Approved by OMB (Office of Management and Budget) 3060-1178

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID: **70287** | Service: **DTV** | Call Sign: **WTJX-TV** | Channel: **36 (UHF)**

File Number: **0000027602**

FRN: **0006610273** | Date Submitted: **01/21/2020**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
VIRGIN ISLANDS PUBLIC BROADCASTING SYSTEM Doing Business As: WTJX-TV	TANYA-MARIE SINGH PO Box 7879 CHARLOTTE AMALIE, ST. THOMAS, VI 00801 United States	+1 (340) 774-6255	tsingh@wtjx.org	Government Entity

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
William T Godfrey , Jr. . *Consulting Engineers Kessler and Gehman Associates, Inc.*	William T. Godfrey, Jr. Kessler and Gehman Associates, Inc. 507-D NW 60th Street Gainesville, FL 32607 United States	+1 (352) 332-3157	bill@kesslerandgehman.com

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	Replace transmitter and antenna. Replace transmission line if sweep tests fail. Acquire interim antenna system during construction and duration of the assigned phase. Map and analyze tower; design and implement modifications or replace if required.

Transmitters

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

Primary Transmitter

Add Transmitter Information

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 and Type	Manufacturer	
	Model	Diamond
	Year	2007
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	5 kW

Primary Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	EC708HP-BB D36
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	6.98 kW
	Justification for New Transmitter	The manufacturer of the existing solid state transmitter advises that the transmitter cannot be re-tuned to the assigned channel. See attachment.

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

Primary Transmitter

Other Transmitter Cost Not Listed

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

Antennas

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

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	Full Power
	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)	50.0 kW

Manufacturer	
Model	TLP-8 S180
Year	2007

Auxiliary Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Auxiliary (Backup)
	Description of Use	Auxiliary
	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	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	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)	42.9 kW
	Manufacturer	
	Model	JA/MS-8/36 SEC

	Year	2018
	Justification for New Antenna	The existing primary antenna is a single channel slotted coaxial which cannot accommodate the assigned channel.

Auxiliary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	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
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Single Channel
	Feed Line Size	3 1/8 inches inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power 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

Auxiliary Antenna

Other Antenna Cost Not Listed

Information not provided.

Primary Antenna

Existing Antenna Information

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?	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	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)	50.0 kW

Manufacturer	
Model	TLP-8 S180
Year	2013

Primary Antenna

New Antenna Costs

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?	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	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	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)	42.9 kW
	Manufacturer	
	Model	JA/MS-8/36 SEC

Year	2018
Justification for New Antenna	The existing primary antenna is a single channel slotted coaxial which cannot accommodate the assigned channel.

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	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
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Single Channel
	Feed Line Size	3 1/8 inches inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power 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

Primary 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

Primary Transmission Line

Existing Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Utilize Existing
	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 Line Manufacturer and Type	Manufacturer	ERI
	Type	Flexible Air
	Diameter	3 inches
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	350 feet per run

Primary Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
Sweep Tests	Sweep line to ensure performance on assigned channel

Auxiliary Transmission Line

Existing Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Auxiliary
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	
	Type	Flexible Air
	Diameter	3 inches
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	120 feet per run

Auxiliary Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Auxiliary (Backup)
	Description of Use	Auxiliary
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	Flexible Air
	Diameter	3 inches
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	120 feet per run
	Justification for New Transmission Line	It has been determined that the auxiliary tower must be replaced and it is not practical to store and reuse flex line once it is removed from the tower.

