

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility	22108	Service: DTV	Call	WFWA	Channel: 18 (UHF)
ID:			Sign:		
File 0000027861					
Number:					
FRN: 000	07158843	Date	11/27		
		Submitted:	/2018		

Applicant Name, Type, and Contact Information

Applicant Information

Applicant	Address	Phone	Email	Арг Тур
TELEVISION, INC. Doing Business As: FORT WAYNE PUBLIC TELEVISION, INC.	2501 EAST COLISEUM BOULEVARD FORT WAYNE, IN 46805 United States	+1 (260) 484- 8839	brucehaines@wfwa. org	Not Pro

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Name and Information Preparer Contact Applicant Address Phone Email Information **Robert Gehman** Robert Gehman +1 (352) 332bob@kesslerandgeł ConsultingEngineer 507 NW 60 Street 3157 com Kessler and Gehman Suite D Associates, Inc. Gainesville, FL 32607

United States

Broadcaster Information and Transition Plan	Question	Response
	Will the station be sharing equipment with another broadcast television station or stations (e. g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	No
	Briefly describe transition plan	Map & analyze tower; modify if needed. Rep transmitter and antenna. Acquire interim anter system to keep station on air while replacing antenna and for the duration of the phase. S attached Transition Plan.

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

Primary	Existing Transmitter Info	rmation			
Transmitter	Section	Question	Response		
	Existing Transmitter	Type of change	Purchase N		
	Description	Use	Primary (Ma		
		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 Model			
	Manufacturer and Type		DTT5CSWL		
		Year	2013		
		Туре	Solid State		
		Solid State Cooling	Liquid Coole		
		Solid State Power Capacity	9.6 kW		

Primary Transmitter	New Transmitter Costs				
	Section	Question	Response		
	New Transmitter	Use	Primary (Ma		
		Change Type	Purchase N		
		Is this a request for upgraded equipment?	No		
		Manufacturer			
		Model	TBD		
		Transmitter Type	Solid State		
		Solid State Cooling	Liquid Coole		
		Solid State Power capacity	10 kW		
		Justification for New Transmitter	Manufacture existing transmitter is of business no support is available for existing transmitter.		

Primary 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	150 kVA		
		Rigid Conduit and Wiring	Yes		
		Size	3 inches		
		Length	100.0 feet		
		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	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
Leasehold Improvement	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	Description	
	Additional Interior RF System	Additional Interior RF System for new transn	
	Standby Exciter and Switch	Standby Exciter with Automatic Change Ove Switch	

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

Primary	Add Antenna Information				
Antenna	Section	Question	Response		
	Existing Antenna Description	Type of change	Purchase N		
	Description	Antenna Use	Primary (Ma		
		Description of Use	N/A		
		Ownership	Owned		
		Owner	N/A		
		Site	N/A		
		Is this antenna currently shared with any other stations?	No		
		Is this antenna directional?	No		
		Is antenna in operating condition?	Yes		
		Is antenna located on or in close proximity to an antenna farm?	No		
	Existing Antenna Manufacturer and Type	Class	Full Power		
		Mounting	Top Mount		
		Antenna position in stack	Not in Stack		
		Polarization	Horizontal		
		Туре	Slotted Coa		
		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)	152.8 kW		
		Manufacturer			

Model	TFU-28GT⊦ 04 DC
 Year	2004

Primary	New Antenna Costs			
Antenna	Section	Question	Response	
	New Antenna Description	Use	Primary (Ma	
		Description of Use	N/A	
		Change Type	Purchase N	
		Is this a request for upgraded equipment?	No	
		Ownership	Owned	
		Owner	N/A	
		Is antenna shared?	No	
		Is antenna directional?	No	
		Will antenna be located on or in close proximity to an antenna farm?	No	
	New Antenna Manufacturer and Types	Class	Full Power	
		Mounting	Top Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		Туре	Slotted Coa	
		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)	109.0 kW	
		Manufacturer		
		Model	TBD	
		Year	2018	
			1	

Justification for New Antenna	The existing primary ante is a single channel slot coaxial whic cannot accommoda the assigned channel.
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Primary Antenna Section Question Response **Combiner for Shared** Do you need a Combiner for a Shared Antenna? No Antenna Туре Number of channels supported N/A Frequencies of channels supported N/A Frequency N/A Do you need a combiner output splitter/switcher N/A for dual feed lines? **Elbow Complex** Do you require the separate purchase of the Yes Elbow Complex? Broadband or Single Channel? Single Chan Feed Line Size 6 1/8 inches inches **Side Mount Brackets** No Do you require the separate purchase of side mount brackets for a high power antenna? **Pattern Scatter Analysis** Do you require separate purchase of pattern No scatter analysis for a side mount high or medium power antenna? Sweep Test Do you require the sweep testing of transmission Yes line and antenna?

