



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **72076** | Service: **DTV** | Call **WFTV** | Channel: **35 (UHF)** |  
ID: | Sign:  
File **0000028020**  
Number:  
FRN: **0014359285** | Date **12/27**  
Submitted: **/2017**

## Applicant Information

### Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
<b>WFTV, LLC</b> 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 Information

### Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

## Preparer Contact Information

### Preparer Contact Name and Information

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

## Broadcaster Information and Transition Plan

Question	Response
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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

## Primary Transmitter

### Existing Transmitter Information

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 and Type	Manufacturer	Harris
	Model	Power CD
	Year	2010

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

**Primary Transmitter**

**Retuning Transmitter Costs**

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

**Primary Transmitter**

**Other Transmitter Costs**

Section	Question	Response
<b>Electrical Service</b>	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
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A

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

**Primary  
Transmitter**

**Other Transmitter Cost Not Listed**

Information not provided.

**Auxiliary  
Transmitter****Existing Transmitter Information**

Section	Question	Response
<b>Existing Transmitter Description</b>	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
<b>Existing Transmitter Manufacturer and Type</b>	Manufacturer	
	Model	Sigma
	Year	1999
	Type	Inductive Output Tube
	IOT Power Type	Three
	Power Capacity	100 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?	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
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	25 tons
	Other Size	N/A
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
<b>Channel 14 Costs</b>	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

**Auxiliary Transmitter**      **Other Transmitter Cost Not Listed**  
Information not provided.

**Auxiliary  
Transmitter****Add Transmitter Information**

Section	Question	Response
<b>Existing Transmitter Description</b>	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
<b>Existing Transmitter Manufacturer and Type</b>	Manufacturer	
	Model	Diamond CD
	Year	2010
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	7.5 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	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.

**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
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	25 tons
	Other Size	N/A
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
<b>Channel 14 Costs</b>	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

**Auxiliary Transmitter**      **Other Transmitter Cost Not Listed**  
Information 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 Manufacturer and Type	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	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  
Antenna**

**Adjustment to Existing Antenna**

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

**Primary  
Antenna**

**Other Antenna Costs**

Section	Question	Response
<b>Combiner for Shared Antenna</b>	Do you need a Combiner for a Shared Antenna?	Yes
	Type	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 Antenna

### Existing Antenna Information

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 Manufacturer and Type	Class	Class A
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	295.0 kW

Manufacturer	
Model	TFU-24DSB-E
Year	2011

## Auxiliary Antenna

### New Antenna Costs

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
	Type	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	ETU-8U4-



		HTP1C-27/35 /39
	Year	2017
	Justification for New Antenna	The existing antenna is single channel and must be replaced to accommodate new assigned channel.

## Auxiliary Antenna

### Other Antenna Costs

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

**Auxiliary  
Antenna**

**Other Antenna Cost Not Listed**

Information not provided.

**Transmission Line**

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

**Auxiliary**  
**Transmission Line**

**Existing Transmission Line**

Section	Question	Response
<b>Existing Transmission Line Description</b>	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?	No
<b>Existing Transmission Line Manufacturer and Type</b>	Manufacturer	
	Type	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**  
**Transmission Line**

Section	Question	Response
<b>New Transmission Line Costs</b>	Use	Auxiliary (Backup)
	Description of Use	Auxiliary
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	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 Line**

Information not provided.

**Tower Equipment And Rigging Costs**

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

**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 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

### Auxiliary Tower

#### Tower Modification Costs

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

### Auxiliary Tower

#### Tower Rigging Costs

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 Tower

### Add 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
23443	WDBO-FM	FM
55454	WRDQ	DTV
48716	WWKA	FM

**Other Types of Users**

Users
Wireless I'net
Two-Way Radio

**Primary  
Tower**

**Tower Modification Costs**

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

**Primary  
Tower**

**Tower Rigging Costs**

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

Required

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**Primary  
Tower**

**Other Tower Expenses Not Listed**

Information not provided.

**Outside  
Professional**

Section	Question	Response
<b>Services Costs Outside Project Management Services</b>	Do you require outside project management services?	Yes
	Number of Hours	100
	Explanation	Coordination of building and construction permits.
<b>Outside RF consulting Engineering Services</b>	Perform engineering study for new channel assignment and antenna development	Yes
	Prepare engineering section of Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	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
<b>Attorney and Other Outside Consulting Services</b>	Prepare and file Form FCC Construction Permit Application	Yes
	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
<b>RF Field Engineering Services</b>	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
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**Outside Other Professional Services Expenses Not Listed**  
**Professional Services Costs** Services not provided.

## Other Expenses

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

<b>Other Expenses</b>	<b>Other Expenses Not Listed</b>
	Information not provided.

