



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **73910** | Service: **DTV** | Call **WPXI** | Channel: **23 (UHF)**  
ID: | Sign:  
File **0000028030**  
Number:  
FRN: **0014361083** | Date **06/29**  
Submitted: **/2020**

## Applicant Information

### Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
<b>WPXI, LLC</b> 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
<b>Otto Schellin</b> <i>Director of Engineering</i> <i>WPXI, LLC</i>	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 CH23 xmtr, replace ant stack with CH23 ant mounted on pole. Use the CH48 main feedline for a new CH23 aux ant. Install a new feedline for the CH23 main ant. Remain on air using the CH48 aux ant. After transition, remove the CH48 aux ant and feedline.

**Transmitters**

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

**Auxiliary  
Transmitter****Existing Transmitter Information**

<b>Section</b>	<b>Question</b>	<b>Response</b>
<b>Existing Transmitter Description</b>	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
<b>Existing Transmitter Manufacturer and Type</b>	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
<b>New Transmitter</b>	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 returned.

**Auxiliary  
Transmitter**

**Other Transmitter Costs**

Section	Question	Response
<b>Electrical Service</b>	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.
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
<b>Channel 14 Costs</b>	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
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<b>Exterior Foundation</b>	Concrete pads for heat exchangers. 50% of total on the main transmitter and 50% on the aux transmitter.
<b>Interior Work</b>	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.

**Primary  
Transmitter**

**Existing Transmitter Information**

<b>Section</b>	<b>Question</b>	<b>Response</b>
<b>Existing Transmitter Description</b>	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
<b>Existing Transmitter Manufacturer and Type</b>	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
<b>New Transmitter</b>	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	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
<b>Electrical Service</b>	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.
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	Yes
	Type	Heating and Cooling
	Size	20 tons
	Other Size	N/A
<b>Transmitter Building Addition/Modification or Leasehold Improvement</b>	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
<b>Channel 14 Costs</b>	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**

<b>Name</b>	<b>Description</b>
<b>Interior Work</b>	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.
<b>Spare Transmitter Parts</b>	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.
<b>Exterior Foundation</b>	Concrete pads for heat exchangers 50% of total on the main transmitter and 50% on the aux transmitter.
<b>Spare Cooling System Parts</b>	To replace currently existing spare parts inventory on our cooling system. These parts are not compatible with the new transmitter and must be replaced.

**Antennas**

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

**Auxiliary  
Antenna**

**Existing Antenna Information**

Section	Question	Response
<b>Existing Antenna Description</b>	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
<b>Existing Antenna Manufacturer and Type</b>	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-R O4
Year	2008

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**Auxiliary  
Antenna**

**New Antenna Costs**

Section	Question	Response
<b>New Antenna Description</b>	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
<b>New Antenna Manufacturer and Types</b>	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	TFU-28DSC-R O4
Year	2018
Justification for New Antenna	Current antenna can not be tuned to the new channel.

**Auxiliary Antenna**

**Other Antenna Costs**

Section	Question	Response
<b>Combiner for Shared Antenna</b>	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
<b>Elbow Complex</b>	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
<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes
<b>Pattern Scatter Analysis</b>	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No

<b>Sweep Test</b>	Do you require the sweep testing of transmission line and antenna?	Yes
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**Auxiliary  
Antenna**

**Other Antenna Cost Not Listed**

Information not provided.



**Primary  
Antenna**

**Existing Antenna Information**

Section	Question	Response
<b>Existing Antenna Description</b>	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
<b>Existing Antenna Manufacturer and Type</b>	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-R06
Year	1999

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**Primary  
Antenna**

**New Antenna Costs**

Section	Question	Response
<b>New Antenna Description</b>	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
<b>New Antenna Manufacturer and Types</b>	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	TFU-27ETT /VP-R O6
Year	2018
Justification for New Antenna	Current antenna can not be tuned to the new channel.