Other Antenna Costs

PrimaryOther Antenna Cost Not ListedAntennaInformation not provided.

Interim	New Antenna Costs			
Antenna	Section	Question	Response	
	New Antenna Description	Use	Interim	
		Description of Use	N/A	
		Change Type	Purchase N	
		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 Manufacturer and Type	Class	Full Power	
		Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		Туре	Slotted Coa:	
		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)	152.8 kW	
		Manufacturer		
		Model	TBD	
		Year	2018	

Justification for New Antenna	An interim
	antenna is
	necessary
	keep statio
	the air duri
	primary an
	replaceme
	for the dura
	the assigned
	phase.

Interim Antenna	Other Antenna Costs		
	Section	Question	Response
	Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
		Broadband or Single Channel?	S
		Feed Line Size	6 1/8 inches
	Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	Yes
	Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
	Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Interim Other Antenna Cost Not Listed

Antenna

Information not provided.

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

Primary	Existing Transmission Line			
Transmission Line	Section	Question	Response	
Line	Existing Transmission	Type of change	Utilize Existi	
	Line Description	Use	Primary (Ma	
		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 Line Manufacturer and	Manufacturer	Dielectric	
	Type	Туре	Rigid	
		Diameter	6 1/8 inches	
		Other Diameter	N/A	
		Segment Length	20 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	770 feet per	

Primary	Other Transmission Line Expenses Not Listed	
Transmission Line	Name	Description
Line	Primary Line Sweep	Sweep line to confirm operation on new chai

Primary	Existing Transmission Line			
Transmission Line	Section	Question	Response	
	Existing Transmission	Type of change	Purchase N	
	Line Description	Use	Primary (Ma	
		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 Line Manufacturer and Type	Manufacturer		
		Туре	Rigid	
		Diameter	6 1/8 inches	
		Other Diameter	N/A	
		Segment Length	20 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	770 feet per	

Primary	New Transmission Line		
Transmission Line	Section	Question	Response
	New Transmission Line	Use	Primary (Ma
	Costs	Description of Use	N/A
		Change Type	Purchase N
		Is this a request for upgraded equipment?	No
		Туре	Rigid
		Diameter	4 1/16 inche
		Other Diameter	N/A
		Segment Length	20 inches
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	775 feet per
		Justification for New Transmission Line	A sweep wa made of the existing 6-1/ line, which fa Station is replacing lin with the sma size that me the power an attenuation requirement

Primary Transmission Information not provided. Line

Interim	New Transmission Line			
Transmission Line	Section	Question	Response	
	New Transmission Line	Use	Interim	
	Costs	Description of Use	N/A	
		Change Type	Purchase N	
		Туре	Flexible Air	
		Diameter	3 inches	
		Segment Length	N/A	
		Other Segment Length		
		Number of parallel runs	1	
		Length	550 feet per	
		Justification for New Transmission Line	An interim transmissior is necessary the interim antenna to k station on th during prima antenna replacement for the durat the assigned phase.	

Interim Transmission Information not provided. Line

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

Primary	Existing Tower			
Tower	Section	Question	Response	
	Existing Tower Description	Type of change	Modify Exist	
		Tower Use	Primary (Ma	
		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?	No	
		Is tower compliant with Rev G?	No	
	Existing Tower Structure Registration	Do you have a tower registration number?	Yes	
		ASR Number	1030891	
	Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	41° 06' 13.0	
		Longitude (NAD83)	085° 11' 28.	
		Overall Structure Height	747.04 feet	
		Support Structure Height	695.53 feet	
		Ground Elevation Above Mean Sea Level (AMSL)	813.64 feet	
		Structure Type	TOWER - F Standing or Guyed Struc	
			1	

Tower Owner	FORT WAY PUBLIC TELEVISIOI
Date Constructed	07/01/1988

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
59132	WAJI	FM

Other Types of Users

Users	
WINM	
ATF	
DEA	
NOAA	
INDDC	
FBI	

Primary Tower

Tower Modification Costs

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

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

Other Tower Expenses Not Listed

Primary Tower

Name	Description
Weather Delays	Delay charges caused by the tower crew not to work due to inclement weather

