

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility 6 ID: File	093 ි 000002	Service: DTV 4819	Call Sign:	WFSG	Channel: 28 (UHF)
Number:					
FRN: 00018	810977	Date	10/23		
		Submitted:	/2018		

Applicant Name, Type, and Contact Information

Applicant Information

Applicant	Address	Phone	Email	Applicant Type
Florida State University	Doug Crall 1600 RED BARBER PLAZA TALLAHASSEE, FL 32310 United States	+1 (850) 645-6032	DCRALL@FSU. EDU	Government Entity

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
	Ryan C Wilhour Consulting Engineer Kessler and Gehman	507 NW 60th ST STE D	+1 (352) 332-3157	ryan@kesslerandgehman. com
	Associates, Inc.	Gainesville, FL 32607 United States		

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.	Νο
	Briefly describe transition plan	Replace Transmitter and purchase a new antenna and transmission line. Use the existing antenna system as the interim through the end of the assigned phase. See WFSG Transmission Plan attached.

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

Primary	Existing Transmitter Information				
Transmitter	Section	Question	Response		
	Existing Transmitter Description	Type of change	Purchase New		
		Use	Primary (Main)		
		Description of Use	N/A		
		Ownership	Owned		
		Owner	N/A		
		Site	N/A		
		Is this transmitter currently shared with another station?	No		
		Is this transmitter currently in operating condition?	Yes		
	Existing Transmitter	Manufacturer			
	Manufacturer and Type	Model	Ultimate		
		Year	2002		
		Туре	Solid State		
		Solid State Cooling	Liquid Cooled		
		Solid State Power Capacity	10 kW		

Existing Transmitter Information

Primary	New Transmitter Costs		
Transmitter	Section	Question	Response
	New Transmitter	Use	Primary (Main)
		Change Type	Purchase New
		Is this a request for upgraded equipment?	Yes
		Manufacturer	
		Model	ULXTE-16
		Transmitter Type	Solid State
		Solid State Cooling	Liquid Cooled
		Solid State Power capacity	10.8 kW
		Justification for New Transmitter	The station currently has a 10kW Comark Ultimate solid state liquid cooled transmitter, which is no longer being manufactured. Jack McAnulty of Comark has indicated that they will NOT re-channelize the Ultimate transmitter. A new transmitter is required.

Primary	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	150 kVA
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	100.0 feet
	Other Electrical Service	No
	Description	N/A
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Cooling Only
	Size	10 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Primary Other Transmitter Cost Not Listed Transmitter Name

nitter	Name	Description	
	Standby Exciter and Switch	Standby Exciter with Automatic Change Over Switch	
	Additional Interior RF System	Interior RF System Existing Transmitter to Interim Transmission line	

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

Primary	Existing Antenna Inform	nation	Response Purchase		
Antenna	Section	Question	Response		
	Existing Antenna Description	Type of change	Purchase New		
			Antenna Use	Primary (Main)	
		Description of Use	N/A		
		Ownership	Owned		
		Owner	N/A		
		Site	N/A		
		Is the existing antenna shared with another station or stations?	No		
		Is the existing antenna directional?	No		
		Is antenna in operating condition?	Yes		
		Is antenna located on or in close proximity to an antenna farm?	No		
	Existing Antenna	Class	Full Power		
	Manufacturer and Type	Mounting	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)	158.0 kW		

	Manufacturer	
	Model	TLP-32A (c)
	Year	2002

Primary	New Antenna Costs		
Antenna	Section	Question	Response
	New Antenna Description	Use	Primary (Main)
		Description of Use	N/A
		Change Type	Purchase New
		Is this a request for upgraded equipment?	Yes
		Ownership	Owned
		Owner	N/A
		Is antenna shared?	No
		Is antenna directional?	No
		Will antenna be located on or in close proximity to an antenna farm?	No
	New Antenna	Class	Full Power
	Manufacturer and Types	Mounting	Top Mount
		Antenna position in stack	Not in Stack
		Polarization	Horizontal
		Туре	Slotted Coaxial
		Number of Stations Supported	N/A
		Number of Panels/Bays	N/A
		Lower Limit	N/A
		Upper Limit	N/A
		Design power capacity in use	N/A
		Other Antenna Type	N/A
		ERP: (Effective Radiated Power)	129.0 kW
		Manufacturer	

Model	TFU-24JTH /VP-R O4
Year	2018
Justification for New Antenna	Refer to Exhibit 2

