



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **53859** | Service: **DTS** | Call **WIPR-TV** | Channel: **26 (UHF)** |
ID: | Sign:
File **0000028582**
Number:
FRN: **0005832233** | Date **02/18**
Submitted: **/2019**

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
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Alejandro Luciano <i>Consulting Engineer</i> <i>Puerto Rico Public Broadcasting Corporation</i>	Alejandro Luciano PE PO Box 194528 SAN JUAN, PR 00919 United States	+1 (787) 717-6984	aluciano@aluciano.com
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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

**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
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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	In order to transition to the new channel by the August 1st 2018 deadline WIPR will need an interim transmitter to remain on the air and maintain limited coverage from an interim site while WAPA decides on the hurricane toppled tower reconstruction.

**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 leasehold 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	Other Transmitter Cost Not Listed
Transmitter	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

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	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)	100.0 kW
	Manufacturer	
	Model	PSILP24AOC- 26-EP
	Year	2018

	Justification for New Antenna	In order to transition to the new channel by the august 1st 2018 deadline WIPR will need an interim antenna to remain on the air with limited coverage while WAPA-TV decides on the hurricane toppled tower reconstruction.
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Interim Antenna

Other Antenna Costs

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 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.
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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	375 feet per run
	Justification for New Transmission Line	In order to transition to the new channel by the august 1st 2018 deadline WIPR will need an interim transmission line to remain with limited coverage from an interim site while WAPA decides on the hurricane toppled tower reconstruction.

Interim
Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
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Dehydrator	Transmission Line Dehydrator
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**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**

Add Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Auxiliary (Backup)
	Description of Use	iNTERIM TOWER
	Ownership	Owned
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	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	1011496
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	18° 15' 54.0" N-
	Longitude (NAD83)	066° 05' 06.0" W-
	Overall Structure Height	285.43 feet
	Support Structure Height	232.94 feet
	Ground Elevation Above Mean Sea Level (AMSL)	1377.94 feet

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	PUERTO RICO PUBLIC BROADCASTING CORP
Date Constructed	01/01/1957

**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
69090	WRTU	FM
10063	WFID	FM

Auxiliary Tower

Tower Modification Costs

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

Auxiliary Tower

Tower Rigging Costs

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

**Auxiliary
Tower**

Other Tower Expenses Not Listed
Information not provided.

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
53860	WIPR-FM	FM
52073	WAPA-TV	DTV

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	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	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	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	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	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	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
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.
Station Employees Time	Stations Employees time exclusively dedicated to the repack functions. See attached Excel worksheet

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		\$370,135.00	
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	\$494,500.00	\$370,135.00	See WIPR Aux Transmitter Invoice Explanation Cover Letter, Invoice and Proposal.	\$370,135.00	N/A
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	<i>\$18,000.00</i>	\$18,000.00	As per previous experience during the analog to digital transitions and site remote location.	N/A	N/A
Primary Transmitter Parallax	\$1,489,800.00	\$906,635.00		\$534,081.00	

UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	\$1,473,000.00	\$890,135.00	See Attached Hitachi Comark main transmitter proposal P#3182PRLXU18- 091317-R1 excluding Item 2.2 PN S16 Transmitter System Transportation to Port of PR and Crating cost.	\$534,081.00	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
Sub-total	\$2,007,500.00	\$1,299,770.00	N/A	\$904,216.00	N/A
Total for all systems	\$5,391,715.77	\$4,449,263.77	N/A	\$990,413.51	N/A