## Cost Information

### Transmitters

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Primary Transmitter Power CD</b>	<b>\$947,400.00</b>	<b>\$659,010.25</b>		<b>\$0.00</b>	
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.	N/A	N/A
<b>Auxiliary Transmitter ULXTE-50</b>	<b>\$1,118,890.00</b>	<b>\$1,162,542.36</b>		<b>\$0.00</b>	
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	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.	N/A	N/A
Transformer 3 phase	\$36,800.00	\$35,000.00	N/A	N/A	N/A



/480v - 300  
KVA

1" Rigid Conduit and Wiring	<b>\$5,390.00</b>	\$5,390.00	N/A	N/A	N/A
25 Ton system	\$91,500.00	\$87,000.00	N/A	N/A	N/A
<b>Auxiliary Transmitter ULXTE-12</b>	<b>\$666,390.00</b>	<b>\$478,955.93</b>		<b>\$90.00</b>	
25 Ton system	\$91,500.00	\$87,000.00	N/A	\$0.00	N/A
1" Rigid Conduit and Wiring	<b>\$5,390.00</b>	\$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 Cooled Solid State Transmitter 8.2 - 13 kW	\$494,500.00	\$315,265.93	N/A	\$90.00	N/A
<b>Sub-total</b>	<b>\$2,732,680.00</b>	<b>\$2,300,508.54</b>	<b>N/A</b>	<b>\$90.00</b>	<b>N/A</b>
<b>Total for all systems</b>	<b>\$5,086,555.00</b>	<b>\$3,706,476.54</b>	<b>N/A</b>	<b>\$41,340.66</b>	<b>N/A</b>

## Components

Actual Information	
Description	File Name
60 kW mask filter	Information not provided.
3 IOT Tubes	Information not provided.
Three IOT system (90 kW)	Information not provided.

UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	Information not provided.
Switchgear - industrial 800 amp	Information not provided.
Transformer 3 phase/480v - 300 KVA	Information not provided.
1" Rigid Conduit and Wiring	Information not provided.
25 Ton system	Information not provided.
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 amp	Information not provided.
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	<div> <div> <b>Component Description:</b> </div> <div> Aux transmitter planning and verification. </div> </div> <div> <div> <b>Amount:</b> </div> <div> \$90.00 </div> </div>

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 TUM20-O4SP-14 /56H-2-R-T	\$864,930.00	\$96,235.00		\$10,234.38	
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
Adding a module to existing combiner (without antenna)	\$84,200.00	\$80,000.00	N/A	N/A	N/A
Re-tuneing elbow complex	<i>\$6,000.00</i>	\$6,000.00	Elbow complex tuning will require an RF Engineer and Tower Crew.	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$10,235.00	Pricing is from quotes and work	\$10,234.38	The initial sweep of the line and antenna verified the power

performed  
by RF  
Engineer.

handling  
and  
available  
channels of  
the line. the  
final sweep  
verified the  
system  
compatibility  
with the  
newly  
assigned  
channel.

<b>Auxiliary Antenna ETU-8U4- HTP1C-27 /35/39</b>	<b>\$253,730.00</b>	<b>\$241,400.00</b>		<b>\$7,181.28</b>	
UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	\$247,000.00	\$235,000.00	N/A	\$3,300.00	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$3,881.28	N/A
<b>Sub-total</b>	<b>\$1,118,660.00</b>	<b>\$337,635.00</b>	<b>N/A</b>	<b>\$17,415.66</b>	<b>N/A</b>
<b>Total for all systems</b>	<b>\$5,086,555.00</b>	<b>\$3,706,476.54</b>	<b>N/A</b>	<b>\$41,340.66</b>	<b>N/A</b>

## Components

<b>Actual Information Description</b>	<b>File Name</b>
UHF - High Power Top Mount (200-1000 kW), Two Station broadband panel antenna, elliptically or circularly polarized	Information not provided.

Adding a module to existing combiner (without antenna)	Information not provided.	
Re-tuneing elbow complex	Information not provided.	
Sweep test of existing antenna	<b>Component Description:</b>  <b>Amount:</b>	Initial sweep of transmission lines and antenna. \$5,729.41   Final sweep of transmission line and antenna to verify compatibility with newly assigned channel. \$4,504.97
UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	<b>Component Description:</b>  <b>Amount:</b>	design and planning of aux antenna \$3,300.00
Sweep test of existing antenna	<b>Component Description:</b>  <b>Amount:</b>	Sweep of the line at the aux site to confirm power handling and channel compatibility. \$3,881.28

Cost  
Information

Transmission Line

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Auxiliary Transmission Line	\$71,000.00	\$53,993.00		\$0.00	
Rigid Transmission Line - copper, 4 1 /16"	\$71,000.00	\$53,993.00	N/A	N/A	N/A
Sub-total	\$71,000.00	\$53,993.00	N/A	\$0.00	N/A
Total for all systems	\$5,086,555.00	\$3,706,476.54	N/A	\$41,340.66	N/A

Components

Information not provided.

