Approved by OMB (Office of Management and Budget) 3060-1178

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID: **73910** | Service: **DTV** | Call Sign: **WPXI** | Channel: **23 (UHF)**

File Number: **0000028030**

FRN: **0014361083** | Date Submitted: **07/28/2017**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
WPXI, LLC Doing Business As: WPXI, LLC	Director of Engineering 4145 EVERGREEN ROAD PITTSBURGH, PA 15214 United States	+1 (412) 237-1100	doe@wpxi.com	Limited Liability Company

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
Otto Schellin *Director of Engineering* *WPXI, LLC*	Otto Schellin 4145 Evergreen Road Pittsburgh, PA 15214 United States	+1 (412) 237-1184	doe@wpxi.com

Broadcaster Information and Transition Plan

Question	Response
Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	No
Briefly describe transition plan	Build CH 23 transmitter, replace ant at top of stack with CH 23 ant and feedline while remaining on CH 48 main ant on bottom of stack until transition date. Replace CH 48 aux ant with CH 23 aux ant. Test CH 23 system, go on the air on transition date.

Transmitters

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

Auxiliary Transmitter

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Auxiliary (Backup)
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	DHD60P2
	Year	2008
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	14 kW

Auxiliary Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	ULXTE-24
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	16.1 kW
	Justification for New Transmitter	Current auxiliary transmitter cannot be retuned.

Auxiliary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	Yes

	Description	480V transformers, raceway, wire, distribution panels, conduit, pump wiring and labor to provide electrical service. Cost represents 30% of total quoted amount to account for aux transmitter needs.
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Auxiliary Transmitter

Other Transmitter Cost Not Listed

Name	Description

Interior Work	Labor to unload and position all transmitter equipment, framing to install RF filters, patch previous transmission line entry points. 50% of total on the main transmitter and 50% on the aux transmitter.
Exterior Foundation	Concrete pads for heat exchangers. 50% of total on the main transmitter and 50% on the aux transmitter.

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	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	CD200P2
	Year	1999
	Type	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	50 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	ULXTED-60
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	38.4 kW
	Justification for New Transmitter	Current transmitter cannot be retuned to the new channel assignment. Also, IOT replacement transmitter would be more costly.

Primary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	No

	Size	N/A
	Length	N/A
	Other Electrical Service	Yes
	Description	480V transformers, raceway, wire, distribution panels, conduit, pump wiring and labor to provide electrical service. Cost represents 70% of total quoted amount to account for main transmitter needs.
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	Heating and Cooling
	Size	20 tons
	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

Name	Description
Spare Transmitter Parts	WPXI currently has an inventory of replacement amplifiers, power supplies, circuit breakers, circuit assemblies and a manufacturer supplied parts kit for our main transmitter. These parts are not compatible with the new transmitter and must be replaced.
Exterior Foundation	Concrete pads for heat exchangers 50% of total on the main transmitter and 50% on the aux transmitter.
Spare Cooling System Parts	To replace currently existing spare parts inventory on our cooling system. These parts are not compatible with the new transmitter and must be replaced.
Interior Work	Labor to unload and position all transmitter equipment, framing to install RF filters, patch previous transmission line entry points.50% of total on the main transmitter and 50% on the aux transmitter.

Antennas

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

Auxiliary Antenna

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Purchase New
	Antenna Use	Auxiliary (Backup)
	Description of Use	Auxiliary (Backup)
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
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)	1000.0 kW

Manufacturer	
Model	TFU-30DSC-RO4
Year	2008

Auxiliary Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Auxiliary (Backup)
	Description of Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	No
	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	Horizontal
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	1000.0 kW
	Manufacturer	

	Model	ATW20HS3-HSO-23H
	Year	2017
	Justification for New Antenna	Current antenna can not be tuned to the new channel.

Auxiliary 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	6 1/8 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

Auxiliary Antenna

Other Antenna Cost Not Listed

Information not provided.

Primary Antenna

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Purchase New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna Manufacturer and Type	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Bottom
	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)	1000.0 kW

Manufacturer	
Model	TFU-30GBH-RO6
Year	1999

Primary Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Top
	Polarization	Horizontal
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	1000.0 kW
	Manufacturer	

Model	ATW24HS3-HTO-23H
Year	2017
Justification for New Antenna	Current antenna can not be tuned to the new 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	6 1/8 inches inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	No
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Primary 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

Auxiliary Transmission Line

Existing Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Auxiliary (Backup)
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	
	Type	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	600 feet per run

Auxiliary Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Auxiliary (Backup)
	Description of Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	300 feet per run
	Justification for New Transmission Line	Need to re-route line to new entry point on building.

Auxiliary Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
Ice Bridge	Needed to protect new transmission line from falling ice off the tower. Also includes concrete foundation necessary for the ice bridge installation. 50% of total on the main transmitter and 50% on the aux transmitter.

