

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID: File	72076 000002	1	Call Sign:	WFTV	Channel: 35 (UHF)
Number:					
FRN: 001	4359285	Date	11/16		
		Submitted:	/2018		

Applicant Name, Type, and Contact Information

Applicant Information

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

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	Existing Transmitter Infor	mation	
Transmitter	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 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.

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	

Add Transmitter Information

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.

Other Transmitter Costs		
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
	Section	SectionQuestionElectrical ServiceService Entrance (3 phases 800A 208V)Switchgear (industrial 800 amp)Transformer (480V)Power

	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	Existing Transmitter Information			
Transmitter	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 and Type	Manufacturer		
		Model	Sigma	
		Year	1999	
		Туре	Inductive Output Tube	
		IOT Power Type	Three	
		Power Capacity	100 kW	

Existing Transmitter Information

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.

Auxiliary 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	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

Existing Antenna Information

Primary

Antenna	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 Manufacturer and Type	Class	Full Power
		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

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

Primary Other Antenna Costs

Antenna

Antenna

Section Question Response Do you need a Combiner for a Shared **Combiner for Shared** Yes Antenna Antenna? 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

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.

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 Stac	
		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	Class	Full Power
	Manufacturer and Types	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 Other Antenna Costs

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

	pattern scatter analysis for a side mount high or medium power antenna?	
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Auxiliary Other Antenna Cost Not Listed

Auxiliary Antenna

Information not provided.

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

Auxiliary	Existing Transmission Line			
Transmissio	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	

Auxiliary	New Transmission Line				
Transmissio	n 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".		

Auxiliary Other Transmission Line Expenses Not Listed Transmission

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

Auxiliary	Existing Tower

Auxiliary			
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 (NAD83 (North American Datum of	Latitude (NAD83)	28° 34' 08.2" N-
198	1983))	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 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:	Major Reinforcements needed

Auxiliary Tower Rigging Costs

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

Auxiliary Tower	Other Tower Expenses Not Listed		
	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
Date Constructed	11/20/2000

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

Two-Way Radio

Wireless I'net

Primary Tower Modification Costs

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

Primary Other Tower Expenses Not Listed

Tower Information 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

Outside Other Professional Services Expenses Not Listed

Professional Services Costsided.

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

Other Expenses Not Listed

Expenses Information not provided.

Transmitters

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual C Justifica
Primary Transmitter Power CD	\$947,400.00	\$659,010.25		\$191,336.75	
60 kW mask filter	\$89,400.00	\$85,000.00	N/A	N/A	N/A
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	N/A
Three IOT system (90 kW)	\$475,500.00	\$574,010.25	Pricing is per manufacturer's quote.	\$191,336.75	N/A
Auxiliary Transmitter ULXTE-12	\$666,390.00	\$478,955.93		\$103,978.11	
25 Ton system	\$91,500.00	\$87,000.00	N/A	\$0.00	N/A
1" Rigid Conduit and Wiring	\$5,390.00	\$5,390.00	N/A	N/A	N/A
Transformer 3 phase /480v - 300 KVA	\$36,800.00	\$35,000.00	N/A	N/A	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N/A
UHF - Liquid	\$494,500.00	\$315,265.93	N/A	\$103,978.11	N/A

Cooled Solid State Transmitter 8.2 - 13 kW

Auxiliary	\$1,118,890.00	\$1,166,042.36		\$717,909.58	
Transmitter ULXTE-50					
25 Ton	\$91,500.00	\$90,500.00	The original plan	\$90,500.00	Per th
system			called for 25 tons		attach
			of cooling with		quot
			pricing based on		"HVAC
			units available		5 ton
			years ago. Once		update
			the transmitter size		the co
			we set the final		for
			determination was		equipm
			for 40 tons of		an
			cooling. The cost of		installa
			the units has risen		of the
			since the initial		require
			estimates were		AC tota
			made.		90,500
1" Rigid Conduit and Wiring	\$5,390.00	\$5,390.00	N/A	N/A	N/A
Switchgear	\$38,200.00	\$105,288.00	The transmitter for	\$7,500.00	Initia
- industrial			the Ft. Christmas		invoice
800 amp			site will require a		the
			new service		electri
			entrance and the		work
			associated		needeo
			switchgear.		the Au
					Site
					Invoid
					8047 is
					the
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will neec be need for the

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	\$619,909.58	N/A
Transformer 3 phase /480v - 300 KVA	\$36,800.00	\$35,000.00	N/A	N/A	N/A
Sub-total	\$2,732,680.00	\$2,304,008.54	N/A	\$1,013,224.44	N/A
Total for all systems	\$5,086,555.00	\$3,709,976.54	N/A	\$1,329,409.17	N/A