Auxiliary Transmission Line

Other Transmission Line Expenses Not Listed

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	Construct New
	Tower Use	Auxiliary (Backup)
	Description of Use	Auxiliary
	Ownership	Owned
	Is this tower consider Complex?	Terrain Constrained
	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	No
	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	1024797
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	18° 21' 19.0" N-
	Longitude (NAD83)	064° 56' 49.0" W-
	Overall Structure Height	115.16 feet
	Support Structure Height	100.06 feet

Ground Elevation Above Mean Sea Level (AMSL)	1479.97 feet
Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	VIRGIN ISLANDS PUBLIC TELEVISION SYSTEM
Date Constructed	01/01/1972

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
70026	WIUJ	FM

Auxiliary Tower

Tower Construction Costs

Section	Question	Response
Construct New Tower	Use	Auxiliary (Backup)
	Description of Use	Licensed AUX Facility
	Is this a request for upgraded equipment?	No
	Height	100.00 feet
	Justification for New Tower	Referring to the attached structural analysis just completed by ERI for the 100 ft self-support structure, the tower must be replaced. The tower is on a 1,400 ft ridge on an island in the Caribbean which makes it a complex tower.

Auxiliary Tower

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	Terrain constrained
Helicopter Services Required	Are helicopter services required?	No

Auxiliary Tower

Other Tower Expenses Not Listed

Name	Description
Tower Inspection and Structural Analysis	On site inspection for mapping and performance of initial structural analysis

Primary Tower

Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Construct New
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Is this tower consider Complex?	Terrain Constrained
	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	No
	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	1244135
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	18° 21' 20.8" N-
	Longitude (NAD83)	064° 56' 51.5" W-
	Overall Structure Height	255.90 feet
	Support Structure Height	255.90 feet
	Ground Elevation Above Mean Sea Level (AMSL)	1462.25 feet
	Structure Type	TOWER - Free Standing or Guyed Structure

Tower Owner	Virgin Islands Public Television System
Date Constructed	02/06/2006

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
184714	WTJX-FM	FM

Primary Tower

Tower Construction Costs

Section	Question	Response
Construct New Tower	Use	Primary (Main)
	Description of Use	N/A
	Is this a request for upgraded equipment?	No
	Height	250.00 feet
	Justification for New Tower	Referring to the attached structural analysis just completed by ERI for the 250 ft self-support structure, the tower must be replaced. The tower is on a 1,400 ft ridge on an island in the Caribbean which makes it a complex tower.

Primary Tower

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	Terrain constrained
Helicopter Services Required	Are helicopter services required?	No

Primary Tower

Other Tower Expenses Not Listed

Name	Description
Tower Inspection and Structural Analysis	On site inspection for mapping and performance of initial structural analysis

Outside Professional Services Costs

Section	Question	Response
Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	1500
	Explanation	It will be necessary to schedule and coordinate multiple vendors, complete progress reports, and update Schedule 399. Station does not have available personnel or personnel trained in project management for such complex 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	Yes
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes

	Quantity	1
	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting Services	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	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	Yes
	Additional Field Engineering Service	Yes

Number of Days	30
Justification	It will be necessary to survey the site, plan the equipment, develop specifications for purchasing, and oversee multiple vendor RF projects. Station does not have available personnel or personnel trained in such services.

Outside Professional Services Costs

Other Professional Services Expenses Not Listed

Name	Description
Other Legal Services	Outside legal services not included in any other 399 section of OPS
Other Engineering Services	Outside engineering services not included in any other 399 section of OPS

Other Expenses

Section	Question	Response
AM Pattern Disturbance	Is an Impact Study needed?	Yes
	Is Remediation needed?	Yes
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 Expenses

Other Expenses Not Listed

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
Primary Transmitter EC708HP-BB D36	**$489,381.05**	**$403,959.00**		**$163,061.14**	
Additional Interior RF System	***$140,000.00***	$140,000.00	N/A	N/A	N/A
3" Rigid Conduit and Wiring (Cost per foot)	$5,200.00	$4,900.00	N/A	$400.14	N/A
Transformer 3 phase /480v - 150 KVA	$25,550.00	$24,300.00	N/A	N/A	N/A
Switchgear - industrial 800 amp	$38,200.00	$36,300.00	N/A	N/A	N/A
UHF - Air Cooled Solid State Transmitter 6.98 kW	***$18,931.05***	$18,931.05	Balance referenced to the TBD component	$8,133.05	N/A
Standby Exciter and Switch	***$25,000.00***	$25,000.00	N/A	N/A	N/A

