

Federal Communications Commission

(REFERENCE COPY - Not for submission)				
FCC Form 399:				

Reimbursement Request

Facility ID: File Number:	37176 000002	I	Call Sign:	WLTX	Channel: 15 (UHF)
FRN: 002	4376113	Date Submitted:	06/05 /2019		

Applicant Name, Type, and Contact Information

Applicant Information

Applicant	Address	Phone	Email	Applicant Type
PACIFIC AND SOUTHERN, LLC	Denise Branson, Sr. Paralegal TEGNA, Inc. 8350 Broad Street, Suite 2000 Tysons, VA 22102 United States	+1 (703) 873-6606	dbranson@TEGNA. com	Limited Liability Company

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer	Preparer Co	Preparer Contact Name and Information			
Contact Information	Applicant	Address	Phone	Email	
	Jeffrey Johnson TEGNA	Jeffrey Johnson 7950 Jones Branch Drive McLean, VA 22102 United States	+1 (703) 873- 6736	repackreimbursement@tegna. 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	WLTX must replace its primary antenna, transmission line and transmitter as a result of the repack. An interim facility must be built in order to operate station during the repack build-out and throughout the station's assigned phase.

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

Auxiliary	Add Transmitter Information				
Transmitter	Section	Question	Response		
	Existing Transmitter Description	Type of change	Purchase New		
		Use	Auxiliary (Backup)		
		Description of Use	Backup Transmitter		
		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			
	Manufacturer and Type	Model	CD3100P1		
		Year	2001		
		Туре	Inductive Output Tube		
		IOT Power Type	Single		
		Power Capacity	25 kW		

Auxiliary	New Transmitter Costs				
Transmitter	Section	Question	Response		
	New Transmitter	Use	Auxiliary (Backup)		
		Change Type	Purchase New		
		Is this a request for upgraded equipment?	Yes		
		Manufacturer			
		Model	ULXTE-40		
		Transmitter Type	Solid State		
	-	Solid State Cooling	Liquid Cooled		
		Solid State Power capacity	25.3 kW		
		Justification for New Transmitter	Existing AUX transmitter cannot be re- tuned per manufacturer. Parts are no longer available to re-tune. Existing AUX transmitter is capable of making full ERP; therefore, new ULXTE- 40 AUX transmitter is reimbursable.		

Auxiliary 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	3 inches
	Length	100.0 feet
	Other Electrical Service	Yes
	Description	Additional electrical services required for transmitter installation, including heat exchangers transformer cooling pumps, etc.
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?	Yes
	Size	100.0 squai feet
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		
	RF Accessories	Required for new channel as part of the RF system		
	Mask Filter System	See attached GatesAir quote		
	Installation and Proof	Required to verify transmitter performance on new channel		

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	N/A	
		Is this transmitter currently shared with another station?	No	
		Is this transmitter currently in operating condition?	Yes	
	Existing Transmitter	Manufacturer		
	Manufacturer and Type	Model	CD3100P1	
		Year	2001	
		Туре	Inductive Output Tube	
		IOT Power Type	Single	
		Power Capacity	25 kW	

Existing Transmitter Information

Primary	New Transmitter Costs			
Transmitter	Section	Question	Response	
	New Transmitter	Use	Primary (Main)	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	Yes	
		Manufacturer		
		Model	ULXTE-40	
		Transmitter Type	Solid State	
		Solid State Cooling	Liquid Cooled	
		Solid State Power capacity	25.3 kW	
		Justification for New Transmitter	Old transmitter cannot be re- tuned per manufacturer. Parts are no longer available to re-tune. Reimbursable TPO is 20.9 kW based on initial 90-day filing CP. This would require a ULXTE-40.	

