

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID: File Number:	53859 000002	Service: DTS 8582	Call Sign:	WIPR-TV	Channel: 26 (UHF)
FRN: 00	05832233	Date	04/03		
		Submitted:	/2021		

Applicant Name, Type, and Contact Information

Applicant Information

Applicant	Address	Phone	Email	Applicant Type
PUERTO RICO PUBLIC BROADCASTING CORPORATION	Marietty Lasanta PO Box 190909 SAN JUAN, PR 00919 United States	+1 (787) 766- 1656	MLasanta@wipr. pr	Government Entity

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
	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	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 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	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	1		
		Is this transmitter currently shared with another station?	No		
		Is this transmitter currently in operating condition?	Yes		
	Existing Transmitter	Manufacturer			
	Manufacturer and Type	Model	Power CD		
		Year	2009		
		Туре	Inductive Output Tube		
		IOT Power Type	Тwo		
		Power Capacity	60 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	HPTV-PRLX- U18
		Transmitter Type	Solid State
		Solid State Cooling	Liquid Cooled
		Solid State Power capacity	30 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 Other Transmitter Costs Transmitter Section

Question

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
	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

Primary
TransmitterOther Transmitter Cost Not ListedInformation not provided.

nterim Transmitter	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 Coolec
		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

Interim	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	Main Pane Breaker and Disconned Switch for transmitte cooling pump and heat exchange
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
Inside RF System	Is an additional interior RF system required to support this interim transmitter?	No

Interim Other Transmitter Cost Not Listed Information not provided.

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

Primary	Existing Antenna Information			
Antenna	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	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	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

Antenna	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
	New Antenna	Will antenna be located on or in close proximity to an antenna farm?	No
		Class	Full Power
	Manufacturer and Types	Mounting	Side Mount
		Antenna position in stack	Not in Stack
		Polarization	Elliptical
		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)	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 manufacture indicates is not feasible to tune the channel 43 antenna to channel 26, WIPR repack assigned channel.

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	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 Other Antenna Cost Not Listed

Antenna Information not provided.

Antenna	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	Elliptical
		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)	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 towe
	reconstructio

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 Information not provided.

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

ransmissio	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	1
		Is the existing transmission line shared with another station or stations?	No
		Is Transmission Line in operating condition?	No
	Existing Transmission	Manufacturer	
	Line Manufacturer and Type	Туре	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

Primary Existing Transmission Line

Primary	New Transmission Line			
Transmissio	n 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	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	810 feet per run	
		Justification for New Transmission Line	The existing shared transmission line belong to WAPA- TV, that line was destroyed by hurricane Maria. WAPA-TV moved to another site and decided no to reconstruct.	

Primary	Other Transmission Line Expenses Not Listed		
Transmissio	n Line	Description	
	Dehydrator	High Capacity Dehydrator	

Interim	New Transmission Line			
Transmission	n Line Section	Question	Response	
	New Transmission Line	Use	Interim	
	Costs	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	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.	

Interim	erim Other Transmission Line Expenses Not Listed	
Transmissio	n Line	Description
	Dehydrator	Transmission Line Dehydrator

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

Auxiliary 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	Do you have a tower registration number?	Yes	
	Structure Registration	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 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 Reinforcement needed

Auxiliary Tower Rigging Costs

Tower

Tower

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

Other Tower Expenses Not Listed Auxiliary Tower

Information not provided.

Primary Tower Section Question Respon Existing Tower Description Type of change Constru- New Tower Use Primary (Main) Description of Use N/A Ownership Leased Is this tower consider Complex? Terrain Constra 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 Registration Do you have a tower registration number? Yes ASR Number 101073	Existing Tower			
Description New Tower Use Primary (Main) Description of Use N/A Ownership Leased Is this tower consider Complex? Terrain Constra Is this tower consider Complex? 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 Do you have a tower registration number? Yes	se			
Image: Construction of Use N/A Description of Use N/A Ownership Leased Is this tower consider Complex? Terrain Constra 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	ct			
Ownership Leased Is this tower consider Complex? Terrain Constru 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 compliant with Rev G? Yes Is tower compliant with Rev G? No Existing Tower Structure Registration Do you have a tower registration number? Yes				
Is this tower consider Complex? Terrain Constru 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				
Existing Tower Structure Registration Constration Constration Constration Constration Constration Stations? Constration Cone or more FM, AM or TV radio broadcaster(s) Yes Others Types of Users No Is tower documented for structural analysis? Yes Ves Ves Stower compliant with Rev G? No				
stations? 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	ned			
broadcaster(s) broadcaster(s) No 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				
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				
Existing Tower Structure Registration Do you have a tower registration number? Yes				
Existing Tower Structure Do you have a tower registration number? Yes Registration				
Registration				
)			
Coordinates (NAD83 (North American Datum of 1200))Latitude (NAD83)18° 06' 35.0" N				
1983)) 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 2955.02 (AMSL)	feet			
Structure Type TOWER Free Standin Guyed Structur	g or			

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 Construction Costs			
Tower	Section	Question	Response	
	Construct New Tower	Use	Primary (Main)	
		Description of Use	N/A	
		Is this a request for upgraded equipment?	No	
		Height	697.00 feet	
		Justification for New Tower	See attached narrative requesting for new tower construction and tower fabricator proposal.	