UHF - Air Cooled Solid State Transmitter 4 - 6 kW	$236,500.00	$154,527.95	***System Notice: Estimate adjusted and locked because line has been superseded. ***	$154,527.95	N/A
Sub-total	$489,381.05	$403,959.00	N/A	$163,061.14	N/A
Total for all systems	$3,811,138.05	$3,494,295.00	N/A	$745,723.39	N/A

Components

Actual Information Description	File Name	
Additional Interior RF System	Information not provided.	
3" Rigid Conduit and Wiring (Cost per foot)	**Component Description:** **Amount:**	Elec wire for Transmitter Installation $400.14
Transformer 3 phase/480v - 150 KVA	Information not provided.	
Switchgear - industrial 800 amp	Information not provided.	
UHF - Air Cooled Solid State Transmitter 6.98 kW	**Component Description:** **Amount:** **Component Description:** **Amount:**	Comark S10269-4 Transmitter v190530jgv1 $7,810.55 Comark S10269-4 TX training v190530jgv1 $322.50

Standby Exciter and Switch	Information not provided.	
UHF - Air Cooled Solid State Transmitter 4 - 6 kW	**Component Description:** **Amount:**	45 percent progress payment before shipment for new transmitter $73,197.45
	Component Description: **Amount:**	50% down payment $81,330.50

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 JA /MS-8/36 SEC	**$57,590.00**	**$55,650.00**		**$21,091.76**	
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/A
Side mount brackets for high power antennas (if not included in antenna base cost)	$23,150.00	$22,000.00	N/A	$1,266.76	N/A
Elbow complex, single channel, at antenna input, per 3 1/8. feedline (if needed)	$7,600.00	$7,400.00	N/A	N/A	N/A
Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	$4,975.00	N/A

UHF - High Power, Side Mount, basic slot antenna, 43 kW input, directional,, horizontally polarized	***$14,850.00***	$14,850.00	***System Notice: Estimate adjusted and locked because line has been superseded. ***	$14,850.00	check
Auxiliary Antenna JA /MS-8/36 SEC	**$127,740.00**	**$125,800.00**		**$19,825.00**	
UHF - High Power, Side Mount, basic slot antenna, 43 kW input, directional,, horizontally polarized	***$85,000.00***	$85,000.00	N/A	$14,850.00	N/A
Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	$4,975.00	N/A
Elbow complex, single channel, at antenna input, per 3 1/8. feedline (if needed)	$7,600.00	$7,400.00	N/A	N/A	N/A

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/A
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/A
Sub-total	$185,330.00	$181,450.00	N/A	$40,916.76	N/A
Total for all systems	$3,811,138.05	$3,494,295.00	N/A	$745,723.39	N/A

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.	
Side mount brackets for high power antennas (if not included in antenna base cost)	**Component Description:** **Amount:**	Adjustable Mounting Bracket for Primary Antenna installation on taper tower, including freight $1,266.76

Elbow complex, single channel, at antenna input, per 3 1/8. feedline (if needed)	Information not provided.
Sweep test of existing antenna	**Component Description:** Balance due for Sweep **Amount:** $2,487.50 **Component Description:** 50% down payment **Amount:** $2,487.50
UHF - High Power, Side Mount, basic slot antenna, 43 kW input, directional,, horizontally polarized	**Component Description:** 50% down payment **Amount:** $7,425.00 **Component Description:** Balance due for Antenna **Amount:** $7,425.00
UHF - High Power, Side Mount, basic slot antenna, 43 kW input, directional,, horizontally polarized	**Component Description:** Balance due for Antenna **Amount:** $7,425.00 **Component Description:** 50% down payment **Amount:** $7,425.00
Sweep test of existing antenna	**Component Description:** Balance due for Sweep **Amount:** $2,487.50 **Component Description:** 50% down payment **Amount:** $2,487.50

Elbow complex, single channel, at antenna input, per 3 1/8. feedline (if needed)	Information not provided.
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.