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	
	Section	Section Question Electrical Service Service Entrance (3 phases 800A 208V) Switchgear (industrial 800 amp) Transformer (480V)	

Other Transmitter Costs

	Rigid Conduit and Wiring	Yes
	Size	3 inches
	Length	100.0 feet
	Other Electrical Service	Yes
	Description	Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc.
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Heating and Cooling
	Size	5 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	Yes
	Size	100.0 square feet
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

Other Transmitter Cost Not Listed

Primary O Transmitter

Name

Description

RF Accessories	Required for new channel as part of the RF system
Mask Filter System	Required for new channel as part of the RF system
Installation and Proof	Required to verify transmitter performance on new channel

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	N/A	
		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?	No	
	Existing Antenna Manufacturer and Type	Class	Full Power	
		Mounting	Top 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)	1000.0 kW	

Manufacturer	
Model	TFU- 26DSC-R
Year	2001

Primary	New Antenna Costs			
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 Manufacturer and Types	Class	Full Power	
		Mounting	Top 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)	951.0 kW	
		Manufacturer		
			1	

Model	TFU- 28ETT-R S260
Year	2019
Justification for New Antenna	Station's licensed horizontally polarized, top-mount, main antenna cannot be re-tuned and must be replaced for new channel assignment

Primary Other Antenna Costs

Primary				
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	
Elbow C		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?	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

Other Antenna Cost Not Listed

Primary Antenna

Name	Description
New Top Plate	Existing top-plate and/or bolt pattern may not work for new top-mount antenna
Shipping	\$9,800

New Antenna Description Use I Description of Use I Change Type I Ownership I Owner I Is antenna shared? I Is antenna directional? I Will antenna be located on or in close proximity to an antenna farm? I New Antenna Manufacturer and Type Class Mounting S	Response
Description of Use I Change Type I Ownership Owner Is antenna shared? I Is antenna directional? Y Will antenna be located on or in close proximity to an antenna farm? I New Antenna Manufacturer and Type Class I Mounting S I	Interim
Change Type I Ownership Owner Owner I Is antenna shared? I Is antenna directional? Vill antenna be located on or in close proximity to an antenna farm? New Antenna Manufacturer and Type Class Mounting S	
New Antenna Class I New Antenna Class I Manufacturer and Type Mounting S	N/A
Owner I Is antenna shared? I Is antenna directional? Y Will antenna be located on or in close proximity to an antenna farm? I New Antenna Manufacturer and Type Class I Mounting S S	Purchase New
Is antenna shared? I Is antenna directional? Y Will antenna be located on or in close proximity to an antenna farm? I New Antenna Manufacturer and Type Class Mounting S	Owned
Is antenna directional? Y Will antenna be located on or in close proximity to an antenna farm? I New Antenna Manufacturer and Type Class I Mounting S S	N/A
Will antenna be located on or in close proximity to an antenna farm?INew Antenna Manufacturer and TypeClassIMountingSS	No
New Antenna Class I Manufacturer and Type Mounting S	Yes
Manufacturer and Type Mounting	No
Mounting	Full Power
	Side Mount
Antenna position in stack	Not in Stack
Polarization	Horizontal
	Broadband Slot
Number of Stations Supported	1
Number of Panels/Bays	24
Lower Limit	488.00 MHz
Upper Limit	494.00 MHz
Design power capacity in use	100.0 %
Other Antenna Type	N/A
ERP: (Effective Radiated Power)	1000.0 kW
Manufacturer	
	TFU-24WB-
Year	R S230 OS

Justification for New Antenna	An interim
	antenna is
	necessary
	to keep
	station on
	air during
	primary
	antenna
	replacemen
	& for
	duration of
	assigned
	phase. An
	interim
	antenna
	with a
	custom
	skull patterr
	is required
	to replicate
	existing
	coverage.

Interim Other Antenna Costs

Antenna

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	В
	Feed Line Size	6 1/8 inches
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?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Interim Antenna	Other Antenna Cost Not Listed	
	Name	Description
	Shipping	\$6,800

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

ransmissio	n Section	Question	Response
	Existing Transmission Line Description	Type of change	Purchase New
		Use	Primary (Main)
		Description of Use	N/A
		Ownership	Owned
		Owner	N/A
		Site	N/A
Existing Transmission Line Manufacturer and Type		Is the existing transmission line shared with another station or stations?	No
		Is Transmission Line in operating condition?	Yes
	Line Manufacturer and	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	1700 feet per run

Primary Existing Transmission Line

Primary	New Transmission Line		
Transmissio	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	20 inches
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	1700 feet per run
		Justification for New Transmission Line	Current Line will not work on new channel assignment.

