channel: 35 (UHF)
FRN: 001	4359285	Date Submitted:	01/22 /2020		

Applicant Name, Type, and Contact Information

Information Applicant Address Phone Email **Applicant Type** WFTV, LLC **Chief Engineer** Limited Liability +1 (407) jeff. Doing Business As: 490 EAST SOUTH 841-9000 juniet@wftv. Company WFTV, LLC STREET com ORLANDO, FL 32801 United States

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Preparer Contact Name and Information

Contact Information	Applicant	Address	Phone	Email
	Jeff Juniet Chief Engineer WFTV, LLC	Chief Engineer 490 E. South Street Orlando, FL 32801 United States	+1 (407) 822-8410	Jeff.Juniet@wftv.com

Broadcaster	Question	Response
Information and Transition		
Plan		

Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	Yes
Briefly describe transition plan	To maintain operations, we will need to replace the 2 backup TXs and re-tune the main TX. The channel combiner needs to add channel 35. The aux tower will need to be brought up to G standard and the aux antenna changed for a broadband antenna.

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

Existing Transmitter Information

Primary Transmitter

r	Section	Question	Response
	Existing Transmitter Description	Type of change	Retune Existing
		Use	Primary (Main)
		Ownership	Owned
		Owner	N/A
		Is this transmitter currently shared with another station?	No
		Is this transmitter currently in operating condition?	Yes
	Existing Transmitter	Manufacturer	Harris
	Manufacturer and Type	Model	Power CD
		Year	2010

Туре	Inductive Output Tube
IOT Power Type	Three
Power capacity	90 kW

Retuning Transmitter Costs Primary Transmitter

Section	Question	Response
New IOT Tubes	Number of Tubes (including accessories) needed	3
New Mask Filter	Power	60 kW
	Other Power	N/A
New Exciter	Is a new exciter needed?	No

Other Transmitter Costs Primarv

Primary			
Transmitter	Section	Question	Response
	Electrical Service	Service Entrance (3 phases 800A 208V)	No
		Switchgear (industrial 800 amp)	No
		Transformer (480V)	No
		Power	N/A
		Rigid Conduit and Wiring	No
		Size	N/A
		Length	N/A
		Other Electrical Service	No
		Description	N/A
	HVAC Service	Does the replacement transmitter require HVAC Service?	No
		Туре	N/A
		Size	N/A

	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Other Transmitter Cost Not Listed PrimaryOther Transmitter CoTransmitterInformation not provided.

uxiliary ransmitter	Section	Question	Response
	Existing Transmitter Description	Type of change	Purchase New
		Use	Auxiliary (Backup)
		Description of Use	Backup
		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	Sigma
		Year	1999
		Туре	Inductive Output Tube
		IOT Power Type	Three
		Power Capacity	100 kW

Auxiliary	New Transmitter Costs			
Transmitter	Section	Question	Response	
	New Transmitter	Use	Auxiliary (Backup)	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	Yes	
		Manufacturer		
		Model	ULXTE-50	
		Transmitter Type	Solid State	
		Solid State Cooling	Liquid Cooled	
		Solid State Power capacity	25.4 kW	
		Justification for New Transmitter	The auxiliary transmitter will be needed at a second site to maintain on- air operations while modifications are performed at the main site.	

Other Transmitter Costs

Auxiliary
Transmitter

smitter	Section	Question	Response
	Electrical Service	Service Entrance (3 phases 800A 208V)	No
		Switchgear (industrial 800 amp)	Yes
		Transformer (480V)	Yes
	Power	300 kVA	
	Rigid Conduit and Wiring	Yes	
		Size	1 inches

	Length	300.0 feet
	Other Electrical Service	No
	Description	N/A
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Cooling Only
	Size	25 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

Other Transmitter Cost Not Listed

AuxiliaryOther Transmitter CoTransmitterInformation not provided.

