

Federal Communications Commission

# (REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility	2174 S	Service: DTV	Call	WMTJ	Channel: 15 (UHF)
ID:			Sign:		
File	000002	8744			
Number:					
FRN: <b>00</b>	01731298	Date	06/13		
		Submitted:	/2019		

#### Applicant Name, Type, and Contact Information

### Applicant Information

Applicant	Address	Phone	Email	Applicant Type
SISTEMA UNIVERSITARIO ANA G. MENDEZ, INC. Doing Business As: SISTEMA UNIVERSITARIO ANA G. MENDEZ, INC.	P. O. BOX 21345 SAN JUAN, PR 00928 United States	+1 (787) 766- 2600	ca_adiaz@suagm. edu	Private Not- for-Profit Educational Institution

#### 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
	<b>Ariel Diaz</b> Engineering VP SISTEMA UNIVERSITARIO ANA G. MENDEZ, INC.	ARIEL DIAZ Sistema-TV PO Box 21345 San Juan, PR 00928 United States	+1 (787) 766-2600	ca_adiaz@suagm. edu

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.	No
	Briefly describe transition plan	File CP, Perform Tower inspection and orders for equipment. File STA, Field Survey and Design. Install interim antenna. Remove present antenna. New equipment installation. Send notifications. File License. Narrative Attached.

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

Auxiliary	Add Transmitter Informat	ansmitter Information			
Transmitter	Section	Question	Response		
	Existing Transmitter Description	Type of change	Purchase New		
		Use	Auxiliary (Backup)		
		Description of Use	Backup Transmitter		
		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	DT835A		
		Year	2000		
		Туре	Solid State		
		Solid State Cooling	Air Cooled		
		Solid State Power Capacity	3 kW		

Auxiliary	New Transmitter Costs			
Transmitter	Section	Question	Response	
	New Transmitter	Use	Auxiliary (Backup)	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	Yes	
		Manufacturer		
		Model	MPTV-PRLX-U3	
		Transmitter Type	Solid State	
		Solid State Cooling	Liquid Cooled	
		Solid State Power capacity	5 kW	
		Justification for New Transmitter	The original manufacturer ADC Telecommunication is no longer on the market. The successor manufacturer does not support this product	

Auxiliary	Other Transmitter Costs	litter Costs				
Transmitter	Section	Question	Response			
	Electrical Service	Service Entrance (3 phases 800A 208V)	No			
		Switchgear (industrial 800 amp)	No			
		Transformer (480V)	No			
		Power	N/A			
		Rigid Conduit and Wiring	Yes			
		Size	2 inches			
		Length	40.0 feet			
		Other Electrical Service	Yes			

	Description	Electrical Panel Distribution modifications, circuit breakers, rewiring. Surge Protector, Voltage Regulator and UPS are required for the new transmitter installation
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Auxiliary	Other Transmitter Cost Not Listed		
Transmitter	Name	Description	
	· · · · · · · · · · · · · · · · · · ·	Due to the particular conditions of the island, special maritime transportation is required to a port	
	Equipment Crating	Equipment Crating for Ocean Shipping	

Motorized Switch	Extra cost for replace an included (3) port Manual Patch Panel on the transmitter proposal as the existing transmission system
Upgraded Mask Filter from 6 to 8 poles	Charge to replace an included RF Mask Filter on the transmitter proposal with 8 pole filter

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	CTT-U DCX-1 Millenium	
		Year	2004	
		Туре	Inductive Output Tube	
		IOT Power Type	Single	
		Power Capacity	20 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	MPTV- PRLX-U6	
		Transmitter Type	Solid State	
		Solid State Cooling	Liquid Cooled	
		Solid State Power capacity	9.7 kW	
		Justification for New Transmitter	Hitachi Kokusai Electric Comark LLC (HKCM) informed us that they will not be able to re- channel our DCX transmitter. The request for a solid state transmitter is because the cost of a new IOT DCX paragon transm. is considerably higher than a Solid State	