Other Transmission Line Expenses Not Listed Primary Transmission Description

New Transmission Line

Name	Description
TX Line Sweep	Sweep required to verify post-transition channel measures well on existing line.

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	Rigid
		Diameter	6 1/8 inches
		Segment Length	Broadband
		Other Segment Length	
		Number of parallel runs	1
		Length	1630 feet per run
		Justification for New Transmission Line	Line necessary for interim facility while new primary antenna and line are installed and throughout duration of assigned phase.

Interim	Other Transmission Line Expenses Not Listed	
Transmissio	n Line	Description
	TX Line Sweep	Sweep required to verify post-transition channel measures well on new line.

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

marv	Existing	Tower
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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	Owned	
		Is this tower consider Complex?	No	
		Is this tower currently shared with any other stations?	No	
		One or more FM, AM or TV radio broadcaster(s)	N/A	
		Others Types of Users	N/A	
		Is tower documented for structural analysis?	No	
		Is tower compliant with Rev G?	No	
	Existing Tower Structure	Do you have a tower registration number?	Yes	
	Registration	ASR Number	1044489	
	Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	34° 05' 50.0" N-	
		Longitude (NAD83)	080° 45' 50.0" W-	
		Overall Structure Height	1706.67 feet	
		Support Structure Height	1637.78 feet	
		Ground Elevation Above Mean Sea Level (AMSL)	342.19 feet	

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Pacific and Southern, LLC
Date Constructed	05/24/1985

Primary Tower Section Out

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

Primary Tower Rigging Costs

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

Primary Other Tower Expenses Not Listed

Tower Information not provided.

Outside	Section	Question	Response
Professional Services Co Outside Projec Management S	Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	852
		Explanation	Fewer PM tasks are needed & OES & 399 work are needed, so the PM total has been reduced to \$150x852hrs (\$127800), a new OES component has been created & funded with part of the \$ removed from PM,& "Prepare & or review reimbursement form" has been increased
-	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	No
		For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes	
	For Auxiliary Facility	No	
	For Main Facility	Yes	
	Prepare request for Special Temporary Authority	Yes	
		Quantity	2

	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting	Prepare and file Form FCC Construction Permit Application	Yes
Services	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	2
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	Yes
	FAA Consultation (including preparation of FAA Form 7460)	Yes
	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	Yes
	RF exposure measurements	Yes
	Additional Field Engineering Service	Yes

Justification	\$5,400 per site
	visit including
	expenses x 20
	days. It is
	necessary to
	survey the
	site, plan the
	equipment,
	develop
	specifications
	for purchasing
	& oversee
	multiple
	vendor RF
	projects.
	Station does
	not have
	available
	personnel
	trained in such
	services.

Outside	Other Professional Services Expenses	Not Listed
Professional	Services Costs	Description

	Name ccs costs	Description
	Other Legal Services	Other Legal Services related to the DTV Repack
	Pre filing site review	outside engineering firm to review all sites
	Other Engineering Services	Other Engineering Services related to the DTV Repack

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	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	Yes
		Non-zoning permits	Yes
		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	Other Expenses Not Listed	
Expenses	Name	Description
	Internal labor	Local and Corporate Labor

Transmitters

Cost Information

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

	Predetermined	Estimated	Estimated Cost		Actual Cost
Description	Cost Estimate	Cost	Justification	Actual Cost	Justification
Primary Transmitter ULXTE-40	\$1,183,860.35	\$978,586.89		\$453,850.17	
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	\$947,000.00	\$742,026.54	See attached GatesAir quote and comparable MSDC IOT quote from Comark. The quotes demonstrate that the proposed solid state upgrade would be \$60,561.46 cheaper than a 1-tube MSDC.	\$371,013.27	N/A
3" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$4,900.00	N/A	N/A	N/A