Auxiliary	Add Transmitter Information		
Transmitter	Section	Question	Response
	Existing Transmitter Description	Type of change	Purchase New
		Use	Auxiliary (Backup)
		Description of Use	Auxiliary
		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	Diamond CD
		Year	2010
		Туре	Solid State
		Solid State Cooling	Air Cooled
		Solid State Power Capacity	7.5 kW

Auxiliary	New Transmitter Costs			
Transmitter	Section	Question	Response	
	New Transmitter	Use	Auxiliary (Backup)	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	No	
		Manufacturer		
		Model	ULXTE-12	
		Transmitter Type	Solid State	
		Solid State Cooling	Liquid Cooled	
		Solid State Power capacity	8.5 kW	
		Justification for New Transmitter	Replacement for the existing backup transmitter. The current TX is an unsupported model that cannot be retuned per the manufacturer.	

r Costs

Auxiliary	Other Transmitter Costs			
Transmitter	Section	Question	Response	
	Electrical Service	Service Entrance (3 phases 800A 208V)	No	
		Switchgear (industrial 800 amp)	Yes	
		Transformer (480V)	Yes	
		Power	300 kVA	
		Rigid Conduit and Wiring	Yes	

	Size	1 inches
	Length	300.0 feet
	Other Electrical Service	No
	Description	N/A
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Cooling Only
	Size	25 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

Other Transmitter Cost Not Listed

AuxiliaryOther Transmitter CoTransmitterInformation not provided.

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

Primary Antenna

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Retune Existing
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	Yes
	Is the existing antenna directional?	Yes
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna	Class	Full Power
Manufacturer and Type	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Туре	Broadband Panel
	Number of Stations Supported	2
	Number of Panels	56
	Design power capacity in use	100.0 %
	Lower Limit	470.00 MHz

Upper Limit	698.00 MHz
Other Antenna Type	N/A
ERP: (Effective Radiated Power)	1000.0 kW
Manufacturer	DIELECTRIC
Model	TUM20- O4SP-14 /56H-2-R-T
Year	2010

Facility ID's and Call Signs of all stations with whom the antenna is shared.

Facility ID	Call Sign
55454	WRDQ

Primary Adjustment to Existing Antenna

Antenna

Section	Question	Response
Sweep Test of Existing Antenna	Do you need a sweep test of existing antenna?	Yes

Primary Other Antenna Costs

Antenna

Section	Question Response	
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Туре	Additional Module
	Number of channels supported	3
	Frequencies of channels supported	RF channel
	Frequency	N/A

Enter a list of RF channel numbers.

RF Channel Number
39
27
35

Primary Antenna

Namo	Description
Other Antenna Cost Not Listed	

Name	Description
Re-tuneing elbow complex	The existing main antenna needs the elbow complex tuned/optimized for the new channel.

Existing Antenna Information

Auxiliary	Existing Antenna Information		
Antenna	Section	Question	Response
	Existing Antenna Description	Type of change	Purchase New
		Antenna Use	Auxiliary (Backup)
		Description of Use	Auxiliary
		Ownership	Owned
		Owner	N/A
		Site	N/A
		Is the existing antenna shared with another station or stations?	No
		Is the existing antenna directional?	Yes
		Is antenna in operating condition?	Yes
		Is antenna located on or in close proximity to an antenna farm?	No
	Existing Antenna	Class	Class A
	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)	295.0 kW

Manufacturer	
Model	TFU-24DSB-E
 Year	2011

Auxiliary	New Antenna Costs		
Antenna	Section	Question	Response
	New Antenna Description	Use	Auxiliary (Backup)
		Description of Use	Auxiliary (Backup)
		Change Type	Purchase New
		Is this a request for upgraded equipment?	No
		Ownership	Owned
		Owner	N/A
		Is antenna shared?	No
		Is antenna directional?	Yes
		Will antenna be located on or in close proximity to an antenna farm?	No
	New Antenna Manufacturer and Types	Class	Full Power
		Mounting	Top Mount
		Antenna position in stack	Not in Stack
		Polarization	Horizontal
		Туре	Broadband Panel
		Number of Stations Supported	1
		Number of Panels/Bays	8
		Lower Limit	470.00 MHz
		Upper Limit	860.00 MHz
		Design power capacity in use	100.0 %
		Other Antenna Type	N/A
		ERP: (Effective Radiated Power)	1000.0 kW
		Manufacturer	
		Model	TUA-C1-8/8H-

	1-T
Year	2017
Justification for New Antenna	The existing antenna is a single channel and must be replaced to accommodate newly assigned channel. Dielectric was able to provide a less expensive & more efficient antenna.