# Primary Other Transmitter Costs

Transmitter	Section	Question	Response
	Electrical Service	Service Entrance (3 phases 800A 208V)	No
		Switchgear (industrial 800 amp)	No
		Transformer (480V)	No
		Power	N/A
		Rigid Conduit and Wiring	Yes
		Size	2 inches
		Length	200.0 feet
		Other Electrical Service	Yes
		Description	Distribution panel modification and rewiring for new transmitters Surge Protector, Voltage Regulator and UPS are required for the new transmitter installation
	HVAC Service	Does the replacement transmitter require HVAC Service?	No
		Туре	N/A
		Size	N/A
		Other Size	N/A
	Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	Yes

	Size	164.0 square feet
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 Description Name Extra cost for replace an included (3) port **Transmitter Motorized Switch** replacement Manual Patch Panel on the transmitter proposal as the existing transmission system **Maritime Transportation** Due to the particular conditions of the island, special maritime transportation is required to a port Upgraded RF Mask Filter to 8 pole Charge to replace an included RF Mask Filter on the transmitter proposal with 8 pole filter **Equipment Crating** Equipment Crating for Ocean Shipping System Design and Site Survey System Design based on Site Survey to prepare an as built and present modifications to accommodate the new transmitters, Filters, RF components. Prepare electrical distribution based on the existing and new components associated with the transition

#### Other Transmitter Cost Not Listed

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

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?	Yes	
	Existing Antenna Manufacturer and Type	Class	Full Power	
		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)	178.0 kW	

Manufacturer	
Model	TFU- 16DSC-R S300
Year	2008

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?	Yes	
	New Antenna Manufacturer and Types	Class	Full Power	
		Mounting	Side 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)	174.0 kW	
		Manufacturer		

Model	TFU- 16DSC-R S300
Year	2017
Justification for New Antenna	Narrowband Slotted coaxial antenna no suited for rechannelin

# Primary Other Antenna Costs

# Antenna

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

Primary Antenna	Other Antenna Cost Not Listed		
	Name	Description	
	Maritime Transportation	Due to the particular conditions of an island, special maritime transportation is required from port to port	

Interim Antenna	New Antenna Costs			
	Section	Question	Response	
	New Antenna Description	Use	Interim	
		Description of Use	N/A	
		Change Type	Purchase New	
		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?	Yes	
	New 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/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)	178.0 kW	
		Manufacturer		
		Model	TFU- 16DSC-R S300	

Year
Justification for New Antenna

# Interim Other Antenna Costs

Antenna	Section	Question	Response
	Elbow Complex	Do you require the separate purchase of the Elbow Complex?	No
		Broadband or Single Channel?	N/A
		Feed Line Size	N/A
	Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	Yes
	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 transmission line and antenna?	Yes

# Interim Other Antenna Cost Not Listed Antenna Name

Name	Description
Maritime Transportation	Due to the particular conditions of an island, special maritime transportation is required from port to port

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

Primary Transmissio	Existing Transmission Line			
	n 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 Line Manufacturer and Type	Manufacturer		
		Туре	Rigid	
		Diameter	4 1/16 inches	
		Other Diameter	N/A	
		Segment Length	19 1/2 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	240 feet per run	

Primary Transmissio	New Transmission 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?	No	
		Туре	Rigid	
		Diameter	4 1/16 inches	
		Other Diameter	N/A	
		Segment Length	20 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	280 feet per run	
		Justification for New Transmission Line	Existing Transmission line can't be re-used because it have a prohibited length for the re-packed channel	

Primary	Other Transmission Line Expenses Not List	
Transmissio	n,Line	Description

5101	Name	Description
	Test for Reducer	Test transition of 4 inch at 50 ohms
	Reducer 6 to 4 inch	Reducer for antenna input 6 to 4 inch reducer at 50 ohms