Other Electrical Service: Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc.	\$25,000.00	\$25,000.00	Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc.	\$4,506.73	N/A
Other HVAC Service Type: H Size: 5 (Other)	\$25,000.00	\$25,000.00	Additional HVAC required for operation of new air- cooled solid- state transmitter while still operating with main transmitter during testing period.	N/A	N/A
Other Building Addition Size: 100.0	\$25,000.00	\$25,000.00	New pad required for heat exchangers, transformers, pumps, etc. Equipment must also be shielded.	N/A	N/A
Installation and Proof	\$58,543.75	\$58,543.75	See attached GatesAir quote	\$29,271.86	N/A
RF Accessories	\$60,395.57	\$60,395.57	See attached GatesAir quote	\$30,197.79	N/A

Mask Filter System	\$37,721.03	\$37,721.03	See attached GatesAir quote	\$18,860.52	N/A
Auxiliary Transmitter ULXTE-40	\$1,158,860.35	\$953,586.89		\$453,850.17	
Installation and Proof	\$58,543.75	\$58,543.75	See attached GatesAir quote	\$29,271.86	N/A
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	\$947,000.00	\$742,026.54	See attached GatesAir quote	\$371,013.27	N/A
3" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$4,900.00	N/A	N/A	N/A
Other Electrical Service: Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc.	\$25,000.00	\$25,000.00	Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc.	\$4,506.73	N/A
Other Building Addition Size: 100.0	\$25,000.00	\$25,000.00	New pad required for heat exchangers, transformers, pumps, etc. Equipment must also be shielded.	N/A	N/A

RF Accessories	\$60,395.57	\$60,395.57	See attached GatesAir quote	\$30,197.79	N/A
Mask Filter System	\$37,721.03	\$37,721.03	See attached GatesAir quote	\$18,860.52	N/A
Sub-total	\$2,342,720.70	\$1,932,173.78	N/A	\$907,700.34	N/A
Total for all systems	\$5,271,847.70	\$4,272,945.13	N/A	\$1,545,908.47	N/A

Components

Actual Information Description	File Name	
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	Component Description: Amount:	Gates inv #JW30004445-1A Primary Transmitter pmt 2 UL20190319jgv1 \$123,671.09
	Component Description: Amount:	Inv JW30004445-1 WLTX Primary Transmitter 1 3rd dp UL20180719jg v1 \$247,342.18
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	

Other Electrical Service: Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc.	Component Description: Amount:	Gates inv #JW30004445-1A Primary TX Electrical pmt 2 UL20190319jgv1 \$1,502.24
	Component Description:	Inv JW30004445-1 WLTX Primary TX Electrical 1 3rd dp UL20180719jg v1
	Amount:	\$3,004.49
Other HVAC Service Type: H Size:5 (Other)	Information not provided.	
Other Building Addition Size: 100.0	Information not provided.	
Installation and Proof	Component Description:	Gates inv #JW30004445-1A Primary TX Install pmt 2
	Amount:	UL20190319jgv1 \$9,757.29
	Component Description:	Inv JW30004445-1 WLTX Primary TX Install 1 3rd dp UL20180719jg v1
	Amount:	\$19,514.57

RF Accessories		
	Component Description:	Inv JW30004445-1 WLTX Primary TX RF Accessories 1 3rd dp
	Amount:	UL20180719jg v1 \$20,131.86
	Component Description:	Gates inv #JW30004445-1A Primary TX RF Accessories pmt 2 UL20190319jgv1
	Amount:	\$10,065.93
Mask Filter System		
	Component Description:	Inv JW30004445-1 WLTX Primary TX Mask Filter 1 3rd dp UL20180719jg v1
	Amount:	\$12,573.68
	Component Description:	Gates inv #JW30004445-1A Primary TX Mask Filter pmt 2
	Amount:	UL20190319jgv1 \$6,286.84
Installation and Proof		
	Component Description:	Inv JW30004446-1 WLTX Aux TX Install 1 3rd dp
	Amount:	UL20180719jg v1 \$19,514.57
	Component Description:	Gates inv #JW30004446-1A Aux TX Install pmt 2
		UL20190319jgv1

UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	Component Description:	Gates inv #JW30004446-1A Aux Transmitter p
	Amount:	2 UL20190319jgv1 \$123,671.09
	Component Description:	Inv JW30004446-1 WLTX Aux Transmitter 1 3rd d
	Amount:	UL20180719jg ∨1 \$247,342.18
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
Other Electrical Service: Additional electrical services required for	Component Description:	Gates inv
transmitter installation, including heat exchangers, transformers, cooling		#JW30004446-1A Aux TX Electrical pmt 2
pumps, etc.	Amount:	UL20190319jgv1 \$1,502.24
	Component Description:	Inv JW30004446-1 WLTX Aux TX Electrical 1 3rd dp
	Amount:	UL20180719jg v1 \$3,004.49
Other Building Addition Size: 100.0	Information not provided.	

RF Accessories		
	Component Description:	Gates inv #JW30004446-1A Aux TX RF Accessories pmt 2 UL20190319jgv1
	Amount:	\$10,065.93
	Component Description:	Inv JW30004446-1 WLTX Aux TX RF Accessories 1 3rd dp UL20180719jg v1
	Amount:	\$20,131.86
Mask Filter System		
	Component Description:	Gates inv #JW30004446-1A Aux TX Mask Filter pmt 2 UL20190319jgv1
	Amount:	\$6,286.84
	Component Description:	Inv JW30004446-1 WLTX Aux TX Mask Filter 1 3rd dp UL20180719jg v1
	Amount:	\$12,573.68

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 TFU-24WB- R S230 OS	\$290,640.00	\$288,200.00		\$145,496.70	
UHF - High Power, Side Mount, basic slot antenna, 24 bay,, 1000 kW input, directional,, horizontally polarized	\$235,000.00	\$235,000.00	N/A	\$135,405.00	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	Per other Dielectric quotes	N/A	N/A
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	\$13,700.00	\$13,000.00	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	Per Widelity estimate	\$10,091.70	N/A

Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	Per Widelity estimate	N/A	N/A
Shipping	\$6,800.00	\$6,800.00	N/A	N/A	N/A
Primary Antenna TFU-28ETT- R S260	\$588,530.00	\$374,748.35		\$108,575.10	
UHF - High Power Top Mount (200- 1000 kW), One station antenna , elliptically or circularly polarized	\$289,500.00	\$226,823.00	N/A	\$102,070.35	N/A
UHF - High Power Top Mount (200- 1000 kW), One station antenna, horizontally polarized	\$247,000.00	\$102,070.35	***System Notice: Estimate adjusted and locked because line has been superseded.	\$0.00	N/A
Shipping	\$6,400.00	\$6,400.00	N/A	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	Per Dielectric estimate	\$2,880.00	N/A

Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)	\$13,900.00	\$8,055.00	Per Dielectric quote	\$3,624.75	N/A
New Top Plate	\$25,000.00	\$25,000.00	Existing top- plate and /or bolt pattern may not work for new top- mount antenna	N/A	N/A
Sub-total	\$879,170.00	\$662,948.35	N/A	\$254,071.80	N/A
Total for all systems	\$5,271,847.70	\$4,272,945.13	N/A	\$1,545,908.47	N/A

Actual Information Description	File Name	
UHF - High Power, Side Mount, basic slot antenna, 24 bay,, 1000 kW input, directional,, horizontally polarized	Component Description: Amount:	Die inv #MAN00844 Aux ant pmt 1 UL20190226jgv1 \$67,702.50
	Component Description:	Die MAN01086 v190502jgv1
	Amount:	\$67,702.50
Sweep test of existing antenna	Information not provided.	

Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	Information not provided.	
Side mount brackets for high power antennas (if not included in antenna base cost)	Component Description:	Die inv #MAN00844 Aux ant mt brackets pmt 1 UL20190226jgv1
	Amount: Component Description:	\$5,045.85 Die MAN01086
	Amount:	v190502jgv1 \$5,045.85
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.	
Shipping	Information not provided.	
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	Component Description: Amount:	Die MAN00948 v190503jgv1 \$102,070.35
UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	Component Description:	Dielectric invoice MAN00948 will not be applied to this component N/A
	Amount:	IN/ <i>P</i> A
Shipping	Information not provided.	
Shipping Sweep test of existing antenna	Information not provided. Component Description:	Die MAN00948 v190503jgv1

channel, at antenna input, per 7 3/16. feedline (if needed)	Component Description: Amount:	Die MAN00948 v190503jgv1 \$3,624.75
New Top Plate	Information not provided.	

Transmission Line

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 Transmission Line	\$384,560.00	\$249,992.00		\$219,631.14	
TX Line Sweep	\$6,400.00	\$6,400.00	N/A	\$5,760.00	N/A
Rigid Transmission Line - copper, 6 1 /8" broadband	\$378,160.00	\$243,592.00	N/A	\$213,871.14	N/A
Primary Transmission Line	\$499,400.00	\$302,305.00		\$130,825.46	
Rigid Transmission Line - copper, 7 3 /16"	\$493,000.00	\$295,905.00	Per Dielectric quote	\$130,825.46	N/A
TX Line Sweep	\$6,400.00	\$6,400.00	N/A	N/A	N/A
Sub-total	\$883,960.00	\$552,297.00	N/A	\$350,456.60	N/A
Total for all systems	\$5,271,847.70	\$4,272,945.13	N/A	\$1,545,908.47	N/A

Actual Information	
Description	File Name

TX Line Sweep		
	Component Description:	Die MAN01086
	Amount:	v190502jgv1 \$2,880,00
	Amount:	\$2,880.00
	Component Description:	Die inv #MAN00844 Aux ant sweep pmt 1 UL20190226jgv1
	Amount:	\$2,880.00
Rigid Transmission Line -		
copper, 6 1/8" broadband	Component Description:	Die inv #MAN00844 Aux line pmt 1 UL20190226jgv1
	Amount:	\$103,281.57
	Component Description:	Die inv #MAN00844
		Aux ant TLSCRs
		pmt 1
	Amount:	UL20190226jgv1 \$3,654.00
	Anount.	ψ 3,034 .00
	Component Description:	Die MAN01086
		v190502jgv1
	Amount:	\$3,654.00
	Component Description:	Die MAN01086
		v190502jgv1
	Amount:	\$103,281.57
Rigid Transmission Line -		
copper, 7 3/16"	Component Description:	Die MAN00948
		v190503jgv1
	Amount:	\$127,808.21
	Component Description:	Die MAN00948
		v190503jgv1
	Amount:	\$3,017.25

	ТΧ	Line	Sweep
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Tower Equipment and Rigging Costs

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
Primary Tower TOWER	\$657,800.00	\$625,000.00		\$7,400.00	
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	\$7,400.00	N/A
Major tower reinforcement /modifications	\$421,000.00	\$400,000.00	N/A	N/A	N/A
Tall Tower (greater than 500')	\$210,500.00	\$200,000.00	Per Widelity estimate	N/A	N/A
Sub-total	\$657,800.00	\$625,000.00	N/A	\$7,400.00	N/A
Total for all systems	\$5,271,847.70	\$4,272,945.13	N/A	\$1,545,908.47	N/A

Actual Information Description	File Name	
Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	Component Description: Amount:	Turris inv #TE-6589 Structural Analysis UL20190402jgv1 \$7,400.00

Major tower reinforcement /modifications	Information not provided.
Tall Tower (greater than 500')	Information not provided.

