

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility	53859	Service: DTS	Call	WIPR-TV	Channel: 26 (UHF)
ID:			Sign:		
File	000002	8582			
Number:					
FRN: 000	5832233	Date	05/20		
		Submitted:	/2018		

Applicant Name, Type, and Contact Information

Applicant 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,	+1 (787) 766- 0505	Avazquez@wipr. pr	Government Entity
	PR 00918 United States			

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer	Preparer Contact Name and I	Information		
Contact Information	Applicant	Address	Phone	Email

Alejandro Luciano PE PO Box 194528 SAN JUAN, PR 00919 United States	+1 (787) 717- 6984	aluciano@aluciano. com
United States		
	Luciano PE PO Box 194528 SAN JUAN, PR 00919	Luciano PE 6984 PO Box 194528 SAN JUAN, PR 00919

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.	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	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 Change Type	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	Other Transmitter Costs
Transmitter	Section

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
		Will antenna be located on or in close proximity to an antenna farm?	No
	New Antenna	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	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 Manufacturer and Type	Class	Full Power
		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

Primary	Existing Transmission Line			
Transmission Section Existing Tr Line Descr	n 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		
		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	

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

Existing Transmission Line

Facility ID	Call Sign
52073	WAPA-TV

Primary	New Transmission Line		
Transmission	n Line Section	Question	Response
	New Transmission Line Costs	Use	Primary (Main)
		Description of Use	N/A
		Change Type	Purchase New
		Is this a request for upgraded equipment?	No
		Туре	Rigid
		Diameter	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.

Other Transmission Line Expenses Not Listed Transmission

Interim	New Transmission Line			
Transmissio	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 while WAPA decides on the hurricane toppled tower reconstruction.	

Other Transmission Line Expenses Not Listed Interim Transmission Line

	Dehydrator	Transmission Line Dehydrator
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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	Type of change	Modify Existing	
	Description	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
10063	WFID	FM
69090	WRTU	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	Existing Tower			
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	
Registration Coordinates (NAD83 (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	
	North American Datum of	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 (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 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 Rigging Costs

Tower

Tower

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

PrimaryOther Tower Expenses Not ListedTowerInformation not provided.

Outside Section		Question	Response
Professional	Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	1500
Outside RF consulting Engineering Services		Explanation	Due to extreme budget constrains WIPR does not have the necessary technical staff to perform the project management for the repack.
	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
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 Cost Justification
Interim Transmitter Parallax	\$517,700.00	\$393,135.00		\$0.00	
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
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
2" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$5,000.00	N/A	N/A	N/A
Primary Transmitter Parallax	\$1,489,800.00	\$891,635.00		\$0.00	

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 35 - 50 kW	\$1,473,000.00	\$875,135.00	See Attached Hitachi Comark main transmitter proposal	N/A	N/A
Sub-total	\$2,007,500.00	\$1,284,770.00	N/A	\$0.00	N/A
Total for all systems	\$5,399,625.46	\$4,464,736.46	N/A	\$63,202.31	N/A

Components

Information not provided.

Antennas

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
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	N/A	\$1,350.00	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	N/A	\$48,678.00	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	\$246,336.00	\$243,904.00		\$0.00	

Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$22,000.00	N/A	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
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
Sub-total	\$379,316.00	\$300,332.00	N/A	\$50,028.00	N/A
Total for all systems	\$5,399,625.46	\$4,464,736.46	N/A	\$63,202.31	N/A

Actual Information Description	File Name	
Side mount brackets for high power antennas (if not included in antenna base cost)	Component Description:	WIPR Auxiliary Antenna Mounting Brackets. \$1,350.00
		• ,
UHF - Lower Power Side Mount, One Station antenna . medium power (50-200 kW), elliptically or circularly polarized	Component Description: Amount:	Auxiliary Antenna Cost EZxcluding Mounting Bracket \$48,678.00
Sweep test of existing antenna	Information not provided.	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.	
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.	
Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)	Information not provided.	
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.	

Transmission Line

Cost Information

	Due determine d	F atimated	Estimated	Actual	A stual Cast
Description	Predetermined Cost Estimate	Estimated Cost	Cost Justification	Actual Cost	Actual Cost Justification
Interim Transmission Line	\$30,885.00	\$29,385.00		\$13,174.31	
Dehydrator	\$3,135.00	\$3,135.00	N/A	\$1,909.11	N/A
Flexible Air Transmission Line - dielectric, 4"	\$27,750.00	\$26,250.00	N/A	\$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	\$320,885.00	\$305,385.00	N/A	\$13,174.31	N/A

Total for all	\$5,399,625.46	\$4,464,736.46	N/A	\$63,202.31	N/A
systems					

Actual Information Description	File Name	
Dehydrator		
	Component Description:	WIPR
		Transmission Line
		Dehydrator Invoice.
	Amount:	\$1,909.11
Flexible Air Transmission Line - dielectric, 4"	Component Description:	WIPR Auxiliary
		Facilities
		Transmission Line
		Invoice Excluding
		Dehydrator.
	Amount:	\$11,265.20
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 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	\$5,399,625.46	\$4,464,736.46	N/A	\$63,202.31	N/A

Information not provided.

Outside Professional Services

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification		Actual Cost Justification
Outside Professional Services	\$312,370.00	\$295,400.00		\$0.00	
Quarterly Progress Reports.	\$2,150.00	\$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 - 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 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
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	\$5,399,625.46	\$4,464,736.46	N/A	\$63,202.31	N/A

Information not provided.

Other Expenses

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$362,454.46	\$361,849.46		\$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
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	\$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
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.	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
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
FCC Filing Fees - Form 2100 minor change CP application	\$1,110.00	\$1,070.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
Sub-total	\$362,454.46	\$361,849.46	N/A	\$0.00	N/A
Total for all systems	\$5,399,625.46	\$4,464,736.46	N/A	\$63,202.31	N/A

Information not provided.

Cost Information	Grand Total				
		Predetermined Cost Estimate	Estimated Cost	Actual Cost	
	Total for all systems	\$5,399,625.46	\$4,464,736.46	\$63,202.31	

Reimbursem	entestiatus	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.	
		 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 05/20/2018

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.

 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 05/20/2018

Attachments