Interim	New Transmission Line			
Transmissio	n Line Section	Question	Response	
	New Transmission Line Costs	Use	Interim	
		Description of Use	N/A	
		Change Type	Purchase New	
		Туре	Flexible Air	
		Diameter	4 inches	
		Segment Length	N/A	
		Other Segment Length		
		Number of parallel runs	1	
		Length	240 feet per run	
		Justification for New Transmission Line	Interim transmission Line for the Interim antenna, to operate while the existing antenna and transmission line are removed and the final antenna with its transmission line for the new channel are installed on the tower	

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

Primary 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?	No
		One or more FM, AM or TV radio broadcaster(s)	N/A
		Others Types of Users	N/A
		Is tower documented for structural analysis?	Yes
		Is tower compliant with Rev G?	Yes
	Existing Tower Structure Registration	Do you have a tower registration number?	No
		ASR Number	
	Coordinates (NAD83 ( North American Datum of	Latitude (NAD83)	18° 18' 27.8" N-
	1983))	Longitude (NAD83)	065° 47' 41.5" W-
		Overall Structure Height	198.00 feet
		Support Structure Height	198.00 feet
		Ground Elevation Above Mean Sea Level (AMSL)	3297.00 feet

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Sistema Universitario Ana G Mendez Inc.
Date Constructed	10/01/2008

# **Tower Modification Costs** Primary Tower

Tower

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

#### **Tower Rigging Costs** Primary

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 Information not provided.

Outside Professional	Section	Question	Response
	I Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	618
		Explanation	External resource are required for management this project. The technical and administrative personnel are occupied in daily operations of the station. The Budgeting's constrains of the NCE (PBS) TV station prevent reassign functions or increase personnel
	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
	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	No
	FAA Consultation (including preparation of FAA Form 7460)	No
	Negotiation of Lease and other Matter for Shared Locations	Yes
	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	No

Justification N/A	Number of Days	N/A
	Justification	N/A

# Outside Other Professional Services Expenses Not Listed

Professional Services Costsided.

Other	Section	Question	Response
Expenses	AM Pattern Disturbance	Is an Impact Study needed?	No
		Is Remediation needed?	No
	Facility Expenses	Name	N/A
		Other Distributed Transmission System Expenses Not listed	N/A
		Name	N/A
		Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
	Permit and Filing Costs	Local Zoning	No
		Non-zoning permits	No
		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**

Other Expenses	Other Expenses Not Listed				
	Name	Description			
	Local Sales and Use Taxes	Sales taxes based on 11.5 percent and service taxes based on 4 percent This amount corresponds to a sales and use tax to be paid by any who imports tangible personal property into Puerto Rico or provides services in relation to any property from abroad			

# 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 Cost Justification
Primary Transmitter MPTV-PRLX- U6	\$601,939.04	\$457,239.04		\$380,970.00	
System Design and Site Survey	\$15,300.00	\$15,300.00	System Design based on Site Survey to prepare an as built and present modifications to accommodate the new transmitters, Filters, RF components. Prepare electrical distribution based on the existing and new components associated with the transition. Mechanical, Electrical and RF Design for the new transmitter	\$13,770.00	N/A

Upgraded RF Mask Filter to 8 pole	\$15,000.00	\$15,000.00	Charge to replace an included RF Mask Filter of 6 pole on the transmitter proposal with 8 pole	\$13,500.00	N/A
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	\$494,500.00	\$350,000.00	Solid state transmitter's request, the cost of a new IOT transmitter is higher than a SS (attached P3245-R1 WMTJ Main Tx ). (DA 16- 1164 MB Docket No. 16- 306 GN Docket No. 12- 268). One power-level step up in transmitter	\$315,000.00	We are eliminating an invoice that indicate - need more information - and including invoice with quotation
2" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$5,000.00	N/A	N/A	N/A