Combiner for Shared AntennaDo you need a Combiner for a Shared Antenna?NoTypeTypeNumber of channels supportedN/AFrequencies of channels supportedN/AFrequencies of channels supportedN/AFrequencyN/ADo you need a combiner output splitter /switcher for dual feed lines?N/AElbow ComplexDo you require the separate purchase of the Elbow Complex?YesBroadband or Single Channel?Single ChannelFeed Line Size4 1/16 inches inchesSide Mount BracketsDo you require the separate purchase of side mount brackets for a high power antenna?NoPattern Scatter AnalysisDo you require the sweep testing ofYesSweep TestDo you require the sweep testing ofYes	Primary Antenna	Other Antenna Costs		
AntennaAntenna?Image: constant of the second of the		Section	Question	Response
Number of channels supported N/A Frequencies of channels supported N/A Frequencies of channels supported N/A Frequency N/A Do you need a combiner output splitter /switcher for dual feed lines? N/A Elbow Complex Do you require the separate purchase of the Elbow Complex? Yes Broadband or Single Channel? Single Channel Feed Line Size 4 1/16 inches inches Side Mount Brackets Do you require the separate purchase of side mount brackets for a high power antenna? No Pattern Scatter Analysis Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? No Sweep Test Do you require the sweep testing of Yes				No
Frequencies of channels supportedN/AFrequencyN/ADo you need a combiner output splitter /switcher for dual feed lines?N/AElbow ComplexDo you require the separate purchase of the Elbow Complex?YesBroadband or Single Channel?Single ChannelFeed Line Size4 1/16 inches inchesSide Mount BracketsDo you require the separate purchase of side mount brackets for a high power antenna?NoPattern Scatter AnalysisDo you require the separate purchase of high or medium power antenna?NoSweep TestDo you require the sweep testing ofYes			Туре	
FrequencyN/ADo you need a combiner output splitter /switcher for dual feed lines?N/AElbow ComplexDo you require the separate purchase of the Elbow Complex?YesBroadband or Single Channel?Single ChannelFeed Line Size4 1/16 inches inchesSide Mount BracketsDo you require the separate purchase of side mount brackets for a high power 			Number of channels supported	N/A
Do you need a combiner output splitter /switcher for dual feed lines?N/AElbow ComplexDo you require the separate purchase of the Elbow Complex?YesBroadband or Single Channel?Single ChannelFeed Line Size4 1/16 inches inchesSide Mount BracketsDo you require the separate purchase of side mount brackets for a high power antenna?NoPattern Scatter AnalysisDo you require the separate purchase of pattern scatter analysis for a side mount high or medium power antenna?NoSweep TestDo you require the sweep testing ofYes			Frequencies of channels supported	N/A
Image: Sweep Test/switcher for dual feed lines?Sweep TestDo you require the separate purchase of the Elbow Complex?YesDo you require the separate purchase of the Elbow Complex?Single Channel?Broadband or Single Channel?Single ChannelFeed Line Size4 1/16 inches inchesSide Mount BracketsDo you require the separate purchase of side mount brackets for a high power antenna?NoSweep TestDo you require the separate purchase of pattern analysis for a side mount high or medium power antenna?No			Frequency	N/A
the Elbow Complex?Broadband or Single Channel?Single ChannelBroadband or Single Channel?Single ChannelFeed Line Size4 1/16 inches inchesSide Mount BracketsDo you require the separate purchase of side mount brackets for a high power antenna?NoPattern Scatter AnalysisDo you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?NoSweep TestDo you require the sweep testing ofYes				N/A
ChannelFeed Line Size4 1/16 inches inchesSide Mount BracketsDo you require the separate purchase of side mount brackets for a high power antenna?NoPattern Scatter AnalysisDo you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?NoSweep TestDo you require the sweep testing ofYes		Elbow Complex		Yes
Side Mount BracketsDo you require the separate purchase of side mount brackets for a high power antenna?NoPattern Scatter AnalysisDo you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?NoSweep TestDo you require the sweep testing ofYes			Broadband or Single Channel?	-
Sweep TestDo you require the sweep testing ofNoYes			Feed Line Size	inches
pattern scatter analysis for a side mount high or medium power antenna?Sweep TestDo you require the sweep testing ofYes		Side Mount Brackets	side mount brackets for a high power	No
		Pattern Scatter Analysis	pattern scatter analysis for a side mount	No
transmission line and antenna?		Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Other Antenna Costs

Primary Other Antenna Cost Not Listed

Antenna Information not provided.