Outside Professional Services Costs	Section	Question	Response
	Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	183
		Explanation	It will be necessary to schedule an coordinate multiple ven complete progress rep and update Schedule 35 Station does have availab personnel of personnel tr in project managemer such comple projects.
	Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	Yes
		Prepare engineering section of Form FCC Construction Permit Application	Yes
		For Auxiliary Facility	No
		For Main Facility	Yes
		Prepare engineering section of Form FCC License to Cover Application	Yes
		For Auxiliary Facility	No
		For Main Facility	Yes
		Prepare request for Special Temporary Authority	Yes
		Quantity	1
		Do you have Distributed Transmission System engineering services?	N/A
		Critical Facility	N/A

		1
	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	1
	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	22

Justification	It will be
	necessary t
	survey the
	plan the
	equipment,
	develop
	specificatio
	purchasing
	oversee mu
	vendor RF
	projects. St
	does not ha
	available
	personnel
	personnel t
	in such ser

Outside	Other Professional Services Expenses Not Listed		
Professional Services Costs	Name	Description	
	Other Engineering Services	Engineering services related to the repack n already included in predetermined 399 catec	
	Other Legal Services	Legal services related to the repack not alreating included in predetermined 399 categories	

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	No
		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	Other Expenses Not Listed	
Expenses	Name	Description

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 Justifi
Primary Transmitter TBD	\$728,450.00	\$700,500.00		\$316,909.20	
Standby Exciter and Switch	\$25,000.00	\$25,000.00	N/A	N/A	N,
Additional Interior RF System	\$140,000.00	\$140,000.00	N/A	N/A	N,
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	\$494,500.00	\$470,000.00	N/A	\$315,449.20	N,
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N,
Transformer 3 phase/480v - 150 KVA	\$25,550.00	\$24,300.00	N/A	N/A	N
3" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$4,900.00	N/A	\$1,460.00	N,
Sub-total	\$728,450.00	\$700,500.00	N/A	\$316,909.20	N,
Total for all systems	\$2,305,354.00	\$2,077,399.60	N/A	\$820,381.71	N,

Components

Actual Information Description	File Name
Standby Exciter and Switch	Information not provided.
Additional Interior RF System	Information not provided.

UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	Component Description: Amount:	GatesAir inv #US0318728 Primary pmt 3 UL20181127jgv \$108,675.74
	Component Description: Amount:	Second payment; one third due prior to shipp \$103,386.73
	Component Description: Amount:	One third down payme for transmitter WFWA \$103,386.73
Switchgear - industrial 800 amp	Information not provided.	
Transformer 3 phase/480v - 150 KVA	Information not provided.	
3" Rigid Conduit and Wiring (Cost per foot)	Component Description: Amount:	Extend existing concrepad to accommodate transmitter heat exchanger. Revised tc clarify WFWA is also known as PBS39 \$1,460.00

Antennas

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 Justifi
Interim Antenna TBD	\$226,240.00	\$130,100.00		\$27,550.50	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	N/A	N/A	N,
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$11,700.00	N/A	N/A	N,
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$0.00	N,
UHF - Lower Power Side Mount, One station antenna - medium power (50- 200 kW), horizontally polarized	\$89,400.00	\$71,562.50	N/A	\$14,113.00	N,
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$22,000.00	N/A	N/A	N,

UHF - Lower Power Side Mount, One station antenna - medium power (50- 200 kW), horizontally polarized	\$89,400.00	\$13,437.50	***System Notice: Estimate adjusted and locked because line has been superseded. ***	\$13,437.50	N,
Primary Antenna TBD	\$266,030.00	\$253,100.00		\$100,000.00	
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$3,125.00	N,
UHF - High Power Top Mount (200- 1000 kW), One station antenna, horizontally polarized	\$247,000.00	\$235,000.00	N/A	\$96,875.00	N
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$11,700.00	N/A	N/A	N,
Sub-total	\$492,270.00	\$383,200.00	N/A	\$127,550.50	N,
Total for all systems	\$2,305,354.00	\$2,077,399.60	N/A	\$820,381.71	N,

Components

Actual Information Description	File Name
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Information not provided.
Sweep test of existing antenna	Information not provided.