**Primary Antenna**

**Other Antenna Costs**

Section	Question	Response
<b>Combiner for Shared Antenna</b>	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
<b>Elbow Complex</b>	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
<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for a high power antenna?	No
<b>Pattern Scatter Analysis</b>	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
<b>Sweep Test</b>	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
<b>Existing Transmission Line Description</b>	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
<b>Existing Transmission Line Manufacturer and Type</b>	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
<b>New Transmission Line Costs</b>	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
<b>Ice Bridge</b>	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
<b>Existing Transmission Line Description</b>	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
<b>Existing Transmission Line Manufacturer and Type</b>	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
<b>New Transmission Line Costs</b>	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
<b>Ice Bridge</b>	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
<b>Existing Tower Description</b>	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	
	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
<b>Existing Tower Structure Registration</b>	Do you have a tower registration number?	Yes
	ASR Number	1032235
<b>Coordinates (NAD83 ( North American Datum of 1983))</b>	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
WYC531 Two Way
WQNF304 Two Way

**Primary  
Tower**

**Tower Modification Costs**

Section	Question	Response
<b>Engineering Study</b>	Please what type of engineering study is required, if any:	Study needed for documented tower
<b>Tower Reinforcements</b>	Please select whether tower reinforcements are needed:	No reinforcements needed

**Primary  
Tower**

**Tower Rigging Costs**

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

**Primary  
Tower**

**Other Tower Expenses Not Listed**

Name	Description
Primary Antenna Support Structure	40.8' monopole and 5' wedding cake to support primary top-mount antenna

**Outside Professional Services Costs**

<b>Section</b>	<b>Question</b>	<b>Response</b>
<b>Outside Project Management Services</b>	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.
<b>Outside RF consulting Engineering Services</b>	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
<b>Attorney and Other Outside Consulting Services</b>	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
<b>RF Field Engineering Services</b>	Comprehensive coverage verification via field study	Yes
	RF exposure measurements	Yes
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

**Other Professional Services Expenses Not Listed**

**Outside Professional Services Costs** Information not provided.



**Other Expenses**

Section	Question	Response
<b>AM Pattern Disturbance</b>	Is an Impact Study needed?	No
	Is Remediation needed?	No
<b>Facility Expenses</b>	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
<b>Permit and Filing Costs</b>	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
<b>Other Miscellaneous Expenses</b>	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
<b>Primary Transmitter ULXTED-60</b>	<b>\$1,848,961.00</b>	<b>\$1,628,557.42</b>		<b>\$1,204,509.28</b>	
Spare Cooling System Parts	<i>\$16,000.00</i>	\$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
Exterior Foundation	<i>\$54,271.00</i>	\$54,271.00	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

Spare Transmitter Parts	<b><i>\$68,000.00</i></b>	\$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
Interior Work	<b><i>\$3,190.00</i></b>	\$3,190.00	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

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.	<b>\$119,000.00</b>	\$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	\$1,304,225.42	N/A	\$1,204,509.28	N/A
20 Ton system	\$115,500.00	\$63,871.00	N/A	N/A	N/A
<b>Auxiliary Transmitter ULXTE-24</b>	<b>\$792,461.00</b>	<b>\$653,854.87</b>		<b>\$358,462.58</b>	

Interior Work	<b><i>\$3,190.00</i></b>	\$3,190.00	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	<b><i>\$54,271.00</i></b>	\$54,271.00	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.	<b>\$51,000.00</b>	\$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	\$545,393.87	N/A	\$358,462.58	N/A
<b>Sub-total</b>	\$2,641,422.00	\$2,282,412.29	N/A	\$1,562,971.86	N/A
<b>Total for all systems</b>	\$4,283,096.00	\$3,838,033.39	N/A	\$2,079,568.66	N/A

### Components

Actual Information	
Description	File Name
Spare Cooling System Parts	Information not provided.
Exterior Foundation	Information not provided.
Spare Transmitter Parts	Information not provided.
Interior Work	Information not provided.