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	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	
	Type	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	850 feet per run

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	6 1/8 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	921 feet per run
	Justification for New Transmission Line	The current line will be in use for the current channel. We will need to install new line for new channel.

Primary Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
Ice Bridge	Needed to protect new transmission line from falling ice off the tower. Also includes concrete foundation necessary for the ice bridge installation. 50% of total on the main transmitter and 50% on the aux transmitter.

Tower Equipment And Rigging Costs

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

Primary Tower

Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	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	Yes
	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	Yes
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1032235
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	40° 27' 47.7" N-
	Longitude (NAD83)	080° 00' 15.5" W-
	Overall Structure Height	846.77 feet
	Support Structure Height	741.46 feet
	Ground Elevation Above Mean Sea Level (AMSL)	1200.12 feet

Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	IWG Towers Assets II, LLC
Date Constructed	06/01/1967

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
55709	WSHH	FM
59968	WWSW-FM	FM

Other Types of Users

Users
WQNF304 Two Way
WYC531 Two Way

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:	No reinforcements needed

Primary Tower

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	N/A
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	480
	Explanation	Project manager is required to supervise various outside contractors and be the point person to represent the station.
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	No
	Quantity	N/A
	Do you have Distributed Transmission System engineering services?	N/A
	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	No
	Quantity	N/A
	NEPA Section 106 environmental review	Yes
	Environmental Assessment	Yes
	ASR Modification	No
	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	No
RF Field Engineering Services	Comprehensive coverage verification via field study	Yes
	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

Services not provided.

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	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
Permit and Filing Costs	Local Zoning	No
	Non-zoning permits	No
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	Yes
	FCC Special Temporary Authority Application	No
Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
	Does this relocation require Equipment Storage?	No
	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

Information not provided.

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
Primary Transmitter ULXTED-60	**$1,844,500.00**	**$1,766,000.00**		**$0.00**	
Spare Cooling System Parts	***$16,000.00***	$16,000.00	To maintain an inventory of critical cooling system replacement parts equivalent to our current inventory. The current inventory of parts are not compatible with the new transmitter and must be replaced.	N/A	N/A

Spare Transmitter Parts	***$68,000.00***	$68,000.00	WPXI currently has an inventory of replacement amplifiers, power supplies circuit breakers, circuit assemblies and a manufacturer supplied parts kit for our main transmitter. These parts are not compatible with the new transmitter and must be replaced.	$0.00	N/A
20 Ton system	$115,500.00	$110,000.00	N/A	N/A	N/A

Interior Work	***$8,000.00***	$8,000.00	50% of quoted cost for interior work including labor to unload and position all transmitter equipment, framing to install RF filters, patch previous transmission line entry points. 50% of total on the main transmitter and 50% on the aux transmitter	N/A	N/A
Exterior Foundation	***$45,000.00***	$45,000.00	50% of quoted cost of exterior concrete pad. This is for the transmitter's heat exchangers and ice protection. 50% of total on the main transmitter and 50% on the aux transmitter	N/A	N/A

Other Electrical Service: 480V transformers, raceway, wire, distribution panels, conduit, pump wiring and labor to provide electrical service. Cost represents 70% of total quoted amount to account for main transmitter needs.	***$119,000.00***	$119,000.00	70% of total electrical cost quote for the main transmitter, remaining 30% is listed under auxiliary transmitter.	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	$1,473,000.00	$1,400,000.00	N/A	N/A	N/A
Auxiliary Transmitter ULXTE-24	**$788,000.00**	**$754,000.00**		**$0.00**	

Interior Work	***$8,000.00***	$8,000.00	50% of quoted cost for interior work including labor to unload and position all transmitter equipment, framing to install RF filters, patch previous transmission line entry points. 50% of total on the main transmitter and 50% on the aux transmitter.	N/A	N/A
Exterior Foundation	***$45,000.00***	$45,000.00	50% of quoted cost of exterior concrete pad. This is for the transmitter's heat exchangers and ice protection. 50% of total on the main transmitter and 50% on the aux transmitter	N/A	N/A

Other Electrical Service: 480V transformers, raceway, wire, distribution panels, conduit, pump wiring and labor to provide electrical service. Cost represents 30% of total quoted amount to account for aux transmitter needs.	***$51,000.00***	$51,000.00	30% of total electrical cost quote for the aux transmitter, remaining 70% is listed under main transmitter.	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	$684,000.00	$650,000.00	N/A	N/A	N/A
Sub-total	$2,632,500.00	$2,520,000.00	N/A	$0.00	N/A
Total for all systems	$3,948,089.00	$3,817,449.00	N/A	$0.00	N/A

Components

Information not provided.