Components

Actual Information Description	File Name	
60 kW mask filter	Information not provided.	
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
25 Ton system	Information not provided.	
1" Rigid Conduit and Wiring	Information not provided.	
Transformer 3 phase/480v - 300 KVA	Information not provided.	
Switchgear - industrial 800	Information not provided.	

amp		
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	Component Description:	deposit invoice for replacement aux transmitter.
	Amount:	ULXTE-12 \$103,850.61
	Component Description:	Auxiliary Transmitter System Design
	Amount:	\$127.50
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
	Amount:	aux site. \$69,000.00
1" Rigid Conduit and Wiring	Information not provided.	
Switchgear - industrial 800 amp		
	Component Description:	Installation of electrical switch gear for HVAC
	Amount:	system at aux site. \$7,500.00
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW		
	Component Description:	Pre-shipping invoice per quote number: GA- 00022140
	Amount:	\$309,954.79

	Component Description:	invoice for the
		deposit on
		replacement aux
		transmitter.
		ULXTE-50
	Amount:	\$309,954.79
Transformer 3 phase/480v - 300 KVA	Information not provided.	

Antennas

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Antenna TUM20- O4SP-14 /56H-2-R-T	\$864,930.00	\$96,235.00		\$10,234.38	
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
UHF - High Power Top Mount (200-1000 kW), Two Station broadband panel antenna, elliptically or circularly polarized	\$768,000.00	\$0.00	N/A	N/A	N/A
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. N/A Adding a \$84,200.00 \$80,000.00 N/A N/A module to existing combiner (without antenna) Auxiliary \$253,730.00 \$241,400.00 \$182,409.38 Antenna TUA-C1-8 /8H-1-T \$6,730.00 \$6,400.00 N/A N/A Sweep test \$3,881.28 of existing antenna UHF - High \$247,000.00 \$235,000.00 N/A \$178,528.10 N/A Power Top Mount (200-1000 kW), One station antenna, horizontally polarized N/A Sub-total \$1,118,660.00 \$337,635.00 N/A \$192,643.76 Total for \$5,086,555.00 N/A N/A \$3,709,976.54 \$1,329,409.17 all systems

Actual Information Description	File Name
Re-tuneing elbow complex	Information not provided.
UHF - High Power Top Mount (200-1000 kW), Two Station broadband panel antenna, elliptically or circularly polarized	Information not provided.

Sweep test of existing antenna		
antenna	Component Description:	Final sweep of transmission line and antenna to verify compatibility with newly assigned channel.
	Amount:	\$4,504.97
	Component Description:	Initial sweep of transmission lines and antenna.
	Amount:	\$5,729.41
Adding a module to existing combiner (without antenna)	Information not provided.	
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
UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	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:	payment for antenna and mounting pole including quote.
	Amount:	\$775.42

Component Description:	INTERIM/AUX
	TERMS: 45%
	PRIOR TO
	SHIPMENT
Amount:	\$86,776.34
Component Description:	Auxiliary Antenna
	Design
Amount:	\$4,200.00

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	\$5,086,555.00	\$3,709,976.54	N/A	\$1,329,409.17	N/A

Actual Information Description	File Name	
Rigid Transmission Line - copper, 4 1/16"	Component Description:	WFTV ORLANDO, FL AUX ST. CLOUD 41/8" TRANSMISSION LINE FOR AUX ANTENNA. RE: QUOTE # 700411CMZ TERMS: 45% WITH
	Amount:	ORDER. \$24,296.85

Component Descriptio	n: WFTV ORLAND
	FL AUX ST.
	CLOUD 41/8"
	TRANSMISSION
	LINE FOR AUX
	ANTENNA. RE:
	QUOTE #
	700411CMZ
	TERMS: 45%
	PAYMENT PRIC
	TO SHIP.
Amount:	\$24,296.85

Tower Equipment and Rigging Costs

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
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	
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
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.
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	\$5,086,555.00	\$3,709,976.54	N/A	\$1,329,409.17	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.	
St Cloud tower	Information not provided.	
Tall Tower (greater than 500')	Information not provided.	
Major tower reinforcement /modifications	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		\$34,086.90	
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 - Aux Antenna, prepare and File Form 2100 Construction	\$4,210.00	\$4,000.00	N/A	N/A	N/A

Permit or License Application					
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, Construction Permit Application	\$2,105.00	\$2,000.00	N/A	\$0.00	Invoiced hou from the consultant fo engineering documentatio
Prepare engineering section of FCC Form 2100	\$3,155.00	\$3,000.00	N/A	\$2,415.00	N/A