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
Primary Transmission Line	**$6,400.00**	**$6,400.00**		**$0.00**	
Sweep Tests	***$6,400.00***	$6,400.00	N/A	N/A	N/A
Auxiliary Transmission Line	**$7,080.00**	**$3,194.00**		**$3,194.00**	
Flexible Air Transmission Line - dielectric, 3"	$7,080.00	$3,194.00	Jampro quote number MF 030218D-R1 attached	$3,194.00	N/A
Sub-total	$13,480.00	$9,594.00	N/A	$3,194.00	N/A
Total for all systems	$3,811,138.05	$3,494,295.00	N/A	$745,723.39	N/A

Components

Actual Information Description	File Name
Sweep Tests	Information not provided.
Flexible Air Transmission Line - dielectric, 3"	**Component Description:** 50% down payment **Amount:** $1,597.00 **Component Description:** Balance Due for transmission line **Amount:** $1,597.00

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
Auxiliary Tower TOWER	**$0.00**	**$0.00**		**$0.00**	
Primary Tower TOWER	**$0.00**	**$0.00**		**$0.00**	
Primary Tower	**$1,246,000.00**	**$1,225,000.00**		**$8,000.00**	
Tower Inspection and Structural Analysis	***$25,000.00***	$25,000.00	N/A	$8,000.00	N/A
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	$421,000.00	$400,000.00	The tower is on a 1,400 ft ridge on an island in the Caribbean which makes it very difficult to access and rig. Also, the structure is within a tower influence zone (Class III).	N/A	N/A

New tower	***$800,000.00***	$800,000.00	Widelity: Costs may be higher for tower sites with difficult soil or other site conditions.	N/A	N/A
Auxiliary Tower	**$965,892.00**	**$944,892.00**		**$434,325.00**	
New tower	***$519,892.00***	$519,892.00	See attached /uploaded PDF files titled "TEP DB CI-380023 v191112jgv1.pdf" and "TEP DB CI-388325 v200121jgv1.pdf"	$426,825.00	N/A
Tower Inspection and Structural Analysis	***$25,000.00***	$25,000.00	N/A	$7,500.00	N/A
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	$421,000.00	$400,000.00	The tower is on a 1,400 ft ridge on an island in the Caribbean which makes it very difficult to access and rig. Also, the structure is within a tower influence zone (Class III).	N/A	N/A
Sub-total	$2,211,892.00	$2,169,892.00	N/A	$442,325.00	N/A

Total for all systems	$3,811,138.05	$3,494,295.00	N/A	$745,723.39	N/A

Components

Actual Information Description	File Name	
Tower Inspection and Structural Analysis	**Component Description:** **Amount:**	ERI 50363 v190729jgv2 $3,000.00
	Component Description: **Amount:**	Site Visit for Tower Proposal split between Primary and Auxiliary towers $2,500.00
	Component Description: **Amount:**	Site Visit for Tower Proposal split between Primary and Auxiliary towers $2,500.00
	Component Description: **Amount:**	Structural Analysis for Primary tower $3,000.00
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	Information not provided.	
New tower	Information not provided.	