Cost Information

Antennas

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Antenna ATW24HS3-HTO-23H	**$266,030.00**	**$253,100.00**		**$0.00**	
Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	N/A	N/A
Elbow complex, single channel, at antenna input, per 6 1 /8. feedline (if needed)	$12,300.00	$11,700.00	N/A	N/A	N/A
UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	$247,000.00	$235,000.00	N/A	N/A	N/A
Auxiliary Antenna ATW20HS3-HSO-23H	**$237,440.00**	**$235,100.00**		**$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

Elbow complex, single channel, at antenna input, per 6 1 /8. feedline (if needed)	$12,300.00	$11,700.00	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
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, 1000 kW input, horizontally polarized	***$190,000.00***	$190,000.00	There is no predetermined cost available for the auxiliary antenna. This cost was based on quote 20170420-186 with freight.pdf lines 1, 4, 5, 6, 7, 8 and estimated freight.	N/A	N/A
Sub-total	$503,470.00	$488,200.00	N/A	$0.00	N/A
Total for all systems	$3,948,089.00	$3,817,449.00	N/A	$0.00	N/A

Components

Information not provided.

Cost Information

Transmission Line

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmission Line	**$210,562.00**	**$201,352.00**		**$0.00**	
Ice Bridge	***$24,520.00***	$24,520.00	50% of cost of ice bridge and concrete foundation. 50% of total on the main transmitter and 50% on the aux transmitter.	N/A	N/A
Rigid Transmission Line - copper, 6 1/8"	$186,042.00	$176,832.00	N/A	N/A	N/A
Auxiliary Transmission Line	**$85,120.00**	**$82,120.00**		**$0.00**	
Rigid Transmission Line - copper, 6 1/8"	$60,600.00	$57,600.00	N/A	N/A	N/A

Ice Bridge	***$24,520.00***	$24,520.00	50% of cost of ice bridge and concrete foundation. 50% of total on the main transmitter and 50% on the aux transmitter.	N/A	N/A
Sub-total	$295,682.00	$283,472.00	N/A	$0.00	N/A
Total for all systems	$3,948,089.00	$3,817,449.00	N/A	$0.00	N/A

Components

Information not provided.

Cost Information

Tower Equipment and Rigging Costs

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower GTOWER	**$223,100.00**	**$244,415.00**		**$0.00**	
Tall Tower (greater than 500')	$210,500.00	$230,115.00	Tower crew mobilization. The cost is higher than the predetermined cost because the solid, one piece, transmission line being removed from the tower must be cut up into pieces to remove from the tower increasing labor costs.	N/A	N/A
Structural engineering tower load study for well documented tower	$12,600.00	$14,300.00	Required a site visit and climb.	N/A	N/A
Sub-total	$223,100.00	$244,415.00	N/A	$0.00	N/A
Total for all systems	$3,948,089.00	$3,817,449.00	N/A	$0.00	N/A

Components

Information not provided.

Cost Information

Outside Professional Services

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	**$228,165.00**	**$216,750.00**		**$0.00**	
Comprehensive coverage verification via field study, if needed	$84,200.00	$80,000.00	N/A	N/A	N/A
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	$10,520.00	$10,000.00	N/A	N/A	N/A
NEPA Section 106 environmental review, if needed	$6,310.00	$6,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	$2,365.00	$2,250.00	N/A	N/A	N/A
Attorney Fees - 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
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 and or review reimbursement form	$2,630.00	$2,500.00	N/A	N/A	N/A
Project management of the transition	$75,840.00	$72,000.00	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
RF Exposure Measurements	$21,050.00	$20,000.00	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
Sub-total	$228,165.00	$216,750.00	N/A	$0.00	N/A
Total for all systems	$3,948,089.00	$3,817,449.00	N/A	$0.00	N/A

Components

Information not provided.

Cost Information

Other Expenses

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	**$65,172.00**	**$64,612.00**		**$0.00**	
DTV Medical Facility Notification	$11,550.00	$11,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	***$5,000.00***	$5,000.00	Expected shipping charges from Gates Air and HVAC contractor. WPXI estimates that there will be additional costs associated with delivery. The transmitter site sits atop a steep hill in an urban area surrounded by narrow, winding roads. Tractor trailer deliveries are not appropriate for the transmitter site. Offloading smaller items into more agile delivery vehicles will avoid the higher costs of road closings and escort services.	N/A	N/A
MVPD Notification of Channel Change	***$5,000.00***	$5,000.00	N/A	N/A	N/A

Develop and air announcement of upcoming channel change	***$5,000.00***	$5,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	***$38,287.00***	$38,287.00	Cost based on Estimate from GatesAir for decommissioning and removal of the channel 48 transmitters	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	$65,172.00	$64,612.00	N/A	$0.00	N/A
Total for all systems	$3,948,089.00	$3,817,449.00	N/A	$0.00	N/A

Components

Information not provided.

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	$3,948,089.00	$3,817,449.00	$0.00

Reimbursement Status

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

Certification

Section	Question	Response
Submission of Estimated Expenses Statements	WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.	
	1. The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.	

4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

	8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.	
	I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.	**Ray Carter** *Vice President and General Manager* 07/28/2017

Attachments