UHF - Lower Power Side Mount, One station antenna - medium power (50-200 kW), horizontally polarized	Component Description: Amount:	Balance of purchase price to vendor for Interim Antenna, plu added shipping, WF \$14,113.00
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.	
UHF - Lower Power Side Mount, One station antenna - medium power (50-200 kW), horizontally polarized	Component Description: Amount:	Down Payment for Interim Antenna WF \$13,437.50
Sweep test of existing antenna	Component Description: Amount:	Sweep tests, which actually for the new primary antenna. WFWA \$3,125.00
UHF - High Power Top Mount (200- 1000 kW), One station antenna, horizontally polarized	Component Description: Amount:	Down payment for Primary Antenna WFWA \$96,875.00
	Component Description: Amount:	Dummy to Delete Component N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Information not provided.	

Transmission Line

Cost Information

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

			Estimated		
Description	Predetermined Cost Estimate	Estimated Cost	Cost Justification	Actual Cost	Actual Justifi
Interim Transmission Line	\$32,450.00	\$30,800.00		\$22,704.00	
Flexible Air Transmission Line - dielectric, 3"	\$32,450.00	\$30,800.00	N/A	\$22,704.00	N,
Primary Transmission Line	\$6,250.00	\$6,250.00		\$6,250.00	
Primary Line Sweep	\$6,250.00	\$6,250.00	***System Notice: Estimate adjusted and locked because line has been superseded. ***Sweep needed to confirm acceptability of existing line on assigned channel.	\$6,250.00	N.
Primary Transmission Line	\$110,050.00	\$71,763.10		\$35,881.55	
Rigid Transmission Line - copper, 4 1 /16"	\$110,050.00	\$71,763.10	N/A	\$35,881.55	N,
Sub-total	\$148,750.00	\$108,813.10	N/A	\$64,835.55	N,
Total for all systems	\$2,305,354.00	\$2,077,399.60	N/A	\$820,381.71	N,

Components

Actual Information Description	File Name	
Flexible Air Transmission Line - dielectric, 3"	Component Description: Amount:	Interim Transmission Line \$22,704.00
Primary Line Sweep		
	Component Description: Amount:	Sweep of existing primary line on post transition channel 18 \$6,250.00
Rigid Transmission Line - copper, 4 1/16"	Component Description:	50% down payment (the new primary line
	Amount:	equipment and mater \$35,881.55

Tower Equipment and Rigging Costs

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 Justifi
Primary Tower TOWER	\$660,300.00	\$627,500.00		\$232,236.15	
Tall Tower (greater than 500')	\$210,500.00	\$200,000.00	N/A	\$99,525.15	N
Weather Delays	\$2,500.00	\$2,500.00	N/A	\$2,500.00	N,
Major tower reinforcement /modifications	\$421,000.00	\$400,000.00	N/A	\$119,461.00	N.
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$25,000.00	N/A	\$10,750.00	N,
Sub-total	\$660,300.00	\$627,500.00	N/A	\$232,236.15	N,
Total for all systems	\$2,305,354.00	\$2,077,399.60	N/A	\$820,381.71	N,

Components

Actual Information Description File Name

Tall Tower (greater than 500')		
	Component Description:	Down payment for Primary Antenna
	Amount:	Installation WFWA \$58,022.65
	Component Description:	50% down payment the installation of ne primary transmissior
	Amount:	line \$41,502.50
Weather Delays		
	Component Description:	Charges for tower cr due to delays cause by inclement weathe
	Amount:	\$2,500.00
Major tower reinforcement		
/modifications	Component Description:	Geotechnical survey and report for tower foundation analysis WFWA
	Amount:	\$6,125.00
	Component Description:	Down Payment for Tower Modification
	Amount:	services \$108,836.00
	Component Description:	Tower Reinforcing Analysis and Design

Component Description:	Balance due for Tow Structural Analysis. S WFWA Structural Analysis - Quote,
Amount:	attached. \$2,000.00
Component Description:	50 percent down payment for Structura Analysis and Report. See WFWA Structura Analysis - Quote, attached. \$2,000.00
Component Description: Amount:	Tower Mapping and Assessment \$6,750.00
	Amount: Component Description: Amount: Component Description:

Outside Professional Services

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 Cos
Outside Professional Services	\$202,034.00	\$184,386.50		\$70,330.82	
Other Legal Services	\$10,000.00	\$10,000.00	N/A	\$2,937.50	
Other Engineering Services	\$20,000.00	\$20,000.00	N/A	\$8,187.50	
Additional Field Engineering Service, 22 Days	\$24,000.00	\$24,000.00	N/A	\$6,934.98	
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	\$33,486.84	
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	\$675.00	
ASR modification (prepare FCC Form 854)	\$2,105.00	\$2,000.00	N/A	\$425.00	

Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	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	\$0.00	
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$0.00	
Prepare request for Special Temporary Authorization	\$2,050.00	\$1,686.50	A legal services invoice for STA was inadvertently included in this category, which caused the amount to be exceeded.	\$1,686.50	Invoice 2 inadvert
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	

Prepare	\$3,155.00	\$3,000.00	N/A	\$2,095.00	
engineering section of FCC Form 2100 (main), Construction Permit Application		÷-,		<i>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</i>	WFWA_KG fc
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$3,500.00	WFWA_KG fc
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	\$151.50	
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	\$2,500.00	
Project management of the transition	\$28,914.00	\$17,450.00	N/A	\$7,751.00	
Sub-total	\$202,034.00	\$184,386.50	N/A	\$70,330.82	
Total for all systems	\$2,305,354.00	\$2,077,399.60	N/A	\$820,381.71	

Components

Actual Information Description File Name

Other Legal Services		
	Component Description:	Other legal services related to the repack o WFWA
	Amount:	\$2,338.50
	Component Description:	Other legal services related to the repack WFWA
	Amount:	\$599.00
Other Engineering Services		
	Component Description:	Engineering services related to preparation 399 actual cost invoic and RF design
	Amount:	\$8,187.50
Additional Field Engineering		
Service, 22 Days	Component Description:	On Site Equipment Inventory and Facilitie survey WFWA
	Amount:	\$3,934.98
	Component Description:	TPO calculations, lay of transmitter and RF system for WFWA
	Amount:	\$2,400.00
	Component Description:	RF Field Engineering Services, Design of
	Amount:	transmitter facilities \$600.00
	Component Description:	On Site Equipment In and Facility Survey
	Amount:	\$3,934.98

Comprehensive coverage verification via field study, if needed	Component Description: Amount:	RF Field Engineering Services \$30,486.84
	Component Description: Amount:	Field Services for W \$3,000.00
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	Component Description: Amount:	Prepare and file FAA form 7460-1 for WFV \$550.00
	Component Description: Amount:	Services related to t preparation of FAA 2 \$125.00
ASR modification (prepare FCC Form 854)	Component Description: Amount:	Preparation and filin ASR \$425.00
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 - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	Form 2100 \$145.50

Prepare request for Special Temporary Authorization	Component Description: Amount:	Engineering for STA fc WFWA \$1,535.00
	Component Description: Amount:	Planning for STA \$151.50
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	Form 2100 \$95.00
	Component Description: Amount:	Engineering section of Form FCC Constructic Permit Application Ma Facility WFWA \$2,000.00
Perform engineering study for new channel assignment and antenna development	Component Description: Amount:	Engineering study for new channel assignme and antenna development WFWA \$3,500.00
Address transition timing and coordination issues w/ other stations and wireless	Component Description: Amount:	Timing issues related early transition under Mobile agreement \$151.50

Prepare and or review reimbursement form	Component Description:	Outside Professional Services and Prepare and Review FCC Forn 399 for reimbursemen
	Amount:	\$2,500.00
Project management of the transition	Component Description:	KGA inv #949-25 Forr 387 2018 Q2 UL20181116jgv1
	Amount:	\$150.00
	Component Description: Amount:	Legal Billing - Progres \$1,568.00
	Component Description:	Legal - Re Filing Form 399
	Amount:	\$1,967.50
	Component Description: Amount:	Legal advice related to Quarterly progress rep \$50.50
	Component Description:	Outside Project Management Services Form 399 Actual Cost
	Amount:	information for WFWA \$300.00
	Component Description:	Legal services related reimbursements
	Amount:	\$353.50
	Component Description:	Legal presentation relating to the FCC reimbursement proces
	Amount:	\$404.00

Component Description:

Component Description:

Amount:

Review FCC Public Notice \$56.00

Review Corresponden re filing date. \$39.00

Legal services announcing the FCC s visit audits \$56.00

Review FCC Public Notice \$56.00

Email regarding FCC webinar \$50.50

Email regarding FCC Auction Closing \$50.50

Outside Project Management Services Form 387 Progress Report 4Q2017 \$225.00

Review FCC channel assignment and Form 1876 \$101.00

Component Description: Amount:	Outside Project Management Services Form 387 Progress Report \$300.00
Component Description: Amount:	Legal services - Revie Public Notice on reimbursement \$112.00
Component Description: Amount:	Email regarding WFW channel reassignment \$202.00
Component Description: Amount:	Prepare and file form 387 progress report WFWA \$225.00
Component Description: Amount:	Legal consultation related to Quarterly Reports for WFWA \$50.50
Component Description: Amount:	Project management a preparation and submission of From 38 for 4Q2017 WFWA \$1,005.00
Component Description: Amount:	Email regarding TV incentive auction \$50.50
Component Description: Amount:	Review FCC Decision \$56.00

Component Description: Amount:	FCC construction perr \$468.00
Component Description: Amount:	Review and email re FCC Public Notice \$56.00
Component Description: Amount:	Review FCC Proceduı \$56.00

Other Expenses

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 Justifi
Other Expenses	\$73,550.00	\$73,000.00		\$8,519.49	
Bank Fee	\$5,000.00	\$5,000.00	Item does not have a predetermined cost	\$1,500.00	N.
MVPD Notification of Channel Change	\$2,000.00	\$2,000.00	Research and notify MVPDs of the channel change carrying station programming	\$125.00	N.
Develop and air announcement of upcoming channel change	\$0.00	\$0.00	N/A	N/A	N.
Equipment Storage	\$10,000.00	\$10,000.00	N/A	\$434.09	N
Equipment Delivery and Handling Charges	\$25,000.00	\$25,000.00	Shipping from factory to site for transmitter, primary antenna and interim antenna system.	\$1,212.90	N
Disposal Costs (for equipment and other waste, net of any salvage value)	\$15,000.00	\$15,000.00	N/A	N/A	N.
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	\$5,247.50	N.

Non-zoning permits	\$5,000.00	\$5,000.00	Local building permits for electrical work and tower modification work.	N/A	N.
Sub-total	\$73,550.00	\$73,000.00	N/A	\$8,519.49	N.
Total for all systems	\$2,305,354.00	\$2,077,399.60	N/A	\$820,381.71	N

Components

Actual Information Description	File Name	
Bank Fee	Component Description: Amount:	The is the amount of debit memo to pay th bank fee for WFWA \$1,500.00
MVPD Notification of Channel Change	Component Description: Amount:	Review of MVPD notifications \$125.00
Develop and air announcement of upcoming channel change	Information not provided.	
Equipment Storage	Component Description:	Storage of antenna a tower parts during rigging and tower modification work for WFWA
	Amount:	\$434.09

Equipment Delivery and Handling Charges	Component Description	Offloading and delive
	Component Description:	of antenna for WFW
	Amount:	\$120.00
	Component Description:	Freight for Interim Transmission Line
	Amount:	\$561.31
	Component Description:	Freight charges for shipping the Interim transmission line.
	Amount:	\$531.59
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.	
DTV Medical Facility Notification		
	Component Description:	Medical Facility Notifications for WF
	Amount:	\$3,310.00
	Component Description:	Preparation and distribution of Medic notifications and certification. Correct
	Amount:	Inv number. \$1,812.50
	Component Description:	Review of Medical
	Amount:	notifications \$125.00
Non-zoning permits	Information not provided.	

Grand Total

Cost Information

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$2,305,354.00	\$2,077,399.60	\$820,381.71

ations	Response
facility has ceased operating on its pre- tion channel.	No
nstruction of final facilities or all necessary difications are complete.	No
receipts for reimbursement have been mitted no further costs are expected to be urred. Note this will lock the Form 399 from her editing and begin close-out procedures the Fund Administrator.	No
ti n n n	facility has ceased operating on its pre- tion channel. Struction of final facilities or all necessary ifications are complete. eccipts for reimbursement have been nitted no further costs are expected to be rred. Note this will lock the Form 399 from er editing and begin close-out procedures

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. 	
		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.	
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.	
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.	
are, under penalty of perjury, that I am an rized representative of the above-named ant for the Authorization(s) specified above.	Jeffrey C Gehman Engineering Associate
	certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund. The above-named entity certifies that 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. 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.

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

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

9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.	
I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.	Jeffrey C Gehman Engineering Associate 11/27/2018

Attachments