<p>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.</p>	<p>Information not provided.</p>												
<p>UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW</p>	<table border="0"> <tr> <td data-bbox="719 568 1027 600"><b>Component Description:</b></td> <td data-bbox="1161 568 1374 797">Down payment (1 /3 of total not including estimated shipping) for main transmitter</td> </tr> <tr> <td data-bbox="719 808 831 840"><b>Amount:</b></td> <td data-bbox="1161 808 1310 840">\$431,075.14</td> </tr> <tr> <td data-bbox="719 947 1027 978"><b>Component Description:</b></td> <td data-bbox="1161 947 1350 1099">GatesAir WPXI- TV Main Transmitter - Invoice 2 of 3</td> </tr> <tr> <td data-bbox="719 1111 831 1142"><b>Amount:</b></td> <td data-bbox="1161 1111 1310 1142">\$431,075.14</td> </tr> <tr> <td data-bbox="719 1249 1027 1281"><b>Component Description:</b></td> <td data-bbox="1161 1249 1382 1597">Balance of payments on GatesAir Quote Q- 76034 for ULXTED-80 transmitter and associated elements as per quote</td> </tr> <tr> <td data-bbox="719 1608 831 1639"><b>Amount:</b></td> <td data-bbox="1161 1608 1310 1639">\$342,359.00</td> </tr> </table>	<b>Component Description:</b>	Down payment (1 /3 of total not including estimated shipping) for main transmitter	<b>Amount:</b>	\$431,075.14	<b>Component Description:</b>	GatesAir WPXI- TV Main Transmitter - Invoice 2 of 3	<b>Amount:</b>	\$431,075.14	<b>Component Description:</b>	Balance of payments on GatesAir Quote Q- 76034 for ULXTED-80 transmitter and associated elements as per quote	<b>Amount:</b>	\$342,359.00
<b>Component Description:</b>	Down payment (1 /3 of total not including estimated shipping) for main transmitter												
<b>Amount:</b>	\$431,075.14												
<b>Component Description:</b>	GatesAir WPXI- TV Main Transmitter - Invoice 2 of 3												
<b>Amount:</b>	\$431,075.14												
<b>Component Description:</b>	Balance of payments on GatesAir Quote Q- 76034 for ULXTED-80 transmitter and associated elements as per quote												
<b>Amount:</b>	\$342,359.00												
<p>20 Ton system</p>	<p>Information not provided.</p>												
<p>Interior Work</p>	<p>Information not provided.</p>												
<p>Exterior Foundation</p>	<p>Information not provided.</p>												



<p>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.</p>	<p>Information not provided.</p>								
<p>UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW</p>	<table border="0"> <tr> <td data-bbox="707 571 1141 795"><b>Component Description:</b></td> <td data-bbox="1141 571 1428 795">Down payment (1 /3 of total cost before estimated shipping) for WPXI-TV Aux Transmitter</td> </tr> <tr> <td data-bbox="707 795 1141 862"><b>Amount:</b></td> <td data-bbox="1141 795 1428 862">\$179,231.29</td> </tr> <tr> <td data-bbox="707 952 1141 1108"><b>Component Description:</b></td> <td data-bbox="1141 952 1428 1108">GatesAir WPXI- TV Aux Transmitter - Invoice 2 of 3 total</td> </tr> <tr> <td data-bbox="707 1108 1141 1176"><b>Amount:</b></td> <td data-bbox="1141 1108 1428 1176">\$179,231.29</td> </tr> </table>	<b>Component Description:</b>	Down payment (1 /3 of total cost before estimated shipping) for WPXI-TV Aux Transmitter	<b>Amount:</b>	\$179,231.29	<b>Component Description:</b>	GatesAir WPXI- TV Aux Transmitter - Invoice 2 of 3 total	<b>Amount:</b>	\$179,231.29
<b>Component Description:</b>	Down payment (1 /3 of total cost before estimated shipping) for WPXI-TV Aux Transmitter								
<b>Amount:</b>	\$179,231.29								
<b>Component Description:</b>	GatesAir WPXI- TV Aux Transmitter - Invoice 2 of 3 total								
<b>Amount:</b>	\$179,231.29								