Other	\$36,300.00	\$36,300.00	Surge	\$25,781.00	N/A
Electrical	φ <b>30,300.00</b>	ψυ0,000.00	Suppressor	Ψ20,701.00	IN/A
Service:			\$5,250.00,		
Distribution			Voltage		
panel			Regulator		
modification			\$23,395.00		
and rewiring			(options		
for new			included on		
transmitters			the Comark		
			Transmitter		
Surge			WMTJ		
Protector,			Parallax U6		
Voltage					
Regulator			10kW revised		
and UPS are			options), and		
required for			UPS		
the new			\$46,912.00		
transmitter			(Quote from		
installation			CLARY Corp)		
			are required		
			for new		
			transmitter		
			installation		
Other	\$21,284.04	\$21,284.04	The heat	N/A	N/A
Building			exchangers		
Addition Size:			for the		
164.0			transmitter are		
			longer than		
			the existing		
			ones. To		
			accommodate		
			them in the		
			room it will be		
			necessary to		
			relocate the		
			intake and		
			exhaust		
			ventilation		
			walls and		
			replace the		
			steel louvers		
			with the metal		
			ducts around		
			the units. The		
			load walls to		
			be modified		
			are concrete		
			and have a		
			this lange of C		
			thickness of 8 "deep.		

Auxiliary Transmitter MPTV-PRLX- U3	\$323,895.00	\$275,355.00	options, Part No. NS1	\$246,859.50	
Equipment Crating	\$4,500.00	\$4,500.00	Equipment Crating required for Maritime Transportation Quotation attached WMTJ Parallax U6 10kW revised	\$4,050.00	N/A
Maritime Transportation	\$5,020.00	\$5,020.00	Due to the particular conditions of an island, special maritime transportation is required from port to port	\$4,518.00	N/A
Transmitter Motorized Switch replacement	\$4,835.00	\$4,835.00	Extra cost for replace an included (3) port Manual Patch Panel on the transmitter proposal with a motorized Switch as the existing transmission system	\$4,351.00	N/A

Equipment Crating	\$4,500.00	\$4,500.00	Equipment Crating required for Maritime Transportation Quotation attached P2986A-R1 AUX WMTJ Parallax U3 5kW Proposal Part No. NS1	\$4,050.00	N/A
2" Rigid Conduit and Wiring (Cost per foot)	\$1,040.00	\$1,000.00	N/A	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 4.9 . 6.5 kW	\$273,500.00	\$225,000.00	Upgrade request from air cooled to liquid cooled transmitter because the air cooled require an additional stepdown transformer (480 to 208 V) and additional wiring for the input. attached quote for both P2986A-R1 AUX Tx WMTJ P3231- R1 WMTJ, P3231-R1 WMTJ	\$202,500.00	N/A

Other	\$20,000.00	\$20,000.00	To increase	\$17,940.00	N/A
Electrical	φ20,000.00	Ψ20,000.00	the capacity	$\psi$ 17,0-10.00	
Service:			of the surge		
Electrical			suppressor,		
Panel			voltage		
Distribution			regulator and		
modifications,			UPS for the		
circuit			main		
			transmitter		
breakers,			and add the		
rewiring.					
Surge			load The		
Protector,			transmitter		
Voltage			facilities are		
Regulator			located on a		
and UPS are			Rain Forest		
required for			where the		
the new			power		
transmitter			fluctuations		
installation			are severe		
			and		
			contiguous		
Upgraded	\$15,000.00	\$15,000.00	Charge to	\$13,500.00	N/A
Mask Filter			replace an		
from 6 to 8			included RF		
poles			Mask Filter of		
			6 pole on the		
			transmitter		
			proposal with		
			8 pole filter		
Motorized	\$4,835.00	\$4,835.00	Extra cost for	\$4,351.50	N/A
Switch	. ,		replace an		
			included (3)		
			port Manual		
			Patch Panel		
			on the		
			transmitter		
			proposal with		
			a motorized		
			Switch as the		
			existing		
			transmission		
			system		
			System		

Maritime Transportation	\$5,020.00	\$5,020.00	Due to the particular conditions of an island, special maritime transportation is required from port to port	\$4,518.00	N/A
Sub-total	\$925,834.04	\$732,594.04	N/A	\$627,829.50	N/A
Total for all systems	\$2,074,327.66	\$1,767,293.96	N/A	\$917,358.28	N/A