Primary Tower Rigging Costs

SectionQuestionResponseTower Rigging CostsComplex TowerN/AHelicopter Services
RequiredAre helicopter services required?No

Primary

Tower

Other Tower Expenses Not Listed

Tower

Name	Description
Tower Erection	Tower Erection
Tower Foundation	Tower Foundation Construction
Structural Study	Structural Study on the old tower prior to damage by Hurricane Maria
Tower Lights	Tower Lights Kit
Face Mounts Installaltion	Install Face Mounts with Face Base Support.

Outside Professional	Section	Question	Response
	Services Costs 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	Prepare and file Form FCC Construction Permit Application	Yes
Services	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 Other Professional Services Expenses Not Listed

Professional Services Costs		Description
	Quarterly Progress Reports.	FCC Quarterly Repack Progress Report

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	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 Not Listed

Other Expenses

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

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 Co Justificat
Interim Transmitter Parallax	\$517,700.00	\$393,135.00		\$370,135.00	
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
2" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$5,000.00	N/A	N/A	N/A
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
Primary Transmitter HPTV- PRLX-U18	\$963,800.00	\$906,635.00		\$850,388.25	

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
2" Rigid Conduit and Wiring (Cost per foot)	\$7,800.00	\$7,500.00	N/A	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	\$947,000.00	\$890,135.00	See Hitachi Kokusai Electric Comark LLC proposal P#3182PRLXU18- 091317-R1 Excluding transportation and crating charges.	\$850,388.25	N/A
Sub-total	\$1,481,500.00	\$1,299,770.00	N/A	\$1,220,523.25	N/A
Total for all systems	\$6,767,803.77	\$6,489,256.52	N/A	\$3,142,588.76	N/A

Components

Actual Information Description	File Name
Other Electrical Service: Main Panel Breaker and Disconnect Switch for transmitter, cooling pump and heat exchanger	Information not provided.
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.

State Transmitter 8.2 - 13 kW	Component Description:	Hitachi Kokusai Electric Comark LLC Invoice 11554. WIPR Aux Transmitter Excluding Transportation.
	Amount:	\$370,135.00
Other Electrical Service: Panel Main Breaker and disconnect switches fro transmitter, cooling pumps and heat exchangers.	Information not provided.	
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	Component Description:	WIPR Main Transmitter 35% of cost reimbursemen request.
	Amount:	\$316,307.25
	Component Description:	WIPR Main Transmitter Initial 60% Reimbursement. 60% of the
		\$13,600.00 transmitter transportation and crating cost, ITEM
		2.2, PART NO. S16 of the proposal not included in above reimbursement
	Amount:	request. \$534,081.00

Antennas

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual C Justifica
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	\$242,130.00	\$217,965.00		\$0.00	
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$13,575.00	See Electronics Research Inc. Proposal 20200421-494, Item 002, antenna side and bottom custom mount.	N/A	N/
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/
UHF - High Power, Side Mount, basic slot antenna, 561 kW input, directional,, elliptically or circularly polarized	\$193,090.00	\$193,090.00	See Electronics Research Inc. Proposal 20200421-494, Item 001 ATW26HS8-ESC1- 26H UHF Antenna.	N/A	N/
Sweep test of existing antenna	\$6,730.00	\$6,300.00	As per previous experience	N/A	N//
Elbow complex, single channel, at antenna input, per 7 3 /16. feedline (if needed)	\$13,900.00	\$0.00	Not needed or included in Electronics Research Inc. antenna proposal 20200421-494.	N/A	N/J

Total for all	\$6,767,803.77	\$6,489,256.52	N/A	\$3,142,588.76	N/A
systems					

Actual Information Description	File Name	
Side mount brackets for high power antennas (if not included in antenna base cost)	Component Description: Amount:	WIPR Auxiliary Antenna Mounting Brackets. \$1,350.00
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	Component Description: Amount:	Auxiliary Antenna Cost Excluding Mounting Brackets \$48,678.00
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.	
UHF - High Power, Side Mount, basic slot antenna, 561 kW input, directional,, elliptically or circularly polarized	Information not provided.	
Sweep test of existing antenna	Information not provided.	

Information not provided.

Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)

Transmission Line

Cost Information

Description	Predetermined Cost Estimate \$29,659.11	Estimated Cost \$13,174.31	Estimated Cost Justification	Actual Cost \$13,174.31	Actual Cost Justification
Transmission Line	·,·	••••,		¢,	
Dehydrator	\$1,909.11	\$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	\$11,265.20	See Explanation Cover Letter, WIPR Auxiliary Transmission Line Invoice and Proposal.	\$11,265.20	N/A
Primary Transmission Line	\$234,900.00	\$211,142.55		\$0.00	
Dehydrator	\$0.00	\$0.00	Dehydrator is included in ERI transmission line, quote number 20200421- 495.	N/A	N/A

Rigid Transmission Line - copper, 7 3 /16"	\$234,900.00	\$211,142.55	See Uploaded Electronics Research Inc. proposal 20200421- 495 Including Dehydrator.	N/A	N/A
Sub-total	\$264,559.11	\$224,316.86	N/A	\$13,174.31	N/A
Total for all systems	\$6,767,803.77	\$6,489,256.52	N/A	\$3,142,588.76	N/A

Actual Information Description	File Name	
Dehydrator	Component Description:	WIPR Auxiliary Transmission Line Dehydrator price.
	Amount:	\$1,909.11
Flexible Air Transmission Line - dielectric, 4"	Component Description:	WIPR Auxiliary Transmission Line
	Amount:	Invoice Excluding Dehydrator. \$11,265.20
Dehydrator	Information not provided.	
Rigid Transmission Line - copper, 7 3/16"	Information not provided.	

Tower Equipment and Rigging Costs

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual C Justifica
Primary Tower TOWER	\$0.00	\$0.00		\$0.00	
Auxiliary Tower TOWER	\$531,500.00	\$424,750.00		\$19,250.00	
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$5,500.00	See Attached TOWERTECK ENGINEERING proposal.	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	\$19,250.00	See Uploaded WIPR-TV Aux Facilities Rigging proposal from Crown Castle USA Inc.	\$19,250.00	N/A
Primary Tower	\$3,260,994.00	\$3,437,399.00		\$1,723,699.50	

Face Mounts Installaltion	\$17,858.00	\$17,858.00	See PRPBC new tower construction request narrative and Sabre Industries Proposal 19- 2046-TAB-R4, Options Line 2, Installation Cost of, Face Stand-off Mounts with Face Base Support for the 695' to 642' Elevations.	\$8,929.00	N/A
Tower Erection	\$1,183,052.00	\$1,183,052.00	See Sabre Industries Proposal 19- 2046-TAB-R4.	\$591,526.00	N/A
Tower Lights	\$20,774.00	\$20,774.00	See PRPBC new tower construction request narrative and Sabre Industries Proposal 19- 2046-TAB-R4, ITEM II, Lighting System.	\$10,387.00	N/A
Tower Foundation	\$519,272.00	\$519,272.00	See Uploaded Sabre Industries Proposal 19- 2046-TAB-R4, Item III Foundation Modifications and Installation.	\$259,636.00	N/A

Structural Study	\$10,000.00	\$10,000.00	See MEI Structural Study proposal and PRPBC Purchase order	\$10,000.00	N/A
Tall Tower (greater than 500')	\$210,500.00	\$386,905.00	See PRPBC new tower construction request narrative and proposal ITEM V Antenna and line installation.	\$193,452.50	N/A
New tower	\$1,299,538.00	\$1,299,538.00	See Uploaded PRPBC new tower construction request narrative and proposal. Item I and, Options minus \$17,858.00 cost of the Face Stand-Off Mounts with Face Base Support for the 695 to 642 Elevation Installation.	\$649,769.00	N/A
Sub-total	\$3,792,494.00	\$3,862,149.00	N/A	\$1,742,949.50	N/A
Total for all systems	\$6,767,803.77	\$6,489,256.52	N/A	\$3,142,588.76	N/A

Actual Information	
Description	File Name

Tower mapping for an	Information not provided.	
undocumented/poorly		
documented tower and		
preparation of		
documentation necessary		
for tower load study		
Major tower reinforcement /modifications	Information not provided.	
Short Tower (less than		
500')	Component Description:	WIPR-TV Aux
		Facilities Rigging
		Reimbursement
		Request. Crown
		Castle Invoice
		28030643. WIPR
		EIN Used.
	Amount:	\$19,250.00
Face Mounts Installaltion		
	Component Description:	WIPR Main Towe
	component Description.	50%
		Reimbursement
		Request, Invoice
		Line 6, Install Fac
		Mounts with Face
		Base Support.
	Amount:	\$8,929.00
		<i>~<i>•••••••••••••</i></i>
Tower Erection		
	Component Description:	WIPR Main Towe
		Tower Erection
		50%
		Reimbursement
		Request, Invoice
		Line 3, Tower
		Erection.

