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: **53859** | Service: **DTS** | Call Sign: **WIPR-TV** | Channel: **26 (UHF)**

File Number: **0000028582**

FRN: **0005832233** | Date Submitted: **09/05/2017**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
PUERTO RICO PUBLIC BROADCASTING CORPORATION Doing Business As: PUERTO RICO PUBLIC BROADCASTING CORPORATION	Dr. Rafael Batista Cruz PO Box 190909 Urb. Baldrich SAN JUAN, PR 00918 United States	+1 (787) 766-0505	Avazquez@wipr.pr	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

Alejandro Luciano *Consulting Engineer* *Puerto Rico Public Broadcasting Corporation*	Alejandro Luciano PE PO Box 194528 SAN JUAN, PR 00919 United States	+1 (787) 717-6984	aluciano@aluciano.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.	Yes
Briefly describe transition plan	File for CP as needed, Perform Towers Structural Study, modify tower as needed, build Interim facilities, remove existing transmitter, install new transmitter, transmission line, combiner, splitter, new antennas. sweep antennas test and transition.

Transmitters

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

Auxiliary Transmitter

Add Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Retune Existing
	Use	Auxiliary (Backup)
	Ownership	Owned

	Owner	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	Harris
	Model	Maxiva UAX1000AT
	Year	2012
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	1.0 kW

Auxiliary Transmitter

Retuning Transmitter Costs

Section	Question	Response
New IOT Tubes	Number of Tubes (including accessories) needed	N/A
New Mask Filter	Power	1.5 kW
	Other Power	N/A
New Exciter	Is a new exciter needed?	No

Auxiliary Transmitter

Other Transmitter Costs

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	No

	Size	N/A
	Length	N/A
	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

Auxiliary Transmitter

Other Transmitter Cost Not Listed

Information not provided.

Primary Transmitter

Existing 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	1
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	Power CD
	Year	2009
	Type	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	60 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	Parallax
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	50 kW
	Justification for New Transmitter	GatesAir, indicates the cost of the modifications of the IOT transmitters plus rental of similar power transmitter to remain on the air will exceed the cost of a new S.S. transmitter. Documents attesting the above will be submitted as soon as received

Primary Transmitter

Other Transmitter Costs

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	300.0 feet
	Other Electrical Service	Yes
	Description	Panel Main Breaker and disconnect switches fro transmitter, cooling pumps and heat exchangers.
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** Information not provided.

Interim Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Interim
	Description of Use	N/A
	Change Type	Purchase
	Manufacturer	
	Model	Parallax
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	10.0 kW
	Justification for New Transmitter	An interim transmitter is needed for WAPA-TV while the shared transmission line combiner /splitter system is removed and the present transmission line is reconnected to the WAPA-TV transmitter and antenna.

Interim Transmitter

Other Transmitter Costs

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	Main Panel Breaker and Disconnect Switch for transmitter, cooling pump and heat exchanger
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
Inside RF System	Is an additional interior RF system required to support this interim transmitter?	No

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

Antennas

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

Primary Antenna

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Purchase New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	1
	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
	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)	762.0 kW

Manufacturer	
Model	26JSC-R CT150SP
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?	Yes
	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	Elliptical
	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)	561.0 kW
	Manufacturer	

	Model	TFU-26JSC /VP-R CT150
	Year	2017
	Justification for New Antenna	The existing antenna is on channel 43, Dielectric the manufacturer indicates is not feasible to tune the channel 43 antenna to channel 26, WIPR repack 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	7 3/16 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 transmission line and antenna?	Yes

Primary Antenna

Other Antenna Cost Not Listed

Name	Description
WIPR-FM 2 Bays Interim Antenna	2 Bays Interim Antenna for WIPR-FM
WIPR-FM 8 Bays FM Antenna High Power 125 kW	To modify the existing tower for TIA 222 Rev G. compliance it is necessary to remove several components from the tower including the WIPR-FM Panel antenna and transmission line and replace with a lighter antenna and combined transmission line..

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 Manufacturer and Type	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	Other
	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	Broadband Panel Array
	ERP: (Effective Radiated Power)	250.0 kW
	Manufacturer	
	Model	773332
	Year	2018

	Justification for New Antenna	An interim antenna is needed for WIPR-TV to remain on air while the present combiner /splitter system is removed, WIPR Ch. 43 Antenna is replaced and existing WAPA antenna and transmitter are reconnected.

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?	B
	Feed Line Size	4 1/16 inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	No
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Interim Antenna

Other Antenna Cost Not Listed

Information not provided.