# Components

Actual Information Description	File Name	
System Design and Site Survey	Component Description:	40% OF SYSTEM DESIGN AND SITE SURVEY Amended proposal dated 3/8 /18
	Amount:	\$6,120.00
	Component Description:	50% OF SYSTEM DESIGN
	Amount:	\$7,650.00
Upgraded RF Mask Filter to 8 pole	Component Description:	40% OF UPGRADED RF MASK FILTER Amended proposal
	Amount:	dated 3/8/18 \$6,000.00
	Component Description:	50% OF UPGRADED RF MASK FILTER
	Amount:	\$7,500.00

UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	Component Description:	50% OF PARALLAX 10KW UHF LIQUID COOLED DIGITAL TRANSMITTER
	Amount:	\$175,000.00
	Component Description:	40% OF PARALLAX 10KW UHF LIQUID COOLED DIGITAL TRANSMITTER Amended proposal dated 3/8/18
	Amount:	\$140,000.00
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
Other Electrical Service: Distribution panel modification and rewiring for new transmitters Surge Protector,Voltage Regulator and UPS are required for the new	Component Description:	50% OF SURGE SUPPRESSOR (\$2,625) AND VOLTAGE REGULATOR
transmitter installation	Amount:	(\$11,698) \$14,323.00
	Component Description:	40% OF SURGE SUPPRESSOR (\$2,100) AND VOLTAGE REGULATOR (\$9,358) Amended
		proposal dated 3/8 /18
	Amount:	\$11,458.00
Other Building Addition Size: 164.0	Information not provided.	

Transmitter Motorized Switch replacement	Component Description:	40% OF
		TRANSMITTER
		MOTORIZED
		SWITCH Amended
		proposal dated 3/8
	_	/18
	Amount:	\$1,934.00
	Component Description:	50% OF
		TRANSMITTER
		MOTORIZED
		SWITCH
	Amount:	\$2,417.00
Maritime Transportation		
	Component Description:	50% OF MARITIME
		TRANSPORTATION
	Amount:	\$2,510.00
	Component Description:	40% OF MARITIME
		TRANSPORTATION
		Amended proposal
		dated 3/8/18
	Amount:	\$2,008.00

Equipment Crating		
	Component Description:	50% OF EQUIPMENT CRATING REQUIRED FOR MARITIME TRANSPORTATION \$2,250.00
	Component Description:	Amended proposal dated 3/8/18 40% OF EQUIPMENT CRATING REQUIRED FOR MARITIME TRANSPORTATION
	Amount.	\$1,800.00
Equipment Crating		
	Component Description:	50% of equipment crating for maritime transportation
	Amount:	\$2,250.00
	Component Description:	40% of equipment crating for maritime transportation
	Amount:	\$1,800.00
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	

UHF - Liquid Cooled Solid State Transmitter 4.9 . 6.5 kW	Component Description:	50% OF PARALLAX 5KM UHF LIQUID COOLED DIGITAL TRANSMITTER
	Amount:	\$112,500.00
	Component Description:	40% OF PARALLAX 5KM UHF LIQUID COOLED DIGITAL TRANSMITTER
	Amount:	\$90,000.00
Other Electrical Service: Electrical Panel Distribution modifications, circuit breakers, rewiring. Surge	Component Description:	Installation of heat exchangers and 2 pump systems for the
Protector, Voltage Regulator and UPS are required for the new transmitter installation	Amount:	transmitter \$17,940.00
Upgraded Mask Filter from 6 to 8 poles	Component Description:	40% of upgraded
	Amount:	mask filter \$6,000.00
	Component Description: Amount:	50% of upgraded mask filter \$7,500.00
Motorized Switch		
	Component Description: Amount:	40% of motorized switch \$1,934.00
	Component Description:	50% of motorized switch
	Amount:	\$2,417.50

Maritime Transportation		
	Component Description:	50% of maritime transportation
	Amount:	\$2,510.00
	Component Description:	40% of maritime
		transportation
	Amount:	\$2,008.00