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

ransmissio	Section	Question	Response
	Existing Transmission Line Description	Type of change	Purchase New
		Use	Primary (Main)
		Description of Use	N/A
		Ownership	Owned
		Owner	N/A
		Site	N/A
		Is the existing transmission line shared with another station or stations?	No
		Is Transmission Line in operating condition?	Yes
	Existing Transmission	Manufacturer	
	Line Manufacturer and Type	Туре	Rigid
		Diameter	3 1/8 inches
		Other Diameter	N/A
		Segment Length	20 inches
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	500 feet per run

Primary Existing Transmission Line

Primary	New Transmission Line		
Transmissio	n Line Section	Question	Response
	New Transmission Line Costs	Use	Primary (Main)
		Description of Use	N/A
		Change Type	Purchase New
		Is this a request for upgraded equipment?	Yes
		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	550 feet per run
		Justification for New Transmission Line	The existing transmission line will be kept in place and used to feed the currently licensed antenna during the interim transitional period.

Primary Other Transmission Line Expenses Not Listed

Transmission home tion 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

marv	Existing	Tower
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Primary	Existing Tower			
Tower	Section	Question	Response	
	Existing Tower Description	Type of change	Modify Existing	
		Tower Use	Primary (Main)	
		Description of Use	N/A	
		Ownership	Owned	
		Is this tower consider Complex?	No	
		Is this tower currently shared with any other stations?	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?	No	
	Existing Tower Structure	Do you have a tower registration number?	Yes	
	Registration	ASR Number	1038765	
	Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	30° 22' 03.0" N-	
		Longitude (NAD83)	085° 55' 28.0" W-	
		Overall Structure Height	488.51 feet	
			Support Structure Height	443.56 feet
		Ground Elevation Above Mean Sea Level (AMSL)	65.62 feet	

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	WFSU / WFSGTV
Date Constructed	09/01/1987

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
21798	WFSW	FM

Other Types of Users

Users

Public Safety

Tower Modification Costs Primary

Tower

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

Tower Rigging Costs Primary

Tower

Section

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

Primary Tower	Other Tower Expenses Not Listed			
	Name	Description		
	Transmission Line Bridge	Transmission line ice bridge to support the new transmission line running to the new transmitter location inside the existing building. See Cover Letter and photo in file named WFSG TCI Final Package		

Outside	Section	Question	Response
Professional	Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	24
		Explanation	Fewer project management hours are being required than originally estimated
	Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	Yes
		Prepare engineering section of Form FCC Construction Permit Application	Yes
		For Auxiliary Facility	No
		For Main Facility	Yes
		Prepare engineering section of Form FCC License to Cover Application	Yes
		For Auxiliary Facility	No
		For Main Facility	Yes
		Prepare request for Special Temporary Authority	Yes
		Quantity	2
		Do you have Distributed Transmission System engineering services?	N/A
		Critical Facility	N/A
		Terrain-Shielded Facility	N/A
	Attorney and Other Outside Consulting	Prepare and file Form FCC Construction Permit Application	Yes
	Services	For Auxiliary Facility	No
		For Main Facility	Yes

	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	2
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	Yes
	FAA Consultation (including preparation of FAA Form 7460)	Yes
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
RF Field Engineering Services	Comprehensive coverage verification via field study	Yes
	RF exposure measurements	No
	Additional Field Engineering Service	Yes
	Number of Days	5
	Justification	Fewer on site days are being required than originally estimated

Outside Other Professional Services Expenses Not Listed

Professional	Services Costs	Description	
	Other Engineering Services	Outside engineering services not included in any other OPS sections	
	Other Legal Services	Outside legal services not included in any other OPS sections	

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	Yes
		BLM or NFS Coordination	No
		FCC Construction Permit Minor Change	No
		FCC License to Cover Application	No
		FCC Special Temporary Authority Application	No
	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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter ULXTE-16	\$599,750.00	\$415,237.28		\$219,302.72	
Additional Interior RF System	\$0.00	\$0.00	Included in transmitter cost	N/A	N/A
Standby Exciter and Switch	\$0.00	\$0.00	Included in transmitter cost	N/A	N/A
10 Ton system	\$38,900.00	\$26,744.00	See quote and justification attached as file WFSG Quote S26744 00000000 Quote 00000000 PEA TX EQ Aug18 FSU	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	\$494,500.00	\$388,493.28	Upgraded transmitter for which Licensee will pay the upgrade cost difference	\$219,302.72	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$0.00	Included in transmitter cost	N/A	N/A

Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$0.00	Included in transmitter cost	N/A	N/A
2" Rigid Conduit and Wiring (Cost per foot)	\$2,600.00	\$0.00	Included in transmitter cost	N/A	N/A
Sub-total	\$599,750.00	\$415,237.28	N/A	\$219,302.72	N/A
Total for all systems	\$1,839,217.00	\$1,466,884.28	N/A	\$847,282.48	N/A

Actual Information Description	File Name	
Additional Interior RF System	Information not provided.	
Standby Exciter and Switch	Information not provided.	
10 Ton system	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	Component Description: Amount:	One-third down payment for new transmitter \$109,651.36
	Component Description:	2nd Installment, one-third payment prior to shipping
	Amount:	\$109,651.36
Switchgear - industrial 800 amp	Information not provided.	
Transformer 3 phase/480v - 150 KVA	Information not provided.	
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	

Antennas

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Antenna TFU-24JTH /VP-R O4	\$270,900.00	\$322,981.00		\$254,828.80	
Elbow complex, single channel, at antenna input, per 4 1/16. feedline (if needed)	\$9,570.00	\$8,890.00	N/A	\$2,667.00	N/A
Sweep test of existing antenna	\$6,730.00	\$0.00	Sweep is included in cost of antenna	N/A	N/A
UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	\$247,000.00	\$309,646.00	See Cover Letter associated with Invoice 8330 in file named WFSG TCI Final Package	\$247,716.80	The total cost of this antenna will be \$309,646.00, which is the cost offered by TCI under the turnkey antenna and tower contract.

Elbow complex, single channel, at antenna input, per 3 1/8. feedline (if needed)	\$7,600.00	\$4,445.00	***System Notice: Estimate adjusted and locked because line has been superseded. ***See Cover Letter associated with Invoice 8330 in file named WFSG TCI Final Package	\$4,445.00	N/A
Sub-total	\$270,900.00	\$322,981.00	N/A	\$254,828.80	N/A
Total for all systems	\$1,839,217.00	\$1,466,884.28	N/A	\$847,282.48	N/A

Actual Information Description	File Name	
Elbow complex, single channel, at antenna input, per 4 1/16. feedline (if needed)	Component Description: Amount:	30pct progress payment \$2,667.00
Sweep test of existing antenna	Information not provided.	

UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally	Component Description:	30 pct progress pmt Pri ant
polarized	Amount:	\$86,318.80
	Component Description:	50 pct down
	Amount:	payment \$161,398.00
Elbow complex, single channel, at antenna input,	O	00
per 3 1/8. feedline (if needed)	Component Description:	30 pct progress pmt, but prior
		50% payment
		was already
		sufficient to tota
		80%.
	Amount:	N/A
	Component Description:	50 pct down
		payment
	Amount:	\$4,445.00

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
Primary Transmission Line	\$135,300.00	\$91,311.00		\$48,699.20	
Rigid Transmission Line - copper, 4 1 /16"	\$78,100.00	\$60,874.00	N/A	\$18,262.20	N/A
Rigid Transmission Line - copper, 3 1/8"	\$57,200.00	\$30,437.00	***System Notice: Estimate adjusted and locked because line has been superseded. ***See Cover Letter associated with Invoice 8330 in file named WFSG TCI Final Package	\$30,437.00	N/A
Sub-total	\$135,300.00	\$91,311.00	N/A	\$48,699.20	N/A
Total for all systems	\$1,839,217.00	\$1,466,884.28	N/A	\$847,282.48	N/A

Actual Information	
Description	File Name

Rigid Transmission Line - copper, 4 1/16"	Component Description: Amount:	30 pct progress pmt for transmission line \$18,262.20
Rigid Transmission Line - copper, 3 1/8"	Component Description:	This component is RED. See new component for the 30pct progress payment.
	Amount:	N/A
	Component Description:	50 pct down payment
	Amount:	\$30,437.00

Tower Equipment and Rigging Costs

Cost Information

	Predetermined	Estimated	Estimated Cost		Actual Cost
Description	Cost Estimate	Cost	Justification	Actual Cost	Justification
Primary Tower TOWER	\$563,780.00	\$375,710.00		\$277,392.00	
Major tower reinforcement /modifications	\$421,000.00	\$173,040.00	See Cover Letter associated with Invoice 8330 in file named WFSG TCI Final Package	\$138,432.00	N/A
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$33,640.00	Includes Structural Analysis which perhaps should have been entered into Modifications section of this Category.	\$29,560.00	Perhaps the Structural Analysis should have been entered in the tower modifications section.
Short Tower (less than 500')	\$84,200.00	\$136,750.00	See Cover Letter associated with Invoice 8330 in file named WFSG TCI Final Package	\$109,400.00	The total cost of this rigging work will be \$136,750, which is part of a turnkey project by TCI for the antenna and tower work.