Auxiliary Antenna Section

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?	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?	No
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or	No

	medium power antenna?	
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Auxiliary Other Antenna Cost Not Listed

Antenna Information not provided.

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

Auxiliary	Existing Transmission Line			
Transmission	n Line Section	Question	Response	
	Existing Transmission Line Description	Type of change	Purchase New	
		Use	Auxiliary (Backup)	
		Description of Use	Auxiliary	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is the existing transmission line shared with another station or stations?	No	
		Is Transmission Line in operating condition?	Yes	
	Existing Transmission	Manufacturer		
	Line Manufacturer and Type	Туре	Rigid	
		Diameter	4 1/16 inches	
		Other Diameter	N/A	
		Segment Length	20 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	1350 feet per run	

Existing Transmission Line

Auxiliary Transmissior	New Transmission Line			
	Section	Question	Response	
	New Transmission Line Costs	Use	Auxiliary (Backup)	
		Description of Use	Auxiliary	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	No	
		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	500 feet per run	
		Justification for New Transmission Line	See attached exhibit titled "Sept. Amendment- Revised Repack Process for WFTV Orlando".	

Other Transmission Line Expenses Not Listed Auxiliary

TransmissionInfine ation not provided.

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

Auxiliary Tower	Existing Tower			
	Section	Question	Response	
	Existing Tower Description	Type of change	Modify Existing	
		Tower Use	Auxiliary (Backup)	
		Description of Use	Auxiliary	
		Ownership	Leased	
		Is this tower consider Complex?	No	
		Is this tower currently shared with any other stations?	No	
		One or more FM, AM or TV radio broadcaster (s)	N/A	
		Others Types of Users	N/A	
		Is tower documented for structural analysis?	Yes	
		Is tower compliant with Rev G?	No	
	Existing Tower Structure	Do you have a tower registration number?	Yes	
	Registration	ASR Number	1214939	
	Coordinates (<u>NAD83</u> (North American Datum of 1983))	Latitude (NAD83)	28° 34' 08.2" N-	
		Longitude (NAD83)	081° 03' 15.6" W-	
		Overall Structure Height	1612.84 feet	
		Support Structure Height	1609.89 feet	
		Ground Elevation Above Mean Sea Level (AMSL)	61.68 feet	
		Structure Type	TOWER -	

	Free Standing or Guyed Structure
Tower Owner	IWG Towers Assets II, LLC
Date Constructed	11/20/2000

Tower Modification Costs Auxiliary

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for documented tower
Tower Reinforcements	Please select whether tower reinforcements are needed:	Major Reinforcements needed

Tower Rigging Costs Auxiliary

Tower

Tower

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

Other Tower Expenses Not Listed Auxiliary Tower Name Description St Cloud tower Modifications are needed to bring the tower up to the G standard. See attached plan for additional details.

Primary	Add Tower			
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?	No	
		Is this tower currently shared with any other stations?	Yes	
		One or more FM, AM or TV radio broadcaster (s)	Yes	
		Others Types of Users	Yes	
		Is tower documented for structural analysis?	Yes	
		Is tower compliant with Rev G?	Yes	
	Existing Tower Structure Registration	Do you have a tower registration number?	Yes	
		ASR Number	1214939	
	Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	28° 34' 08.2" N-	
		Longitude (NAD83)	081° 03' 15.6" W-	
		Overall Structure Height	1612.84 feet	
		Support Structure Height	1609.89 feet	
		Ground Elevation Above Mean Sea Level (AMSL)	61.68 feet	
		Structure Type	TOWER - Free Standing or Guyed Structure	
		Tower Owner	IWG Towers Assets II, LLC	

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
48716	WWKA	FM
23443	WDBO-FM	FM
55454	WRDQ	DTV

Other Types of Users

Users

Wireless I'net

Two-Way Radio

Primary Tower Modification Costs

Tower

Tower

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

Primary Tower Rigging Costs

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

Primary
TowerOther Tower Expenses Not ListedInformation not provided.