**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
<b>Primary Antenna TFU-27ETT /VP-R O6</b>	<b>\$266,030.00</b>	<b>\$242,286.00</b>		<b>\$106,553.70</b>	
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$12,135.00	Direct quoted cost from Dielectric. Is \$135.00 over predetermined estimate.	\$5,460.75	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$2,880.00	N/A
UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	\$247,000.00	\$223,751.00	N/A	\$98,212.95	N/A
<b>Auxiliary Antenna TFU-28DSC-R O4</b>	<b>\$203,880.00</b>	<b>\$200,148.00</b>		<b>\$87,591.60</b>	

Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$21,750.00	N/A	\$9,787.50	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$10,298.00	N/A	\$4,634.10	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$2,880.00	N/A
UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, horizontally polarized	<b><i>\$161,700.00</i></b>	\$161,700.00	There is no predetermined cost available for the auxiliary antenna. This cost was based on attached quote 700361CMZ-2 WPXI Cox Aux.pdf.	\$70,290.00	N/A
<b>Sub-total</b>	\$469,910.00	\$442,434.00	N/A	\$194,145.30	N/A
<b>Total for all systems</b>	\$4,283,096.00	\$3,838,033.39	N/A	\$2,079,568.66	N/A

## Components

Actual Information Description	File Name
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<p>Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)</p>	<p><b>Component Description:</b> Dielectric Elbow Complex - Part of total invoice - 45% Down Payment</p> <p><b>Amount:</b> \$5,460.75</p>
<p>Sweep test of existing antenna</p>	<p><b>Component Description:</b> For Dielectric main antenna repack sweep</p> <p><b>Amount:</b> \$2,880.00</p>
<p>UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized</p>	<p><b>Component Description:</b> For Dielectric main antenna (\$88,782.75), feed-through components (\$8,563.95), and transmission line (\$866.25).</p> <p><b>Amount:</b> \$98,212.95</p>
<p>Side mount brackets for high power antennas (if not included in antenna base cost)</p>	<p><b>Component Description:</b> Dielectric Aux Antenna Antenna Mounting Brackets - Invoice 1 of 3 - 45% Down Payment</p> <p><b>Amount:</b> \$9,787.50</p>
<p>Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)</p>	<p><b>Component Description:</b> Dielectric Aux Antenna Elbow Complex - Payment 1 of 3 - 45% Down Payment</p> <p><b>Amount:</b> \$4,634.10</p>

<p>Sweep test of existing antenna</p>	<p><b>Component Description:</b> Dielectric Aux Antenna Repack Sweep - Invoice 1 of 3 - 45% Down Payment</p> <p><b>Amount:</b> \$2,880.00</p>
<p>UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, horizontally polarized</p>	<p><b>Component Description:</b> Dielectric Aux Antenna (\$69,423.75) and Rigid Transmission Line (\$866.25) Invoice 1 of 3 - 45% Down Payment</p> <p><b>Amount:</b> \$70,290.00</p>

**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
<b>Primary Transmission Line</b>	<b>\$210,562.00</b>	<b>\$176,760.10</b>		<b>\$0.00</b>	
Rigid Transmission Line - copper, 6 1/8"	\$186,042.00	\$152,240.10	N/A	N/A	N/A
Ice Bridge	<i>\$24,520.00</i>	\$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
<b>Auxiliary Transmission Line</b>	<b>\$85,120.00</b>	<b>\$82,120.00</b>		<b>\$0.00</b>	
Ice Bridge	<i>\$24,520.00</i>	\$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