Components

Actual Information
Description

File Name

UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	<p>Component Description:</p> <p>Hitachi Kokusai Electric Comark LLC Invoice 11554. WIPR Aux Transmitter Excluding Transportation.</p> <p>Amount:</p> <p>\$370,135.00</p>
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.
Other Electrical Service: Main Panel Breaker and Disconnect Switch for transmitter, cooling pump and heat exchanger	Information not provided.
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	<p>Component Description:</p> <p>60% deposit on WIPR Main Transmitter, Hitachi Kokusai Electric Comark LLC Proposal PROPOSAL P#3182PRLXU18-091317-R1. Excluding Freight.</p> <p>Amount:</p> <p>\$534,081.00</p>
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.
Other Electrical Service: Panel Main Breaker and disconnect switches for transmitter, cooling pumps and heat exchangers.	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 PSILP24AOC- 26-EP	\$132,980.00	\$56,428.00		\$50,028.00	
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$1,350.00	See attached WIPR AUX Antenna_P040418- PK1 from Propagation Systems, Inc. Item "Set of Custom Mounting Brackets for an Angled Leg Tower". In attached WIPR AUX Antenna_P040418- PK1-3 document.	\$1,350.00	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), elliptically or circularly polarized	\$103,100.00	\$48,678.00	See attached WIPR AUX Antenna_P040418- PK1 proposal from Propagation Systems, Excluding the "Set of Custom Mounting Brackets for an Angled Leg Tower" Item. In attached WIPR AUX Antenna_P040418- PK1-3 document.	\$48,678.00	N/A

Primary Antenna TFU-26JSC /VP-R CT150	\$246,336.00	\$243,904.00		\$0.00	
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	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
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
Sub-total	\$379,316.00	\$300,332.00	N/A	\$50,028.00	N/A

Total for all systems	\$5,391,715.77	\$4,449,263.77	N/A	\$990,413.51	N/A
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Components

Actual Information	
Description	File Name
Side mount brackets for high power antennas (if not included in antenna base cost)	<p>Component Description: WIPR Auxiliary Antenna Mounting Brackets.</p> <p>Amount: \$1,350.00</p>
Sweep test of existing antenna	Information not provided.
UHF - Lower Power Side Mount, One Station antenna . medium power (50-200 kW), elliptically or circularly polarized	<p>Component Description: Auxiliary Antenna Cost Excluding Mounting Brackets</p> <p>Amount: \$48,678.00</p>
Sweep test of existing antenna	Information not provided.
UHF - High Power, Side Mount, basic slot antenna, 561 kW input, directional,, elliptically or circularly polarized	Information not provided.
Elbow complex, single channel, at antenna input, per 7 3/16. 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.
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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	\$29,659.11	\$13,534.11		\$13,174.31	
Dehydrator	<i>\$1,909.11</i>	\$1,909.11	See Explanation Cover Letter, WIPR Auxiliary Transmission Line Invoice and Proposal.	\$1,909.11	N/A
Flexible Air Transmission Line - dielectric, 4"	\$27,750.00	\$11,625.00	See Explanation Cover Letter, WIPR Auxiliary Transmission Line Invoice and Proposal.	\$11,265.20	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	\$319,659.11	\$289,534.11	N/A	\$13,174.31	N/A
Total for all systems	\$5,391,715.77	\$4,449,263.77	N/A	\$990,413.51	N/A

Components

Actual Information	
Description	File Name
Dehydrator	<p>Component Description: WIPR Auxiliary Transmission Line Dehydrator price.</p> <p>Amount: \$1,909.11</p>
Flexible Air Transmission Line - dielectric, 4"	<p>Component Description: WIPR Auxiliary Transmission Line Invoice Excluding Dehydrator.</p> <p>Amount: \$11,265.20</p>

Rigid Transmission Line - copper, 7 3/16"	Information not provided.
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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
Auxiliary Tower TOWER	\$531,500.00	\$505,000.00		\$0.00	
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$25,000.00	N/A	N/A	N/A