Total for all systems	\$5,086,555.00	\$3,709,976.54	N/A	\$1,329,409.17	
Sub-total	\$222,025.00	\$219,875.00	N/A	\$34,086.90	
Application					
Cover					
License to					
File FCC Form 2100 (main),					
Prepare and					
Attorney Fees -	\$2,365.00	\$2,250.00	N/A	N/A	
the transition					
management of	φτο,000.00	φ13,000.00	IN/A	IN/A	
Project	\$15,800.00	\$15,000.00	N/A	N/A	
					f
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					pre
form			č		
reimbursement			engineer.		fees
Prepare and or review	\$2,630.00	\$8,625.00	Quote from consulting	⊅1∠,153.0 0	Le Eng
Proparo and or	¢2 620 00	¢8 625 00	Quote from	\$12,153.60	
development					
and antenna					
assignment					
study for new channel					
engineering					
Perform	\$7,360.00	\$7,000.00	N/A	\$5,460.00	
	\$7 260 00	¢7 000 00	N1/A	¢5 460 00	
Permit Application					

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

	Component Description:	Additional engineering services for CMG amount split between 10 stations \$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 - 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 permit for main transmission site. \$4,315.80
Prepare request for Special Temporary Authorization	Information not provided.	
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering	Information not provided.	

section of FCC Form 2100, License to Cover Application		
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	
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:	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: Amount:	Main antenna system design and analysis \$5,325.00
	Component Description:	Main antenna system design and analysis for Cox Media Group. Amount split between ten stations \$135.00
Prepare and or review		φ133.00

Component Description: Amount:	Legal fees incurred for preparation, review, and filing of reimbursement for 399. \$756.90
Component Description: Amount:	Review Reimbursement submission \$1,050.00
Component Description: Amount:	Legal fees incurred for preparation, review, and filing of reimbursement for 399. \$1,047.20
Component Description: Amount:	Legal fees incurred for preparation, review, and filing of reimbursement for 399. \$2,318.80
Component Description: Amount:	Legal fees incurred for preparation, review, and filing of reimbursement for 399. \$3,291.20
Component Description: Amount:	review Reimbursement submission for 10 Cox Media Group Locations. Amount is split between ten stations \$30.00

	Component Description:	review Reimbursement submission for 2 Cox Media Group Locations. Amount is split between two stations
	Amount:	\$150.00
	Component Description: Amount:	Legal fees incurred for preparation, review, and filing of reimbursement for 399. \$3,509.50
Project management of the transition	Information not provided.	
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	

Other Expenses

Cost Information

	Predetermined	Estimated	Estimated Cost		Actual Co
Description	Cost Estimate	Cost	Justification	Actual Cost	Justificat
Other Expenses	\$74,990.00	\$74,385.00		\$13,500.37	
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 Delivery and Handling Charges	\$42,300.00	\$42,300.00	delivery and storage costs per transmitter manufacturer's quotes.	\$10,673.37	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
FCC Filing Fees - Special	\$195.00	\$190.00	N/A	N/A	N/A

Temporary Authorization request					
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
Equipment Storage	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Sub-total	\$74,990.00	\$74,385.00	N/A	\$13,500.37	N/A
Total for all systems	\$5,086,555.00	\$3,709,976.54	N/A	\$1,329,409.17	N/A

Actual Information Description	File Name	
MVPD Notification of Channel Change	Information not provided.	
Develop and air announcement of upcoming channel change	Information not provided.	
Equipment Delivery and Handling Charges	Component Description: Amount:	FREIGHT, SHIPPING, AND HANDLING FOR PANEL ANTENNA AND MOUNTING POLE. WFTV AUX SITE. \$10,673.37

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.	
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.	
Equipment Storage	Information not provided.	

Cost	Grand Total			
Information		Predetermined Cost Estimate	Estimated Cost	Actual Cost
	Total for all systems	\$5,086,555.00	\$3,709,976.54	\$1,329,409.17

Reimbursem	entestatus	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 912(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.	
		 The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 	
		2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.	
		3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.	
		 4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the 	

signal of a broadcaster that changes channels (MVPD).

- The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
- 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. Jeffrey M I declare, under penalty of perjury, that I am an authorized representative of the above-Juniet named applicant for the Authorization(s) Director of specified above. Engineering 11/16/2018

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	 WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733). 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. 2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct. 3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 4. The above-named entity acknowledges the submission of the information herein 	

creates no obligation on the part of the government to pay any amount.

- 5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster **Relocation Fund are** necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.
- 8. The above-named entity acknowledges that overpayments or payments in error

an au name	are, under penalty of perjury, that I am thorized representative of the above- ed applicant for the Authorization(s) fied above.	Jeffrey M Juniet , Juniet . Director of Engineering
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.	
	must be promptly refunded to the Commission.	

Attachments