Outside	Section	Question	Response
Professional Services Costs	Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	100
		Explanation	Coordination of building and construction permits.
	Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	Yes
		Prepare engineering section of Form FCC Construction Permit Application	Yes
		For Auxiliary Facility	Yes
		For Main Facility	Yes
		Prepare engineering section of Form FCC License to Cover Application	Yes
		For Auxiliary Facility	Yes
		For Main Facility	Yes
		Prepare request for Special Temporary Authority	Yes
		Quantity	1
		Do you have Distributed Transmission System engineering services?	N/A
		Critical Facility	N/A
		Terrain-Shielded Facility	N/A
	Attorney and Other Outside Consulting	Prepare and file Form FCC Construction Permit Application	Yes
	Services	For Auxiliary Facility	Yes
		For Main Facility	Yes
		Prepare and file Form FCC License to Cover Application	Yes
		For Auxiliary Facility	Yes

	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	No
	FAA Consultation (including preparation of FAA Form 7460)	No
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	No
RF Field Engineering Services	Comprehensive coverage verification via field study	Yes
	RF exposure measurements	Yes
	Additional Field Engineering Service	Yes
	Number of Days	35
	Justification	RF Consulting Engineer - To determine correct mask filter to avoid interference RF Consulting Engineer - 10- 30 days to test for interference after mask filter is installed

Outside Professional Information not provided. Services Costs

Other	Section	Question	Response
Expenses	AM Pattern Disturbance	Is an Impact Study needed?	No
		Is Remediation needed?	No
	Facility Expenses	Name	N/A
		Other Distributed Transmission System Expenses Not listed	N/A
		Name	N/A
		Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
	Permit and Filing Costs	Local Zoning	Yes
		Non-zoning permits	No
		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

OtherOther Expenses Not ListedExpensesInformation not provided.

Transmitters

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual
Primary Transmitter Power CD	\$947,400.00	\$659,010.25		\$191,336.75	
3 IOT Tubes	\$382,500.00	\$0.00	Price of tubes is included in the price of retuning the main transmitter (Quote_GA- 00018301r1_WFTV PWR90D3 Channel Change 2016-11- 29).	N/A	
Three IOT system (90 kW)	\$475,500.00	\$574,010.25	Pricing is per manufacturer's quote.	\$191,336.75	
60 kW mask filter	\$89,400.00	\$85,000.00	N/A	N/A	
Auxiliary Transmitter ULXTE-50	\$1,118,890.00	\$1,166,042.36		\$1,035,484.05	
1" Rigid Conduit and Wiring	\$5,390.00	\$5,390.00	N/A	N/A	
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	\$947,000.00	\$929,864.36	Per Manufacturer's quote and includes RF system and switching	\$880,231.05	
25 Ton system	\$91,500.00	\$90,500.00	The original plan called for 25 tons of cooling with pricing based on units available years ago. Once	\$90,500.00	Per the "HV/ update ec

			the transmitter size we set the final determination was for 40 tons of cooling. The cost of the units has risen since the initial estimates were made.		inst requi
Transformer 3 phase /480v - 300 KVA	\$36,800.00	\$35,000.00	N/A	N/A	
Switchgear - industrial 800 amp	\$38,200.00	\$105,288.00	The transmitter for the Ft. Christmas site will require a new service entrance and the associated switchgear.	\$64,753.00	Initial electric at the / 8047 is work installa syste electric and equ to be tran
Auxiliary Transmitter ULXTE-12	\$661,000.00	\$463,424.18		\$460,900.18	
Switchgear - industrial 800 amp	\$38,200.00	\$51,440.30	The totals for the electrical work, including all parts and labor, exceed the predetermined costs. This total covers all required electrical for the removal of old equipment and wiring and installation of switch-gear, conduit, and wiring for the aux tx.	\$51,440.30	
25 Ton system	\$91,500.00	\$87,000.00	N/A	\$84,476.00	
1" Rigid Conduit and	\$0.00	\$0.00	N/A	N/A	