Major tower reinforcement /modifications	\$421,000.00	\$400,000.00	N/A	N/A	N/A
Short Tower (less than 500')	\$84,200.00	\$80,000.00	N/A	N/A	N/A
Sub-total	\$2,017,100.00	\$1,917,000.00	N/A	\$0.00	N/A
Total for all systems	\$5,391,715.77	\$4,449,263.77	N/A	\$990,413.51	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	\$312,370.00	\$295,400.00		\$0.00	
Quarterly Progress Reports.	<i>\$2,150.00</i>	\$2,150.00	Estimated Fee for Quarterly Repack Progress Report Documents preparation and filling.	N/A	N/A
RF Exposure Measurements	\$21,050.00	\$20,000.00	N/A	N/A	N/A
ASR modification (prepare FCC Form 854)	\$2,105.00	\$2,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$11,040.00	\$10,500.00	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
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
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
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	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
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
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 request for Special Temporary Authorization	\$6,150.00	\$4,500.00	N/A	N/A	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Project management of the transition	\$237,000.00	\$225,000.00	N/A	N/A	N/A
Sub-total	\$312,370.00	\$295,400.00	N/A	\$0.00	N/A
Total for all systems	\$5,391,715.77	\$4,449,263.77	N/A	\$990,413.51	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	\$355,770.66	\$347,227.66		\$22,995.20	
Station Employees Time	<i>\$90,764.46</i>	\$90,764.46	Estimated amount for station personnel repack dedicated time. See Attached WIPR Personnel Repack Hours Estimate Worksheet.	N/A	N/A
8 poles Adjacent Channel Filter. Two Filters, Two Stations	<i>\$160,000.00</i>	\$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
MVPD Notification of Channel Change	<i>\$316.20</i>	\$316.20	See WIPR MVPD Explanation Cover Letter Invoice and Proposal Document.	\$316.20	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
Equipment Storage	\$7,000.00	\$7,000.00	Based on previous experience during the analog to digital transition	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.	\$19,617.00	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
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A

DTV Medical Facility Notification	\$11,550.00	\$3,062.00	See Explanation Cover Letter, WIPR Medical Notification Invoice and Proposal.	\$3,062.00	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 minor change CP application	\$1,110.00	\$1,070.00	N/A	N/A	N/A
Sub-total	\$355,770.66	\$347,227.66	N/A	\$22,995.20	N/A
Total for all systems	\$5,391,715.77	\$4,449,263.77	N/A	\$990,413.51	N/A

Components

Actual Information	
Description	File Name
Station Employees Time	Information not provided.
8 poles Adjacent Channel Filter. Two Filters, Two Stations	Information not provided.
MVPD Notification of Channel Change	<p>Component Description: WIPR MVPD Notifications. DTVNotification Invoice: INV-001805</p> <p>Amount: \$316.20</p>
Develop and air announcement of upcoming channel change	Information not provided.

Equipment Storage	Information not provided.
Equipment Delivery and Handling Charges	<p>Component Description: WIPR Main Transmitter 60% payment on Transportation and Crating cost as per Hitachi Kokusai Electric Comark LLC PROPOSAL P#3182PRLXU18-091317-R1</p> <p>Amount: \$8,160.00</p> <p>Component Description: Hitachi Kokusai Electric Comark LLC Invoice 11554 Item 4 SHP/CRT-PARLX-UL SHIPPING PORT OF PUERTO RICO & CRATING</p> <p>Amount: \$11,457.00</p>
Local Zoning	Information not provided.
FCC Filing Fees - Special Temporary Authorization request	Information not provided.
FCC Filing Fees - Form 2100 license to cover application	Information not provided.
DTV Medical Facility Notification	<p>Component Description: WIPR medical Notifications. DTVNotification Invoice: INV-001806</p> <p>Amount: \$3,062.00</p>
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.

FCC Filing Fees - Form 2100 minor change CP application	Information not provided.
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Cost Information	Grand Total		
	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$5,391,715.77	\$4,449,263.77	\$990,413.51

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	<p>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.</p>	
		<ol style="list-style-type: none"> 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.

<p>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.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p>Alejandro Luciano , PE . <i>Repack Project Manager</i></p> <p>02/18/2019</p>

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	<p>WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS 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 AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).</p>	
		<ol style="list-style-type: none"> 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.

<p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>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.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p>Alejandro Luciano , PE . <i>Repack Project Manager</i></p> <p>02/18/2019</p>

Attachments