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Rigid Transmission Line - copper, 6 1/8"	\$60,600.00	\$57,600.00	N/A	N/A	N/A
<b>Sub-total</b>	\$295,682.00	\$258,880.10	N/A	\$0.00	N/A
<b>Total for all systems</b>	\$4,283,096.00	\$3,838,033.39	N/A	\$2,079,568.66	N/A

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## 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
<b>Primary Tower GTOWER</b>	<b>\$582,745.00</b>	<b>\$572,945.00</b>		<b>\$322,451.50</b>	
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$409,500.00	N/A	\$255,336.25	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
Primary Antenna Support Structure	<i>\$149,145.00</i>	\$149,145.00	No predetermined cost available. This is for the primary antenna support structures needed including a 40.8' monopole and a 5' wedding cake which are not currently part of tower.	\$67,115.25	N/A
<b>Sub-total</b>	<b>\$582,745.00</b>	<b>\$572,945.00</b>	N/A	<b>\$322,451.50</b>	N/A



<b>Total for all systems</b>	\$4,283,096.00	\$3,838,033.39	N/A	\$2,079,568.66	N/A
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## Components

Actual Information	
Description	File Name
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	<p><b>Component Description:</b> GTI America 25% down payment for main and aux antenna installation</p> <p><b>Amount:</b> \$76,836.25</p>
	<p><b>Component Description:</b> GTI America 75% remainder payment for main antenna installation</p> <p><b>Amount:</b> \$178,500.00</p>
	Information not provided.
	Structural engineering tower load study for well documented tower
Primary Antenna Support Structure	<p><b>Component Description:</b> Dielectric Main Antenna Support Structure - Payment 1 of 3 - 45% Down Payment</p> <p><b>Amount:</b> \$67,115.25</p>

**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
<b>Outside Professional Services</b>	<b>\$228,165.00</b>	<b>\$216,750.00</b>		<b>\$0.00</b>	
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

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
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
RF Exposure Measurements	\$21,050.00	\$20,000.00	N/A	N/A	N/A
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
<b>Sub-total</b>	\$228,165.00	\$216,750.00	N/A	\$0.00	N/A
<b>Total for all systems</b>	\$4,283,096.00	\$3,838,033.39	N/A	\$2,079,568.66	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
<b>Other Expenses</b>	<b>\$65,172.00</b>	<b>\$64,612.00</b>		<b>\$0.00</b>	
MVPD Notification of Channel Change	<i>\$5,000.00</i>	\$5,000.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	<i>\$5,000.00</i>	\$5,000.00	N/A	N/A	N/A

Equipment Delivery and Handling Charges	<b><i>\$5,000.00</i></b>	\$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
Disposal Costs (for equipment and other waste, net of any salvage value)	<b><i>\$38,287.00</i></b>	\$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
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
<b>Sub-total</b>	<b>\$65,172.00</b>	<b>\$64,612.00</b>	N/A	<b>\$0.00</b>	N/A

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<b>Total for all systems</b>	\$4,283,096.00	\$3,838,033.39	N/A	\$2,079,568.66	N/A
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### **Components**

Information not provided.

**Cost Information** **Grand Total**

	<b>Predetermined Cost Estimate</b>	<b>Estimated Cost</b>	<b>Actual Cost</b>
<b>Total for all systems</b>	\$4,283,096.00	\$3,838,033.39	\$2,079,568.66

**Reimbursement Status**

<b>Question</b>	<b>Response</b>
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
	<p><b>Submission of Estimated Expenses Statements</b></p>	<p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p>	
		<ol style="list-style-type: none"> <li>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.</li> <li>2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> <li>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.</li> </ol>	

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.

**Otto Schellin**  
*Director of Engineering*

06/29/2020

Certification	Section	Question	Response
	<p><b>Submission of Actual Cost Documentation Statements</b></p>	<p>WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).</p>	
		<ol style="list-style-type: none"> <li>1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity.</li> <li>2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.</li> <li>3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> </ol>	

4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD) .
6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

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.

**Otto Schellin**  
*Director of Engineering*

06/29/2020

## Attachments