New tower	**Component Description:**	TEP DB CI-388325 v200121jgv1
	Amount:	$53,500.00
	Component Description:	TEP DB CI-380023 v191112jgv1
	Amount:	$373,325.00
Tower Inspection and Structural Analysis	**Component Description:**	Site Visit for Tower Proposal split between Primary and Auxiliary towers
	Amount:	$2,500.00
	Component Description:	Structural analysis for auxiliary tower
	Amount:	$2,500.00
	Component Description:	ERI 50363 v190729jgv2
	Amount:	$2,500.00
	Component Description:	Site Visit for Tower Proposal split between Primary and Auxiliary towers
	Amount:	$2,500.00
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	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
Outside Professional Services	**$651,065.00**	**$443,900.00**		**$70,667.52**	
Other Legal Services	***$16,000.00***	$16,000.00	Outside legal services not included in other 399 OPS sections	$15,830.00	N/A
Other Engineering Services	***$190,000.00***	$190,000.00	Outside Engineering Services not included in any 399 OPS sections	$24,505.50	N/A
Additional Field Engineering Service, 30 Days	***$60,000.00***	$60,000.00	N/A	$7,348.52	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
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	$550.00	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	$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
Prepare request for Special Temporary Authorization	$2,050.00	$1,650.00	N/A	$1,650.00	N/A

RF Consulting Engineer Fees-Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	$1,580.00	$1,500.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	$1,580.00	$1,500.00	N/A	N/A	N/A
Address transition timing and coordination issues w/ other stations and wireless	$2,630.00	$2,500.00	N/A	$120.00	N/A
Prepare and or review reimbursement form	$2,630.00	$15,000.00	The cost estimate includes the initial 399 amendment, anticipated subsequent 399 amendments, and Actual Cost invoice prep and submission by KGA.	$9,013.50	N/A

Project management of the transition	$237,000.00	$25,000.00	It is nor realized that most engineering and legal services will not fall under Project Management so most of the PM budget has been transferred to new sections: Other Engineering Services and Other Legal Services	$1,650.00	N/A
Perform engineering study for new channel assignment and antenna development	$7,360.00	$7,000.00	N/A	$7,000.00	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	$3,155.00	$3,000.00	N/A	$3,000.00	N/A
RF Consulting Engineer Fees-Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	$2,105.00	$2,000.00	N/A	N/A	N/A
Sub-total	$651,065.00	$443,900.00	N/A	$70,667.52	N/A

Total for all systems	$3,811,138.05	$3,494,295.00	N/A	$745,723.39	N/A

Components

Actual Information Description	File Name	
Other Legal Services	**Component Description:**	Other repack legal services
	Amount:	$210.00
	Component Description:	Repack legal services
	Amount:	$399.00
	Component Description:	Repack legal services
	Amount:	$480.00
	Component Description:	GSB 709558 v190520pmv1
	Amount:	$90.00
	Component Description:	GSB inv #704340 Various legal UL20190415jgv1
	Amount:	$1,290.00
	Component Description:	GSB 716803 v191015jgv1
	Amount:	$364.75
	Component Description:	GSB 720587 v191015jgv1
	Amount:	$450.00

Component Description:	GSB 689065 v190520pmv1
Amount:	$686.50
Component Description:	GSB 720220 v191015jgv1
Amount:	$120.00
Component Description:	Foster Garvey 2736773 v200121jgv1
Amount:	$2,508.00
Component Description:	Foster Garvey 2732781 v200121jgv1
Amount:	$1,380.00
Component Description:	Repack legal services
Amount:	$1,942.50
Component Description:	GSB 662399 v190520pmv1
Amount:	$960.00
Component Description:	Repack legal services
Amount:	$360.00
Component Description:	GSB inv #706641 Various legal UL20190415jgv1
Amount:	$120.00

Component Description:	SWM 20289 v190520pmv1
Amount:	$690.00
Component Description:	Other repack legal services
Amount:	$30.00
Component Description:	GSB 696677 v190520pmv1
Amount:	$120.00
Component Description:	Repack legal services
Amount:	$779.25
Component Description:	GSB 688485 v190520pmv1
Amount:	$720.00
Component Description:	GSB 694130 v190520pmv1
Amount:	$510.00
Component Description:	GSB 686991 v190520pmv1
Amount:	$150.00
Component Description:	GSB 691542 v190520pmv1
Amount:	$780.00
Component Description:	Repack legal services
Amount:	$690.00