### Antennas

# Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna TFU- 16DSC-R S300	\$133,780.00	\$42,900.00		\$0.00	
Maritime Transportation	\$14,500.00	\$14,500.00	Due to the particular conditions of an island, special maritime transportation is required from port to port. Quote includes the transmission line volume and weight	N/A	N/A
UHF - Lower Power Side Mount, One station antenna - medium power (50- 200 kW), horizontally polarized	\$89,400.00	\$0.00	NO CHANGE	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	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	\$0.00	N/A

Primary Antenna TFU- 16DSC-R S300	\$238,010.00	\$179,140.30		\$145,916.10	
Maritime Transportation	\$14,500.00	\$14,500.00	Due to the particular conditions of an island, special maritime transportation is required from port to port. Quote includes the transmission line volume and weight	N/A	N/A
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$4,725.00	ANALYSIS TO BE ON LARGE OD SUPPORT POLE WITH DIAMETER OF 5.5 FT TO 4.0 FT APPROX. IN ANTENNA APERTURE. See proposal 900110CMZ WMTJ Antenna Scatter Analysis from Dielectric	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	\$15,768.00	N/A

Total for all systems	\$2,074,327.66	\$1,767,293.96	N/A	\$917,358.28	N/A
Sub-total	\$371,790.00	\$222,040.30	N/A	\$145,916.10	N/A
UHF - Lower Power Side Mount, One station antenna - medium power (50- 200 kW), horizontally polarized	\$89,400.00	\$61,207.65	***System Notice: Estimate adjusted and locked because line has been superseded. ***the original estimated cost for lower power side mount antenna is \$139440	\$61,207.65	N/A
Elbow complex, single channel, at antenna input, per 4 1 /16. feedline (if needed)	\$9,570.00	\$9,100.00	N/A	\$7,732.80	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
UHF - Lower Power Side Mount, One station antenna - medium power (50- 200 kW), horizontally polarized	\$89,400.00	\$61,207.65	NO CHANGE	\$61,207.65	N/A

Actual Information	
Description	File Name

Maritime Transportation	Information not provided.	
UHF - Lower Power Side Mount, One station antenna - medium power (50-200 kW), horizontally polarized	Information not provided.	
Sweep test of existing antenna	Information not provided.	
Side mount brackets for high power antennas (if not included in antenna base cost)	Component Description:	45% with order prior to shipment for side mount brackets N/A
	Amount:	IN/A
Maritime Transportation	Information not provided.	
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:	45% for Side mount brackets \$7,884.00
	Component Description:	45% of invoice fo Side mount
	Component Description: Amount:	
		Side mount brackets

UHF - Lower Power Side Mount, One station antenna - medium power (50-200 kW), horizontally polarized	Component Description:	45% of UHF - Lower Power Side Mount, One station antenna - medium power (50-200 kW), horizontally polarized \$61,207.65
Sweep test of existing antenna	Information not provided.	
Elbow complex, single channel, at antenna input, per 4 1/16. feedline (if needed)	Component Description: Amount:	45% with invoice prior to shipment for elbows complex N/A
	Component Description: Amount:	45% for elbow complex \$3,866.40
	Component Description: Amount:	45% for elbow complex \$3,866.40
UHF - Lower Power Side Mount, One station antenna - medium power (50-200 kW), horizontally polarized	Component Description: Amount:	45% for UHF- Lower power side mount antenna one-station horizontally polarized \$61,207.65

# **Transmission Line**

### Cost Information

Description	Predetermined Cost Estimate \$17,760.00	Estimated Cost \$16,800.00	Estimated Cost Justification	Actual Cost \$0.00	Actual Cost Justification
Transmission Line		. ,			
Flexible Air Transmission Line - dielectric, 4"	\$17,760.00	\$16,800.00	N/A	N/A	N/A
Primary Transmission Line	\$43,466.00	\$48,796.00		\$43,661.70	
Rigid Transmission Line - copper, 4 1 /16"	\$39,760.00	\$45,090.00	This cost estimated by the factory includes 3 elbows and a dehydrator.	\$43,661.70	N/A
Test for Reducer	\$2,034.00	\$2,034.00	Estimated cost by factory for test the transition from 4 inch 50 ohms to 6 inch 50 ohms	N/A	N/A
Reducer 6 to 4 inch	\$1,672.00	\$1,672.00	Cost for a separate reducer transition from 6 inch to 4 inch at 50 ohms	\$0.00	N/A
Sub-total	\$61,226.00	\$65,596.00	N/A	\$43,661.70	N/A