Wiring					
Transformer 3 phase /480v - 300 KVA	\$36,800.00	\$0.00	N/A	N/A	
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	\$494,500.00	\$324,983.88	N/A	\$324,983.88	Cost dif to char from th visit. De in updatec - Liqu State
Sub-total	\$2,727,290.00	\$2,288,476.79	N/A	\$1,687,720.98	
Total for all systems	\$4,313,165.00	\$3,694,444.79	N/A	\$2,020,101.23	

Components

Actual Information Description	File Name	
3 IOT Tubes	Information not provided.	
Three IOT system (90 kW)		
	Component Description: Amount:	Deposit payment for retuning the main transmitter to new channel including RF system and new IOTs. \$191,336.75
60 kW mask filter	Information not provided.	
1" Rigid Conduit and Wiring	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	Component Description: Amount:	Pre-shipping invoice per quote number: GA-00022140 \$309,954.79

	Component Description:	Final invoice for Aux transmitter. Requested reimbursement for invoice US0324071 is \$260,321.47 due to clerical error \$260,321.47
	Component Description: Amount:	invoice for the deposit on replacement aux transmitter. ULXTE- 50 \$309,954.79
	Component Description:	Final payment for hardware per quote Q-79017. Labor and travel expenses will be invoiced separately. \$282,681.78
25 Ton system		
	Component Description:	Initial invoice/deposit for HVAC system equipment and installation for Aux site.
	Amount:	\$21,500.00
	Component Description:	Final invoice for HVAC equipment and installation for aux site.
	Amount:	\$69,000.00
Transformer 3 phase/480v - 300 KVA	Information not provided.	
Switchgear - industrial 800 amp		

	Component Description:	Installation of electrical switch gear for HVAC system at aux site.
	Amount:	\$7,500.00
	Component Description:	Installation of switch gear and wiring for WFTV aux transmitter site.
	Amount:	\$44,323.00
	Component Description:	switchgear installation for aux transmitter.
	Amount:	\$12,930.00
Switchgear - industrial 800 amp		
anp	Component Description:	Electrical switch gear and labor.
	Amount:	\$8,405.00
	Component Description:	Final invoice for the electrical work and switch gear needed at the WFTV Main Site supporting the installation of the ULXTE 12 Aux transmitter and supporting systems.
	Amount:	\$29,083.30

	Component Description:	Electrical work and switch gear needed at the WFTV Main Site to support the installation of the ULXTE 12 Aux transmitter and supporting systems. \$13,952.00
25 Ton system	Component Description: Amount:	HVAC equipment and installation for ULXTE 12 aux transmitter. \$84,476.00
1" Rigid Conduit and Wiring	Information not provided.	
Transformer 3 phase/480v - 300 KVA	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	Component Description: Amount:	Auxiliary Transmitter System Design \$127.50
	Component Description: Amount:	final hardware payment for aux transmitter. \$124,021.11
	Component Description:	deposit invoice for replacement aux transmitter. ULXTE-
	Amount:	12 \$103,850.61
	Component Description:	progress payment - prior to shipping per quote.
	Amount:	\$96,984.66