Transmission Line Bridge	\$32,280.00	\$32,280.00	See Cover Letter and photo in file named WFSG TCI Final Package	N/A	N/A
Sub-total	\$563,780.00	\$375,710.00	N/A	\$277,392.00	N/A
Total for all systems	\$1,839,217.00	\$1,466,884.28	N/A	\$847,282.48	N/A

Actual Information Description	File Name	
Major tower reinforcement /modifications	Component Description: Amount:	30 pct progress pmt for tower mods \$51,912.00
	Component Description:	50 pct down payment
	Amount:	\$86,520.00

Tower mapping for an		
undocumented/poorly documented tower and	Component Description:	Structural
		Analysis of the
preparation of		WFSG Panama
documentation necessary for		City Tower. Also
tower load study		see attached
		letter from the
		vendor with
		further
		explanation.
	Amount:	\$6,000.00
	Component Description:	Tower Structural
		Analysis for Side
		Mount Antennas
	Amount:	\$7,240.00
	Component Description:	30 pct progress
	component Description.	pmt for mapping
	Amount:	\$6,120.00
	Component Description:	50 pct down
		payment
	Amount:	\$10,200.00
Short Tower (less than 500')		
	Component Description:	30 pct progress
		pmt rigging
		antenna
		installation
	Amount:	\$47,600.00
		FO and down
	Component Description:	50 pct down
	Amount:	payment \$61,800.00

Outside Professional Services

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$176,937.00	\$169,645.00		\$42,122.26	
Other Legal Services	\$10,000.00	\$10,000.00	N/A	\$57.00	N/A
Other Engineering Services	\$24,107.50	\$24,107.50	N/A	\$6,412.50	N/A
Additional Field Engineering Service, 5 Days	\$10,000.00	\$10,000.00	N/A	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	\$18,811.51	Comprehensiv coverage verification via field study for WFSG. These measurements will be used to compare with post-transitior measurements
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	\$2,105.00	\$2,000.00	N/A	N/A	N/A
ASR modification (prepare FCC Form 854)	\$2,105.00	\$2,000.00	N/A	N/A	N/A

Attorney Fees - Prepare and File request for Special Temporary Authorization	\$7,360.00	\$7,000.00	N/A	\$783.75	Attorney Request for Special Temporary Authority - eau transition for WFSG
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 - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$1,475.00	Attorney section of For FCC Construction Permit Application Main Facility WFSG
Prepare request for Special Temporary Authorization	\$4,100.00	\$3,000.00	N/A	\$875.00	Engineering Special Temporary Authority fo early transitio of WFSG
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	\$2,500.00	Prepare or Review FC0 Form 399 fo Reimburseme for WFSG
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	N/A

Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$4,500.00	Engineering study for new channel assignment an antenna development for WFSG
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$1,500.00	Engineering section of Forr FCC Construction Permit Application Main Facility fc WFSG
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
Project management of the transition	\$3,792.00	\$3,600.00	N/A	\$1,020.00	Outside Projec Management Services for WFSG
Additional Field Engineering Service, 15 Days	\$4,187.50	\$4,187.50	***System Notice: Estimate adjusted and locked because line has been superseded.	\$4,187.50	Additional Fiel Engineering Service, Site survey WFSC
Sub-total	\$176,937.00	\$169,645.00	N/A	\$42,122.26	N/A
Total for all systems	\$1,839,217.00	\$1,466,884.28	N/A	\$847,282.48	N/A

Actual Information	
Description	File Name

Other Legal Services		
	Component Description:	Repack
		reimbursement
		legal advice
	Amount:	\$57.00
Other Engineering Services		
0 0	Component Description	Droporo and submit
	Component Description:	Prepare and submit Form 399 actual
		cost invoices
	Amount:	\$812.50
	Amount.	ψ012.00
	Component Description:	RF Design for
		WFSG primary and
		interim facilities
	Amount:	\$5,600.00
Additional Field	Information not provided.	
Engineering Service, 5		
Days		
Comprehensive coverage		
verification via field study,	Component Description:	Refer to attachment
if needed		"KG Invoice
		Explanations.pdf".
		Comprehensive
		coverage
		coverage
	Amount:	coverage verification via field
	Amount:	coverage verification via field study for WFSG
FAA consultant, including	Amount:	coverage verification via field study for WFSG
FAA consultant, including cost of preparing FAA		coverage verification via field study for WFSG
-		coverage verification via field study for WFSG
cost of preparing FAA		coverage verification via field study for WFSG
cost of preparing FAA Form 7460 (Notice of		coverage verification via field study for WFSG
cost of preparing FAA Form 7460 (Notice of Proposed Construction), if		coverage verification via field study for WFSG