Total for all	\$2,074,327.66	\$1,767,293.96	N/A	\$917,358.28	N/A
systems					

Actual Information Description	File Name	
Flexible Air Transmission Line - dielectric, 4"	Information not provided.	
Rigid Transmission Line - copper, 4 1/16"	Component Description:	45% for rigid transmission line copper \$21,830,85
	Amount: Component Description:	\$21,830.85 45% of invoice to shipment for rigid
	Amount:	transmission line- copper N/A
	Component Description:	45% for rigid transmission line copper
	Amount:	\$21,830.85
Test for Reducer	Information not provided.	
Reducer 6 to 4 inch	Information not provided.	

# **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 Cost Justification
Primary Tower TOWER	\$254,800.00	\$242,000.00		\$65,447.68	
Structural engineering tower load study for well documented tower	\$12,600.00	\$12,000.00	N/A	\$8,247.68	N/A
Minor tower reinforcement /modifications	\$158,000.00	\$150,000.00	N/A	\$57,200.00	N/A
Short Tower (less than 500')	\$84,200.00	\$80,000.00	N/A	N/A	N/A
Sub-total	\$254,800.00	\$242,000.00	N/A	\$65,447.68	N/A
Total for all systems	\$2,074,327.66	\$1,767,293.96	N/A	\$917,358.28	N/A

Actual Information	
Description	File Name

Structural engineering tower load study for well documented tower	Component Description:	45% with order prior to shipment
	Amount:	for engineer on- site N/A
	Component Description:	Consulting for El Yunque Tower (WMTJ) and its bases
	Amount:	\$2,487.68
	Component Description:	45% for one field engineer on-site for one day, travel, expenses
	Amount:	and report \$2,880.00
	Component Description:	45% for one field engineer on-site for one day, travel, expenses
	Amount:	and report \$2,880.00
Minor tower reinforcement /modifications		
modifications	Component Description:	Modification and replace antenna El Yunque (WMTJ)
	Amount:	\$57,200.00
Short Tower (less than 500')	Information not provided.	

# **Outside Professional Services**

#### Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$237,814.00	\$282,750.00		\$6,457.92	
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	N/A	\$3,200.42	N/A
Attorney Fees - Negotiation of lease and other matters for shared locations	\$4,210.00	\$4,000.00	N/A	\$2,882.50	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 - 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	\$1,500.00	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	\$375.00	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	N/A	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	N/A	N/A
Project management of the transition	\$97,644.00	\$150,000.00	Proposal from RGB Corporation HMDRQ2923 and Detail estimate attached	N/A	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	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	N/A	N/A

RF Exposure Measurements	\$21,050.00	\$20,000.00	N/A	N/A	N/A
Sub-total	\$237,814.00	\$282,750.00	N/A	\$6,457.92	N/A
Total for all systems	\$2,074,327.66	\$1,767,293.96	N/A	\$917,358.28	N/A

Actual Information Description	File Name
Comprehensive coverage verification via field study, if needed	Information not provided.