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 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/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)	260.0 kW
	Manufacturer	

	Model	ALP24M6-HSW-27
	Year	2018
	Justification for New Antenna	An interim antenna is needed for WAPA-TV to remain on the air while the existing combiner /splitter system is removed, the WIPR Antenna is replaced and the existing WAPA antenna and transmitter are reconnected.

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	4 1/16 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?	No

Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Interim 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	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Owner	Televicentro LLC
	Site	1
	Is the existing transmission line shared with another station or stations?	Yes
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	
	Type	Rigid
	Diameter	7 3/16 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1000 feet per run

Facility ID's and Call Signs of all stations with whom the transmission line is shared.

Facility ID	Call Sign
52073	WAPA-TV

Primary Transmission Line

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
	Type	Rigid
	Diameter	7 3/16 inches
	Other Diameter	N/A
	Segment Length	19 1/2 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1000 feet per run

Justification for New Transmission Line	The existing shared transmission line belong to WAPA-TV, that station operates non DA, and it's line section of 20' are a prohibited length for operation in channel 26. Also it is not possible to build a splitter for adjacent channels operation.

Primary Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

Interim Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Type	Flexible Air
	Diameter	4 inches
	Segment Length	N/A
	Other Segment Length	
	Number of parallel runs	1
	Length	550 feet per run
	Justification for New Transmission Line	An interim transmission line is needed for WIPR-TV to remain on the air while the existing combiner splitter system is removed, the present WIPR antenna is replaced, and the existing WAPA antenna and transmitter are recombined.

Interim Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

Interim Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Type	Flexible Air
	Diameter	4 inches
	Segment Length	N/A
	Other Segment Length	
	Number of parallel runs	1
	Length	600 feet per run
	Justification for New Transmission Line	An interim transmission line is needed for WAPA-TV to remain on the air while the existing combiner /splitter system is removed and the existing WAPA antenna and transmitter are reconected.

Interim Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

Interim Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Type	Flexible Air
	Diameter	3 inches
	Segment Length	N/A
	Other Segment Length	
	Number of parallel runs	1
	Length	450 feet per run
	Justification for New Transmission Line	An interim transmission line is needed for WIPR-FM to remain on the air while the existing WIPR-FM panel antenna system and transmission line are removed to reduce approximately a 5 tons weight load from the present antenna and transmission line.

Interim 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

Primary Tower

Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	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?	No
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1010730
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	18° 06' 35.0" N-
	Longitude (NAD83)	066° 03' 04.0" W-
	Overall Structure Height	1090.87 feet
	Support Structure Height	1006.88 feet

Ground Elevation Above Mean Sea Level (AMSL)	2955.02 feet
Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Televicentro of Puerto Rico, LLC
Date Constructed	07/01/1966

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
52073	WAPA-TV	DTV
53860	WIPR-FM	FM

Primary Tower

Tower Modification Costs

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

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

Information not provided.

Outside Professional Services Costs

Section	Question	Response
Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	1500
	Explanation	Due to extreme budget constrains WIPR does not have the necessary technical staff to perform the project management for the repack.
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	3
	Do you have Distributed Transmission System engineering services?	No
	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	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	3
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	Yes
	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	No
	RF exposure measurements	Yes
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

Outside Professional Services Costs

Other Professional Services Expenses Not Listed

Name	Description
Quarterly Progress Reports.	FCC Quarterly Repack Progress Report

Other Expenses

Section	Question	Response
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	No
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
Permit and Filing Costs	Local Zoning	Yes
	Non-zoning permits	No
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	Yes
	FCC License to Cover Application	Yes
	FCC Special Temporary Authority Application	Yes
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

Name	Description
WIPR-TV-WIPR-FM Combiner-Splitter.	To minimize tower loading as per structural engineer request and to optimize the use of the WIPR-TV transmission line it is proposed to combine the WIPR-TV and WIPR-FM signals on the 7 inch line to be installed for WIPR-TV.
Station Employees Time	Stations Employees time exclusively dedicated to the repack functions
8 poles Adjacent Channel Filter. Two Filters, Two Stations	WIPR-TV and WAPA-TV radiation centers are within 50ft vertically, after repack WIPR will be on Ch. 26 adjacent to WAPA Ch. 27. A filter is needed for both WAPA and WIPR to impede interactions to WAPA and WIPR transmitters from each other emissions.