Fower Lights		
	Component Description:	WIPR Main Tower
		Light Kit 50%
		Reimbursement
		Request, Invoice Line 5, Light Kit
	Amount:	\$10,387.00
		<i>Q</i> .0,001.00
Tower Foundation		
	Component Description:	WIPR Main Tower
		Tower Foundation
		construction and
		installation 50%
		Reimbursement
		Request, Invoice
		Line 2, Foundation
		tower.
	Amount:	\$259,636.00
Structural Study		
	Component Description:	Malouf Engineering
		Intl., Inc. Invoice
		1700409V0.
	Amount:	\$10,000.00
Tall Tower (greater than		
500')	Component Description:	50%
		Reimbursement
		Request for WIPR
		Tower Lines and
		Antenna
		Installation, Sabre
		Industries Invoice
		475187B Line 4.
	Amount:	\$193,452.50

New tower		
	Component Description:	WIPR Main Tower
		Initial 50% deposit
		reimbursement
		request. Sabre
		Industries Invoice
		475487B Line 1.
	Amount:	\$649,769.00

Outside Professional Services

Cost Information

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	
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 - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	N/A	N/A
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	\$4,210.00	\$4,000.00	N/A	N/A	N/A

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Prepare request for Special Temporary Authorization	\$6,150.00	\$4,500.00	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
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	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 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
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
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	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
Sub-total	\$312,370.00	\$295,400.00	N/A	\$0.00	N/A
Total for all systems	\$6,767,803.77	\$6,489,256.52	N/A	\$3,142,588.76	N/A

Information not provided.

Other Expenses

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justificatio
Other Expenses	\$541,770.66	\$533,227.66		\$115,913.70	
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
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
MVPD Notification of Channel Change	\$316.20	\$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	\$236,000.00	\$236,000.00	See Attached transportation Cost estimates and WIPR Employees Time and Freight Charges Estimate Document and Sabre Industries Estimated Freight Charges for the shipping of WIPR Main Tower. Sabre Proposal 19- 2046-TAB- R4.	\$112,535.50	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

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
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
FCC Filing Fees - Form 2100 minor change CP application	\$1,110.00	\$1,070.00	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
Sub-total	\$541,770.66	\$533,227.66	N/A	\$115,913.70	N/A
Total for all systems	\$6,767,803.77	\$6,489,256.52	N/A	\$3,142,588.76	N/A

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	Component Description:	WIPR MVPD Notifications. DTVNotification Invoice: INV-001805
	Amount:	\$316.20
Develop and air announcement of upcoming channel change	Information not provided.	
Equipment Storage	Information not provided.	

Equipment Delivery and		
Handling Charges	Component Description:	WIPR Main Tower
		Sabre Industries
		Proposal19-2046-
		TAB-R4 Estimated
		Freight to Cayey,
		Puerto Rico.
	A	
	Amount:	\$92,918.50
	Component Description:	Hitachi Kokusai
		Electric Comark
		LLC Invoice 11554
		Item 4 SHP/CRT-
		SHIPPING PORT
		OF PUERTO RICO
		& CRATING
	Amount:	\$11,457.00
	Component Description:	WIPR Main
		Transmitter 60%
		reimbursement
		request on Hitachi
		Kokusai Electric
		Comark LLC
		PROPOSAL
		P#3182PRLXU18-
		091317-R1 ITEM
		2.2 PART NO. S16.
	Amount:	\$8,160.00
Disposal Costs (for	Information not provided.	
equipment and other waste, net of any salvage value)		
Local Zoning	Information not provided.	
	Information not provided.	

DTV Medical Facility Notification	Component Description:	WIPR medical Notifications. DTVNotification
	Amount:	Invoice: INV-00180 \$3,062.00
FCC Filing Fees - Form 2100 minor change CP application	Information not provided.	
FCC Filing Fees - Form 2100 license to cover application	Information not provided.	

Cost Information	Grand Total			
		Predetermined Cost Estimate	Estimated Cost	Actual Cost
	Total for all systems	\$6,767,803.77	\$6,489,256.52	\$3,142,588.76

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

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.	
		 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. The above-named 	
		entity acknowledges that all certifications and attached documentation are considered material representations.	
		3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.	

- 4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 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.	
an au name	are, under penalty of perjury, that I am thorized representative of the above- d applicant for the Authorization(s) ied above.	Alejandro Luciano , PE . Repack Project Manager 04/03/2021

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).	
		 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).
- The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

 8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission. 9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested. 	
I declare, under penalty of perjury, that I am an authorized representative of the above- named applicant for the Authorization(s) specified above.	Alejandro Luciano , PE . Repack Project Manager 04/03/2021

Attachments