## Cost Information

### Tower Equipment and Rigging Costs

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Primary Tower TOWER</b>	<b>\$223,100.00</b>	<b>\$12,000.00</b>		<b>\$0.00</b>	
Tall Tower (greater than 500')	\$210,500.00	\$0.00	N/A	N/A	N/A
Structural engineering tower load study for well documented tower	\$12,600.00	\$12,000.00	N/A	N/A	N/A
<b>Auxiliary Tower TOWER</b>	<b>\$644,100.00</b>	<b>\$708,080.00</b>		<b>\$0.00</b>	
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 engineering tower load study for well	\$12,600.00	\$15,460.00	Pricing is from structural engineering	N/A	N/A

documented tower			study by TCI.		
St Cloud tower	<b><i>\$0.00</i></b>	\$0.00	N/A	N/A	N/A
<b>Sub-total</b>	\$867,200.00	\$720,080.00	N/A	\$0.00	N/A
<b>Total for all systems</b>	\$5,086,555.00	\$3,706,476.54	N/A	\$41,340.66	N/A

### Components

Information not provided.



## Cost Information

### Outside Professional Services

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Outside Professional Services</b>	<b>\$222,025.00</b>	<b>\$219,875.00</b>		<b>\$23,835.00</b>	
Additional Field Engineering Service, 35 Days	<i>\$65,000.00</i>	\$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	\$14,255.00	N/A
Prepare and or review reimbursement form	\$2,630.00	\$8,625.00	Quote from consulting engineer.	\$1,380.00	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	\$1,500.00	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$3,730.00	N/A

Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$2,970.00	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 Cover Application	\$2,365.00	\$2,250.00	N/A	N/A	N/A
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	N/A	N/A
Project management of	\$15,800.00	\$15,000.00	N/A	N/A	N/A

the transition

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
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 hours from the consultant for engineering documentation.
<b>Sub-total</b>	\$222,025.00	\$219,875.00	N/A	\$23,835.00	N/A
<b>Total for all systems</b>	\$5,086,555.00	\$3,706,476.54	N/A	\$41,340.66	N/A

## Components

Actual Information	
Description	File Name
Additional Field Engineering Service, 35 Days	<p><b>Component Description:</b> Additional engineering planning and consulting.</p> <p><b>Amount:</b> \$14,255.00</p>
Prepare and or review reimbursement form	

	<p><b>Component Description:</b> review Reimbursement submission</p> <p><b>Amount:</b> \$1,380.00</p>
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	<p><b>Component Description:</b> Prepare engineering section for License to Cover Application</p> <p><b>Amount:</b> \$1,500.00</p>
Perform engineering study for new channel assignment and antenna development	<p><b>Component Description:</b> Main antenna verification and pattern study.</p> <p><b>Amount:</b> \$3,730.00</p>
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	<p><b>Component Description:</b> Invoiced hours from the consultant for engineering documentation.</p> <p><b>Amount:</b> \$2,970.00</p>
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	Information not provided.

Permit or License Application	
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.
Project management of the transition	Information not provided.
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.
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Information not provided.

## Cost Information

### Other Expenses

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Other Expenses</b>	<b>\$74,990.00</b>	<b>\$74,385.00</b>		<b>\$0.00</b>	
MVPD Notification of Channel Change	<i>\$1,500.00</i>	\$1,500.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	<i>\$1,500.00</i>	\$1,500.00	Costs for the production of on-air and website announcements.	N/A	N/A
Equipment Delivery and Handling Charges	<i>\$42,300.00</i>	\$42,300.00	delivery and storage costs per transmitter manufacturer's quotes.	N/A	N/A
Equipment Storage	<i>\$5,000.00</i>	\$5,000.00	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
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
FCC Filing Fees - Special Temporary	\$195.00	\$190.00	N/A	N/A	N/A

Authorization  
request

Local Zoning	<b>\$1,500.00</b>	\$1,500.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	<b>\$10,000.00</b>	\$10,000.00	Removal of old equipment and high voltage transformers from Ft Christmas and St Cloud sites.	N/A	N/A
<b>Sub-total</b>	\$74,990.00	\$74,385.00	N/A	\$0.00	N/A
<b>Total for all systems</b>	\$5,086,555.00	\$3,706,476.54	N/A	\$41,340.66	N/A

### Components

Information not provided.

<b>Cost Information</b>	<b>Grand Total</b>		
		<b>Predetermined Cost Estimate</b>	<b>Estimated Cost</b>
			<b>Actual Cost</b>
	<b>Total for all systems</b>	\$5,086,555.00	\$3,706,476.54
			\$41,340.66

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

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 above-named applicant for the Authorization(s) specified above.

**Jeffrey M  
Juniet**  
*Director of  
Engineering*

12/27/2017

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	<p>WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).</p>	
		<ol style="list-style-type: none"> <li>1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity.</li> <li>2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.</li> <li>3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> <li>4. The above-named entity acknowledges the submission of the information herein</li> </ol>	

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

<p>must be promptly refunded to the Commission.</p> <p>9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p><b>Jeffrey M Juniet</b>  <i>Director of Engineering</i></p> <p>12/27/2017</p>

## Attachments