Antennas

Cost Information

Description Primary Antenna TUM20- O4SP-14	Predetermined Cost Estimate \$96,930.00	Estimated Cost \$96,235.00	Estimated Cost Justification	Actual Cost \$10,234.38	Actual Cost Justification
/56H-2-R-T Sweep test of existing antenna	\$6,730.00	\$10,235.00	Pricing is from quotes and work performed by RF Engineer.	\$10,234.38	The initial sweep of the line and antenna verified the power handling and available channels of the line. the final sweep verified the system compatibility with the newly assigned channel.
Adding a module to existing combiner (without antenna)	\$84,200.00	\$80,000.00	N/A	N/A	N/A
Re-tuneing elbow complex	\$6,000.00	\$6,000.00	Elbow complex tuning will require an RF Engineer and Tower Crew.	N/A	N/A

Auxiliary Antenna TUA-C1-8 /8H-1-T	\$253,730.00	\$241,400.00		\$188,809.38	
UHF - High Power Top Mount (200- 1000 kW), One station antenna, horizontally polarized	\$247,000.00	\$235,000.00	N/A	\$184,928.10	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$3,881.28	N/A
Sub-total	\$350,660.00	\$337,635.00	N/A	\$199,043.76	N/A
Total for all systems	\$4,313,165.00	\$3,694,444.79	N/A	\$2,020,101.23	N/A

Actual Information Description	File Name	
Sweep test of existing antenna	Component Description: Amount:	Initial sweep of transmission lines and antenna. \$5,729.41
	Component Description: Amount:	Final sweep of transmission line and antenna to verify compatibility with newly assigned channel. \$4,504.97
Adding a module to existing combiner (without antenna)	Information not provided.	
Re-tuneing elbow complex	Information not provided.	
UHF - High Power Top Mount		

(200-1000 kW), One station antenna, horizontally polarized	Component Description:	payment for antenna and mounting pole including quote.
	Amount:	\$775.42
	Component Description:	Field engineer on- site for repack sweep of the Aux antenna.
	Amount:	\$6,400.00
	Component Description:	INTERIM/AUX TERMS: 45% PRIOR TO SHIPMENT
	Amount:	\$86,776.34
	Component Description:	Auxiliary Antenna Design
	Amount:	\$4,200.00
	Component Description:	Input elbow complex for panel antenna.
	Amount:	\$8,085.00
	Component Description:	Invoice for 45% of total w/order for Aux antenna. TUA-C1-8 /8H-1-T DIRECTIONAL ANTENNA FOR D35
	Amount:	\$86,776.34
	Component Description:	Aux antenna design services. Updated 10 /25/19
	Amount:	N/A
Sweep test of existing antenna		

Component Description:	Sweep of the line at the aux site to confirm power
	handling and channel compatibility.
Amount:	\$3,881.28

Transmission Line

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Auxiliary Transmission Line	\$71,000.00	\$53,993.00		\$48,593.70	
Rigid Transmission Line - copper, 4 1 /16"	\$71,000.00	\$53,993.00	N/A	\$48,593.70	N/A
Sub-total	\$71,000.00	\$53,993.00	N/A	\$48,593.70	N/A
Total for all systems	\$4,313,165.00	\$3,694,444.79	N/A	\$2,020,101.23	N/A

Actual Information Description File Na	ame
Rigid Transmission Line -	nonent Description: WFTV ORLANDO, FL AUX ST. CLOUD 41 /8" TRANSMISSION LINE FOR AUX ANTENNA. RE: QUOTE # 700411CMZ TERMS: 45% PAYMENT PRIOR TO SHIP. s24,296.85

Component Description:	WFTV ORLANDO, FL
	AUX ST. CLOUD 41
	/8" TRANSMISSION
	LINE FOR AUX
	ANTENNA. RE:
	QUOTE #
	700411CMZ TERMS:
	45% WITH ORDER.
Amount:	\$24,296.85