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
Interim Transmitter Parallax	**$517,700.00**	**$393,135.00**		**$0.00**	
2" Rigid Conduit and Wiring (Cost per foot)	$5,200.00	$5,000.00	N/A	N/A	N/A
Other Electrical Service: Main Panel Breaker and Disconnect Switch for transmitter, cooling pump and heat exchanger	***$18,000.00***	$18,000.00	As per previous experience during the analog to digital transitions and site remote location.	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	$494,500.00	$370,135.00	See Attached Hitachi Comark proposal P#3131PRLXU6-071217R1	N/A	N/A
Primary Transmitter Parallax	**$1,489,800.00**	**$891,635.00**		**$0.00**	
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	$1,473,000.00	$875,135.00	See Attached Hitachi Comark main transmitter proposal	N/A	N/A

2" Rigid Conduit and Wiring (Cost per foot)	$7,800.00	$7,500.00	N/A	N/A	N/A
Other Electrical Service: Panel Main Breaker and disconnect switches fro transmitter, cooling pumps and heat exchangers.	***$9,000.00***	$9,000.00	As per previous experience during the analog to digital transitions and site remote location.	N/A	N/A
Auxiliary Transmitter Maxiva UAX1000AT	**$108,230.00**	**$102,800.00**		**$0.00**	
UHF and VHF - minor banding issues	$105,200.00	$100,000.00	N/A	N/A	N/A
1.5 kW mask filter	$3,030.00	$2,800.00	N/A	N/A	N/A
Sub-total	$2,115,730.00	$1,387,570.00	N/A	$0.00	N/A
Total for all systems	$5,514,513.46	$4,651,151.46	N/A	$0.00	N/A

Components

Information not provided.

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
Interim Antenna 773332	**$207,180.00**	**$196,800.00**		**$0.00**	
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	$189,500.00	$180,000.00	N/A	N/A	N/A
Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	N/A	N/A
Elbow complex, broadband, at antenna input, per 4 1 /16. feedline (if needed)	$10,950.00	$10,400.00	N/A	N/A	N/A
Interim Antenna ALP24M6-HSW-27	**$228,950.00**	**$217,500.00**		**$0.00**	
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

Elbow complex, single channel, at antenna input, per 4 1 /16. feedline (if needed)	$9,570.00	$9,100.00	N/A	N/A	N/A
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	$189,500.00	$180,000.00	N/A	N/A	N/A
Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	N/A	N/A
Primary Antenna TFU-26JSC/VP-R CT150	**$304,960.00**	**$302,528.00**		**$0.00**	
WIPR-FM 2 Bays Interim Antenna	***$10,000.00***	$10,000.00	Based on Manufacturer Consultations, Final quote to be provided as soon as received.	N/A	N/A
Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	N/A	N/A
Elbow complex, single channel, at antenna input, per 7 3 /16. feedline (if needed)	$13,900.00	$13,208.00	Based on Dielectric Elbow Complex Quote	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
WIPR-FM 8 Bays FM Antenna High Power 125 kW	***$48,624.00***	$48,624.00	Based on Attached Dielectric Order Number 45360 Items 4 - 8	N/A	N/A
UHF - High Power, Side Mount, basic slot antenna, 561 kW input, directional,, elliptically or circularly polarized	***$197,296.00***	$197,296.00	Based on attached Dielectric Order Number 45360 Lines 1, 3	N/A	N/A
Sub-total	$741,090.00	$716,828.00	N/A	$0.00	N/A
Total for all systems	$5,514,513.46	$4,651,151.46	N/A	$0.00	N/A

Components

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
Interim Transmission Line	**$40,700.00**	**$38,500.00**		**$0.00**	
Flexible Air Transmission Line - dielectric, 4"	$40,700.00	$38,500.00	N/A	N/A	N/A
Interim Transmission Line	**$44,400.00**	**$42,000.00**		**$0.00**	
Flexible Air Transmission Line - dielectric, 4"	$44,400.00	$42,000.00	N/A	N/A	N/A
Interim Transmission Line	**$26,550.00**	**$25,200.00**		**$0.00**	
Flexible Air Transmission Line - dielectric, 3"	$26,550.00	$25,200.00	N/A	N/A	N/A
Primary Transmission Line	**$290,000.00**	**$276,000.00**		**$0.00**	

Rigid Transmission Line - copper, 7 3/16"	$290,000.00	$276,000.00	The existing shared transmission line is owned by WAPA, the sections length of 20 ft. are prohibited for channel 26, it is not possible to separate adjacent channels at tower to maintain current setting. See attached RF System diagram.	N/A	N/A
Sub-total	$401,650.00	$381,700.00	N/A	$0.00	N/A
Total for all systems	$5,514,513.46	$4,651,151.46	N/A	$0.00	N/A

Components

Information not provided.