	Component Description:	Other repack legal services
	Amount:	$960.00
Other Engineering Services		
	Component Description:	R Dickinson 00118 v190517jgv1
	Amount:	$1,840.00
	Component Description:	KGA 111-93 v191018jgv1
	Amount:	$1,050.00
	Component Description:	KGA 111-109 v191111jgv1
	Amount:	$300.00
	Component Description:	KGA 111-82 v191018jgv1
	Amount:	$1,775.50
	Component Description:	KGA 111-95 v191018jgv1
	Amount:	$1,325.00
	Component Description:	KGA 111-86 v191018jgv1
	Amount:	$1,625.00
	Component Description:	Preparation of transmitter-antenna bids for WTJX, review of bids and recommendation for award
	Amount:	$7,400.00

Component Description:	R Dickinson 00115 v190517jgv1
Amount:	$640.00
Component Description:	KGA 111-105 v191018jgv1
Amount:	$200.00
Component Description:	Preparation of transmitter-antenna bids for WTJX, review of bids and recommendation for award
Amount:	$5,625.00
Component Description:	KGA 111-88 v191018jgv1
Amount:	$625.00
Component Description:	KGA 111-102 v191018jgv1
Amount:	$800.00
Component Description:	KGA 111-99 v191018jgv1
Amount:	$1,300.00
Component Description:	On site equipment inventory and facilities survey
Amount:	$7,348.52

Additional Field Engineering Service, 30 Days	**Component Description:** **Amount:** **Component Description:** **Amount:**	Added invoice to this component by mistake. Please reject or disregard. N/A On site equipment inventory and facilities survey $7,348.52
RF Exposure Measurements	Information not provided.	
Comprehensive coverage verification via field study, if needed	Information not provided.	
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	**Component Description:** **Amount:**	KGA 111-83 v191018jgv1 $550.00
ASR modification (prepare FCC Form 854)	Information not provided.	
Attorney Fees - Prepare and File request for Special Temporary Authorization	Information not provided.	
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	Information not provided.	
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.	

Prepare request for Special Temporary Authorization	**Component Description:** **Amount:**	Legal STA for phase change $150.00
	Component Description: **Amount:**	KGA 111-78 v191018jgv1 $1,500.00
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	
Address transition timing and coordination issues w/ other stations and wireless	**Component Description:** **Amount:**	GSB 727546 v191111jgv1 $120.00
	Component Description: **Amount:**	GSB 698928 v191016jgv2 $300.00
	Component Description: **Amount:**	Legal advice related to changing the phase and timing of the transition $510.00
Prepare and or review reimbursement form	**Component Description:** **Amount:**	KGA 111-87 v191018jgv1 $150.00

Component Description:	KGA 111-96 v191018jgv1
Amount:	$2,555.00
Component Description:	KGA 111-81 v191018jgv1
Amount:	$371.00
Component Description:	KGA 111-92 v191018jgv1
Amount:	$465.00
Component Description:	KGA 111-103 v191018jgv1
Amount:	$225.00
Component Description:	KGA 111-80 v191018jgv1
Amount:	$1,722.50
Component Description:	KGA 111-106 v191018jgv1
Amount:	$125.00
Component Description:	KGA 111-85 v191018jgv1
Amount:	$325.00
Component Description:	Prepare and or review reimbursement form based on lump sum
Amount:	$2,500.00
Component Description:	KGA 111-97 v191018jgv1
Amount:	$250.00

Component Description:	KGA 111-106 v191111jgv1
Amount:	$125.00
Component Description:	KGA 111-90 v191018jgv1
Amount:	$325.00