Tower Equipment and Rigging Costs

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justificatior
Primary Tower TOWER	\$223,100.00	\$12,000.00		\$11,900.00	
Structural engineering tower load study for well documented tower	\$12,600.00	\$12,000.00	N/A	\$11,900.00	N/A
Tall Tower (greater than 500')	\$210,500.00	\$0.00	N/A	N/A	N/A
Auxiliary Tower TOWER	\$644,100.00	\$708,080.00		\$15,460.00	
Major tower reinforcement /modifications	\$421,000.00	\$472,620.00	This work will bring the tower up to G standard.	\$0.00	The pricing is based on the quote from the structural engineering firm.
St Cloud tower	\$0.00	\$0.00	N/A	N/A	N/A
Tall Tower (greater than 500')	\$210,500.00	\$220,000.00	Estimate from tower engineering firm to rig and unrig the tower for the required upgrade work.	N/A	N/A
Structural	\$12,600.00	\$15,460.00	Pricing is	\$15,460.00	N/A

engineering tower load study for well documented tower	from structural engineering study by TCI.				
Sub-total	\$867,200.00	\$720,080.00	N/A	\$27,360.00	N/A
Total for all systems	\$4,313,165.00	\$3,694,444.79	N/A	\$2,020,101.23	N/A

Actual Information Description	File Name	
Structural engineering tower load study for well documented tower	Component Description: Amount:	structural analysis, inspection and inventory of main tower \$11,900.00
Tall Tower (greater than 500')	Information not provided.	
Major tower reinforcement /modifications	Information not provided.	
St Cloud tower	Information not provided.	
Tall Tower (greater than 500')	Information not provided.	
Structural engineering tower load study for well documented tower	Component Description:	structural analysis, inspection and inventory of aux tower
	Amount:	\$15,460.00

Outside Professional Services

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$222,025.00	\$219,875.00		\$39,336.90	
Additional Field Engineering Service, 35 Days	\$65,000.00	\$65,000.00	RF Consulting Engineer - To determine correct mask filter to avoid interference at 5-days & 10-30 days to test for interference after mask filter is installed	\$9,742.50	N/A
RF Exposure Measurements	\$21,050.00	\$20,000.00	N/A	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to	\$2,365.00	\$2,250.00	N/A	N/A	N/A

Cover Application					
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	\$4,210.00	\$4,000.00	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	\$4,315.80	N/A
Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	N/A	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	\$0.00	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100,	\$2,105.00	\$2,000.00	N/A	\$0.00	Invoiced ho from the consultant t engineerin documentat

Permit Application					
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$2,415.00	I
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$10,710.00	Add wor nee veri ant patte the handlin trans line for
Project management of the transition	\$15,800.00	\$15,000.00	N/A	N/A	
Prepare and or review reimbursement form	\$2,630.00	\$8,625.00	Quote from consulting engineer.	\$12,153.60	Leg Engin fees i prepa revie fili reimbu for
Sub-total	\$222,025.00	\$219,875.00	N/A	\$39,336.90	
Total for all systems	\$4,313,165.00	\$3,694,444.79	N/A	\$2,020,101.23	

Actual Information Description	File Name
Additional Field Engineering Service, 35 Days	

	Component Description:	Additional engineering services for CMG amount spl between 10 stations
	Amount:	\$7,042.50
	Component Description: Amount:	additional Engineering services \$2,700.00
RF Exposure Measurements	Information not provided.	
Comprehensive coverage verification via field study, if needed	Information not provided.	
Attorney Fees - Prepare and File request for Special Temporary Authorization	Information not provided.	
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	Information not provided.	
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description:	Legal fees for preparation ans filing of construction perm for main transmissio site.
	Amount:	\$4,315.80
Prepare request for Special Temporary Authorization	Information not provided.	
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	Information not provided.	

of FCC Form 2100 (main), License to Cover Application		
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	Preparation of construction permit. \$2,250.00
	Component Description: Amount:	Preparation of constriction permit for Cox Media Group. Costs split between ten stations. \$165.00
Perform engineering study for new channel assignment and antenna development	Component Description:	Main antenna system design and analysis for Cox Media Group. Amount split between ten stations
	Amount:	\$135.00
	Component Description:	\$150.00 of the invoice total belongs to another project and will be invoiced
	Amount:	separately. \$5,250.00
	Component Description: Amount:	Main antenna system design and analysis \$5,325.00
Project management of the transition	Information not provided.	
Prepare and or review		

Component Description:

Amount:

Component Description:

review Reimbursement submission for 2 Cox Media Group Locations. Amount is split between two stations \$150.00

Review

Reimbursement submission \$1,050.00

Legal fees incurred for preparation, review, and filing of reimbursement for 399. \$3,291.20

Amount:

Amount:

Component Description:

Component Description:

Legal fees incurred for preparation, review, and filing of reimbursement for 399. \$756.90

Amount:

Component Description:

Legal fees incurred for preparation, review, and filing of reimbursement for 399. \$2,318.80

Amount:

Component Description: Amount:	review Reimbursement submission for 10 Cox Media Group Locations. Amount is split between ten stations \$30.00
Component Description: Amount:	Legal fees incurred for preparation, review, and filing of reimbursement for 399. \$1,047.20
Component Description:	Legal fees incurred for preparation, review, and filing of reimbursement for 399. \$3,509.50

Other Expenses

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual C Justifica
Other Expenses	\$74,990.00	\$74,385.00		\$18,045.89	
Equipment Delivery and Handling Charges	\$42,300.00	\$42,300.00	delivery and storage costs per transmitter manufacturer's quotes.	\$15,218.89	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
FCC Filing Fees - Form 2100 minor change CP application	\$1,110.00	\$1,070.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
MVPD Notification of Channel Change	\$1,500.00	\$1,500.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	\$1,500.00	\$1,500.00	Costs for the production of on-air and website announcements.	N/A	N/A

Equipment Storage	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$10,000.00	\$10,000.00	Removal of old equipment and high voltage transformers from Ft Christmas and St Cloud sites. per initial attached quote "Channel 9 Tower Transformer removal updated-32318. pdf"	\$2,827.00	N/A
Local Zoning	\$1,500.00	\$1,500.00	N/A	N/A	N/A
Sub-total	\$74,990.00	\$74,385.00	N/A	\$18,045.89	N/A
Total for all systems	\$4,313,165.00	\$3,694,444.79	N/A	\$2,020,101.23	N/A

Actual Information Description	File Name	
Equipment Delivery and Handling Charges	Component Description: Amount:	freight and shipping on horizontal line sections for Aux antenna. \$1,017.14
	Component Description: Amount:	shipping charges on line parts for Aux antenna. \$3,172.49

	Component Description:	shipping on line segments for Au antenna. \$355.89
	Amount:	\$355.89
	Component Description:	FREIGHT, SHIPPING, AND HANDLING FOR PANEL ANTENN AND MOUNTING POLE. WFTV AL SITE.
	Amount:	\$10,673.37
FCC Filing Fees - Special Temporary Authorization request	Information not provided.	
FCC Filing Fees - Form 2100 license to cover application	Information not provided.	
FCC Filing Fees - Form 2100 minor change CP application	Information not provided.	
DTV Medical Facility Notification	Information not provided.	
MVPD Notification of Channel Change	Information not provided.	
Develop and air announcement of upcoming channel change	Information not provided.	
Equipment Storage	Information not provided.	
Disposal Costs (for equipment and other waste, net of any salvage value)	Component Description:	removal and disposal of high voltage transformers (3)
	Amount:	\$2,827.00
Local Zoning	Information not provided.	

Cost	Grand Total				
Information		Predetermined Cost Estimate	Estimated Cost	Actual Cost	
	Total for all systems	\$4,313,165.00	\$3,694,444.79	\$2,020,101.23	

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

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.	
		 The Authorized Person signing below certifies that he/she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above- named entity. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount. 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 	
			I

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.
- 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 Jeffrey an authorized representative of the above-Juniet. named applicant for the Authorization(s) Juniet. specified above. Director of Engineering

01/22/2020

Certification	Section	Question	Response
Certification	Submission of Actual Cost Documentation Statements	WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).	
		 The Authorized Person signing below certifies and represents that he/she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above- named entity. 	
		2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.	
		3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.	
		4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.	

- 5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster **Relocation Fund are** necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- 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.
- 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

Attachments