Cost Information

Tower Equipment and Rigging Costs

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower TOWER	**$1,485,600.00**	**$1,412,000.00**		**$0.00**	
Complex Tower (includes, for example, those with candelabras and /or stacked antennas)	$421,000.00	$400,000.00	N/A	N/A	N/A
Serious tower reinforcement /modifications	$1,052,000.00	$1,000,000.00	N/A	N/A	N/A
Structural engineering tower load study for well documented tower	$12,600.00	$12,000.00	N/A	N/A	N/A
Sub-total	$1,485,600.00	$1,412,000.00	N/A	$0.00	N/A
Total for all systems	$5,514,513.46	$4,651,151.46	N/A	$0.00	N/A

Components

Information not provided.

Cost Information

Outside Professional Services

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	**$308,685.00**	**$291,900.00**		**$0.00**	
Prepare request for Special Temporary Authorization	$6,150.00	$4,500.00	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
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	$3,155.00	$3,000.00	N/A	N/A	N/A
Project management of the transition	$237,000.00	$225,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	$11,040.00	$10,500.00	N/A	N/A	N/A
ASR modification (prepare FCC Form 854)	$2,105.00	$2,000.00	N/A	N/A	N/A

Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	$2,365.00	$2,250.00	N/A	N/A	N/A
Attorney Fees - Negotiation of lease and other matters for shared locations	$4,210.00	$4,000.00	N/A	N/A	N/A
Quarterly Progress Reports.	***$2,150.00***	$2,150.00	Estimated Fee for Quarterly Repack Progress Report Documents preparation and filling.	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
Address transition timing and coordination issues w/ other stations and wireless	$2,630.00	$2,500.00	N/A	N/A	N/A
Prepare and or review reimbursement form	$2,630.00	$2,500.00	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

RF Exposure Measurements	$21,050.00	$20,000.00	N/A	N/A	N/A
Sub-total	$308,685.00	$291,900.00	N/A	$0.00	N/A
Total for all systems	$5,514,513.46	$4,651,151.46	N/A	$0.00	N/A

Components

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	**$461,758.46**	**$461,153.46**		**$0.00**	
Station Employees Time	***$90,764.46***	$90,764.46	Estimated amount for station personnel repack dedicated time. See Attached WIPR Personnel Repack Hours Estimate Worksheet.	N/A	N/A
Equipment Delivery and Handling Charges	***$50,000.00***	$50,000.00	See Attached transportation Cost estimates and WIPR Employees Time and Freight Charges Estimate Document.	N/A	N/A

8 poles Adjacent Channel Filter. Two Filters, Two Stations	***$160,000.00***	$160,000.00	Estimated price for two hi power filters (WAPA Ch. 27 and WIPR Ch. 26) based on manufacturer consultation. Final quote price to be provided as soon as received.	N/A	N/A
WIPR-TV-WIPR-FM Combiner-Splitter.	***$99,304.00***	$99,304.00	See already attached Dielectric Order Number 45360 Lines 7-10.	N/A	N/A
MVPD Notification of Channel Change	***$7,000.00***	$7,000.00	Based on previous experience during the analog to digital transition	N/A	N/A
Develop and air announcement of upcoming channel change	***$20,000.00***	$20,000.00	Based on previous experience during the analog to digital transition	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	***$4,500.00***	$4,500.00	Based on previous experience during the analog to digital transition.	N/A	N/A

FCC Filing Fees - Form 2100 license to cover application	$335.00	$325.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 minor change CP application	$1,110.00	$1,070.00	N/A	N/A	N/A
FCC Filing Fees - Special Temporary Authorization request	$195.00	$190.00	N/A	N/A	N/A
Local Zoning	***$10,000.00***	$10,000.00	Based on previous experience. Local authority estimated fees for tower work permits.	N/A	N/A
Equipment Storage	***$7,000.00***	$7,000.00	Based on previous experience during the analog to digital transition	N/A	N/A
DTV Medical Facility Notification	$11,550.00	$11,000.00	N/A	N/A	N/A
Sub-total	$461,758.46	$461,153.46	N/A	$0.00	N/A
Total for all systems	$5,514,513.46	$4,651,151.46	N/A	$0.00	N/A

Components

Information not provided.

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	$5,514,513.46	$4,651,151.46	$0.00

Reimbursement Status

Question	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.	
	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.	**Alejandro Luciano** *Repack Project Manager* 09/05/2017

Attachments