Attorney Fees - Prepare and		
File request for Special Temporary Authorization	Component Description:	WMTJ attorney fees
	Amount:	\$112.00
	Amount.	ψ112.00
	Component Description:	WMTJ attorney
		fees
	Amount:	\$1,051.00
	Component Description:	WMTJ attorney
	Component Description.	fees
	Amount:	\$56.00
	Component Description:	WMTJ attorney
		fees
	Amount:	\$818.00
	Component Description:	WMTJ attorney
		fees
	Amount:	\$101.00
	Component Description:	WMTJ attorney fees
	Amount:	\$274.50
	Amount.	ψ274.30
	Component Description:	WMTJ attorney
		fees
	Amount:	\$787.92
Attorney Fees - Negotiation		
of lease and other matters	<b>Component Description:</b>	WMTJ attorney
for shared locations	-	fees
	Amount:	\$942.00
	Component Description:	WMTJ attornev
	Component Description:	WMTJ attorney fees

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	Information not provided.	
Prepare request for Special Temporary Authorization	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Component Description:	Preparation of License Application
	Amount:	\$225.00
	Component Description:	Preparation of quarterly update WMTJ
	Amount:	\$150.00
Prepare engineering section of FCC Form 2100 (main), Construction Permit	Information not provided.	
Application		
Application Perform engineering study for new channel assignment and antenna development	Information not provided.	
Perform engineering study for new channel assignment	Information not provided.	
Perform engineering study for new channel assignment and antenna development Project management of the		
Perform engineering study for new channel assignment and antenna development Project management of the transition Prepare and or review	Information not provided.	

# **Other Expenses**

# Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$222,863.62	\$222,313.62		\$28,045.38	
Local Sales and Use Taxes	\$148,313.62	\$148,313.62	PR Sales and Use Tax 11.5% for all the imported equipment or 4% for all the services from abroad. Attached Excel Worksheet with detailed calculations, Translated copy of the state law 25- 2017, Copy of the DA 15-17 and translated Indirect Tax Alert	\$28,045.38	N/A
MVPD Notification of Channel Change	\$12,000.00	\$12,000.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	\$20,000.00	\$20,000.00	N/A	N/A	N/A

Equipment Delivery and Handling Charges	\$15,000.00	\$15,000.00	Estimated proposal for Delivery from Maritime Port of San Juan to the Transmitter Site Attached Transportes Rolon proposal	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$9,000.00	\$9,000.00	N/A	N/A	N/A
Equipment Storage	\$7,000.00	\$7,000.00	N/A	N/A	N/A
Sub-total	\$222,863.62	\$222,313.62	N/A	\$28,045.38	N/A
Total for all systems	\$2,074,327.66	\$1,767,293.96	N/A	\$917,358.28	N/A

Actual Information Description	File Name	
Local Sales and Use Taxes	Component Description: Amount:	PR taxes \$5,581.53
	Component Description: Amount:	Puerto Rico taxes \$22,463.85
MVPD Notification of Channel Change	Information not provided.	

Develop and air announcement of upcoming channel change	Information not provided.
Equipment Delivery and Handling Charges	Information not provided.
DTV Medical Facility Notification	Information not provided.
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.
Equipment Storage	Information not provided.

Cost	Grand Total				
Information		Predetermined Cost Estimate	Estimated Cost	Actual Cost	
	Total for all systems	\$2,074,327.66	\$1,767,293.96	\$917,358.28	

Reimbursem	entestatus	Response
	The facility has ceased operating on its pre- auction channel.	No
	Construction of final facilities or all necessary modifications are complete.	No
	All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out procedures with the Fund Administrator.	No

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 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.	
		<ol> <li>The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity.</li> <li>The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> <li>The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.</li> </ol>	

- 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.

enti is in with rule and requ which a pr obta pay	e above-named ty certifies that it n full compliance n all statutes, es, regulations I governmental uirements for ch compliance is re-requisite for aining the ments herein uested.	
an authoriz	under penalty of perjury, that I am zed representative of the above- plicant for the Authorization(s) bove.	GINIA E HERNANDEZ Sponsored Program Director 06/13/2019

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).	
		<ol> <li>The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity.</li> </ol>	
		2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.	
		3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.	

- 4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
- 5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster **Relocation Fund are** necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

I dealare under papalty of pariury that I am	
I declare, under penalty of perjury, that I am an authorized representative of the above- named applicant for the Authorization(s)	Ariel Diaz Engineer

#### Attachments