Project management of the transition	**Component Description:**	KGA 111-79 v191018jgv1
	Amount:	$150.00
	Component Description:	KGA 111-84 v191018jgv1
	Amount:	$150.00
	Component Description:	KGA 111-69 v191018jgv1
	Amount:	$300.00
	Component Description:	KGA 111-70 v191018jgv1
	Amount:	$225.00
	Component Description:	KGA 111-107 v191111jgv1
	Amount:	$150.00
	Component Description:	KGA 111-89 v191018jgv1
	Amount:	$150.00
	Component Description:	KGA 111-98 v191018jgv1
	Amount:	$150.00
	Component Description:	KGA 111-75 v191018jgv1
	Amount:	$150.00
	Component Description:	Prepare schedule 387 progress report for 1Q2018
	Amount:	$225.00

Perform engineering study for new channel assignment and antenna development	**Component Description:** **Amount:**	Perform engineering study for new channel assignment and antenna development based on lump sum $7,000.00
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	**Component Description:** **Amount:**	Prepare engineering section of FCC Form 2100 (main), Construction Permit Application based on lump sum $3,000.00
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
Other Expenses	**$259,990.00**	**$285,500.00**		**$25,558.97**	
AM Pattern Disturbance -- Remedy	$21,050.00	$40,000.00	Required to protect patterns for two AM stations: 1) WSTA-AM located 2.50 km from WTJX site 2) WVWI-AM located 2.39 km from WTJX site	N/A	N/A
MVPD Notification of Channel Change	***$2,000.00***	$2,000.00	N/A	$1,545.00	N/A
Develop and air announcement of upcoming channel change	***$5,000.00***	$5,000.00	N/A	N/A	N/A
Equipment Storage	***$25,000.00***	$25,000.00	N/A	N/A	N/A

Equipment Delivery and Handling Charges	***$137,500.00***	$137,500.00	See attached quote for freight from ERI for the two new towers. Based on shipping 10 open top containers 40 feet in length each with the required steel for the new towers.	$13,443.81	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	***$25,000.00***	$25,000.00	N/A	N/A	N/A
Non-zoning permits	***$25,000.00***	$25,000.00	N/A	$8,035.16	N/A
DTV Medical Facility Notification	$11,550.00	$11,000.00	N/A	$2,535.00	N/A
AM Pattern Disturbance -- Impact study	$7,890.00	$15,000.00	Required to protect patterns for two AM stations: 1) WSTA-AM located 2.50 km from WTJX site 2) WVWI-AM located 2.39 km from WTJX site	N/A	N/A
Sub-total	$259,990.00	$285,500.00	N/A	$25,558.97	N/A

Total for all systems	$3,811,138.05	$3,494,295.00	N/A	$745,723.39	N/A

Components

Actual Information Description	File Name
AM Pattern Disturbance -- Remedy	Information not provided.
MVPD Notification of Channel Change	**Component Description:** KGA 111-77 v191018jgv1 **Amount:** $1,545.00
Develop and air announcement of upcoming channel change	Information not provided.
Equipment Storage	Information not provided.
Equipment Delivery and Handling Charges	**Component Description:** Freight, shipping transmitter to St Thomas USVI **Amount:** $9,385.46 **Component Description:** Freight for Primary and Auxiliary antenna and Auxiliary Line **Amount:** $4,058.35
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.

Non-zoning permits	**Component Description:** **Amount:**	DPNR 204-19 v191016jgv1 $4,210.16
	Component Description: **Amount:**	KGA 111-91 v191018jgv1 $3,825.00
DTV Medical Facility Notification	**Component Description:** **Amount:**	DTV Medical Facility Notification $2,535.00
AM Pattern Disturbance -- Impact study	Information not provided.	

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	$3,811,138.05	$3,494,295.00	$745,723.39

Reimbursement Status

Question	Response
The facility has ceased operating on its pre-auction channel.	Yes
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.	
	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. 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).
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 C Gehman** *Engineering Associate* 01/21/2020

Certification

Section	Question	Response
Submission of Actual Cost Documentation Statements	WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).	
	1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct. 3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.	

4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (full power and Class A stations) and/or otherwise modify a television station’s facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD) .
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 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* 01/21/2020

Attachments