Attorney Fees - Prepare and File request for Special Temporary Authorization	Component Description: Amount:	Attorney Request for Special Temporary Authority - early transition for WFSG \$783.75
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	Incentive Auction Public Notice and regional coordinator for repack transition \$213.75
	Component Description: Amount:	Attorney section of Form FCC Construction Permit Application Main Facility for WFSG \$71.25
	Component Description: Amount:	Attorney section of Form FCC Construction Permit Application Main Facility for WFSG \$285.00
	Component Description: Amount:	Attorney section of Form FCC Construction Permit Application Main Facility for WFSG \$71.25

Component Description: Amount:	Attorney section of Form FCC Construction Permit Application Main Facility WFSG \$285.00
Component Description: Amount:	Attorney section of Form FCC Construction Permit Application Main Facility for WFSG \$406.25
Component Description: Amount:	Post auction reimbursement procedures and application procedures \$142.50
Component Description:	Refer to attachment "KG Invoice Explanations.pdf". Engineering for Special Temporary Authority for early transition for WFSG \$875.00
Component Description: Amount:	Refer to attachment "KG Invoice Explanations.pdf". Prepare or Review FCC Form 399 for Reimbursement for WFSG \$2,500.00
	Amount: Component Description: Amount: Component Description: Amount: Component Description: Amount:

Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	
Perform engineering study for new channel assignment and antenna development	Component Description:	Refer to attachment "KG Invoice Explanations.pdf". Engineering study for new channel assignment and antenna development for WFSG \$4,500.00
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Component Description:	Refer to attachment "KG Invoice Explanations.pdf". Engineering section of Form FCC Construction Permit Application Main Facility for WFSG \$1,500.00
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	

	Amount:	\$4,187.50
		facilities survey - site visit
		inventory and
		Equipment
		WFSG on-site
		Explanations.pdf".
		"KG Invoice
Additional Field Engineering Service, 15 Days	Component Description:	Refer to attachment
	Amount:	progress report \$225.00
	Component Description:	Prepare and submit Form 387 1Q2018
	Amount:	progress report \$495.00
	Component Description:	Prepare and submit Form 387 4Q2017
	Amount:	\$300.00
		Services, Form 387 Progress Report
		Management
		Outside Project
		"KG Invoice Explanations.pdf".
	Component Description:	Refer to attachment

Other Expenses

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$92,550.00	\$92,000.00		\$4,937.50	
MVPD Notification of Channel Change	\$2,000.00	\$2,000.00	N/A	\$1,812.50	N/A
Develop and air announcement of upcoming channel change	\$15,000.00	\$15,000.00	N/A	N/A	N/A
Equipment Storage	\$15,000.00	\$15,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	\$25,000.00	\$25,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$20,000.00	\$20,000.00	N/A	N/A	N/A
Non-zoning permits	\$2,000.00	\$2,000.00	N/A	N/A	N/A
Local Zoning	\$2,000.00	\$2,000.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	\$3,125.00	N/A
Sub-total	\$92,550.00	\$92,000.00	N/A	\$4,937.50	N/A

Total for all	\$1,839,217.00	\$1,466,884.28	N/A	\$847,282.48	N/A
systems					

Actual Information Description	File Name	
MVPD Notification of Channel Change	Component Description: Amount:	Prepare and distribute MVPD notifications and certification statement for public file \$1,812.50
Develop and air announcement of upcoming channel change	Information not provided.	
Equipment Storage	Information not provided.	
Equipment Delivery and Handling Charges	Information not provided.	
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.	
Non-zoning permits	Information not provided.	
Local Zoning	Information not provided.	
DTV Medical Facility Notification	Component Description: Amount:	Prepare and distribute Medical notifications and certification statement for public file \$3,125.00

Cost	Grand Total				
Information		Predetermined Cost Estimate	Estimated Cost	Actual Cost	
	Total for all systems	\$1,839,217.00	\$1,466,884.28	\$847,282.48	

Reimbursem	enrestanus	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. 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.
- 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.	Robert Gehman Consulting Engineer 10/23/2018

Attachments