Outside Professional Services

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Co Justificat
Outside Professional Services	\$370,316.00	\$363,250.00		\$23,009.73	
Other Engineering Services	\$10,800.00	\$10,800.00	Fewer PM tasks are needed & OES & 399 work are needed, so the PM total has been reduced to \$150x852hrs (\$127800), a new OES component has been created & funded with part of the \$ removed from PM,& "Prepare & or review reimbursement form" has been increased	N/A	N/A
Pre filing site review	\$19,000.00	\$19,000.00	N/A	N/A	N/A
Other Legal Services	\$10,000.00	\$10,000.00	Other Legal Services related to the DTV Repack	\$443.82	N/A

Additional Field Engineering Service, 20 Days	\$50,000.00	\$50,000.00	\$5,400 per site visit including expenses x 20 days. It is necessary to survey the site, plan the equipment, develop specifications for purchasing, & oversee multiple vendor RF projects. Station does not have available personnel trained in such services.	N/A	N/A
RF Exposure Measurements	\$21,050.00	\$20,000.00	Per widelity estimate.	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	Per Widelity estimate	N/A	N/A
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	\$2,105.00	\$2,000.00	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	\$7,360.00	\$3,500.00	Per Widelity estimates	N/A	N
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	Per Widelity estimate	N/A	Ν
Project management of the transition	\$134,616.00	\$127,800.00	Fewer PM tasks are needed & OES & 399 work are needed, so the PM total has been reduced to \$150x852hrs (\$127800), a new OES component has been created & funded with part of the \$ removed from PM,& "Prepare & or review reimbursement	\$22,565.91	Ν
			form" has been increased		

\$2,630.00	\$13,900.00	Fewer PM tasks are needed & OES & 399 work are needed, so the PM total has been reduced to \$150x852hrs (\$127800), a new OES component has been created & funded with part of the \$ removed from PM,& "Prepare & or review reimbursement form" has been increased	N/A	N/A
\$2,630.00	\$2,500.00	N/A	N/A	N/A
\$7,360.00	\$7,000.00	Per Widelity estimate	N/A	N/A
\$3,155.00	\$3,000.00	Per Widelity estimate	N/A	N/A
	\$2,630.00	\$2,630.00 \$2,500.00 \$7,360.00 \$7,000.00	 tasks are needed & OES & 399 work are needed, so the PM total has been reduced to \$150x852hrs (\$127800), a new OES component has been created & funded with part of the \$ removed from PM,& "Prepare & or review reimbursement form" has been increased \$2,630.00 \$2,500.00 N/A \$7,360.00 \$7,000.00 Per Widelity estimate \$3,155.00 \$3,000.00 Per Widelity 	tasks are needed & OES & 399 work are needed, so the PM total has been reduced to \$150x852hrs (\$127800), a new OES component has been created & funded with part of the \$ removed from PM,& "Prepare & or review reimbursement form" has been increased\$2,630.00\$2,500.00N/AN/A\$7,360.00\$7,000.00Per Widelity estimateN/A\$3,155.00\$3,000.00Per WidelityN/A

Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	Per Widelity estimate	N/A	N/A
Prepare request for Special Temporary Authorization	\$4,100.00	\$3,000.00	Per Widelity estimate	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	Per Widelity estimate	N/A	N/A
Sub-total	\$370,316.00	\$363,250.00	N/A	\$23,009.73	N/A
Total for all systems	\$5,271,847.70	\$4,272,945.13	N/A	\$1,545,908.47	N/A

Actual Information Description	File Name
Other Engineering Services	Information not provided.
Pre filing site review	Information not provided.

Other Legal Services		
	Component Description:	Covington 60801032 v190529jgv2
	Amount:	\$70.43
	Component Description:	Covington inv #60796723 Variou Legal UL20181024jgv1
	Amount:	\$174.42
	Component Description:	Covington 60805585 v190513pmv1
	Amount:	\$34.53
	Component Description:	Covington 60801029 v190513pmv1
	Amount:	\$164.44
Additional Field Engineering Service, 20 Days	Information not provided.	
RF Exposure Measurements	Information not provided.	
Comprehensive coverage verification via field study, if needed	Information not provided.	
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	Information not provided.	
ASR modification (prepare FCC Form 854)	Information not provided.	

Attorney Fees - Prepare and File request for Special Temporary Authorization	Information not provided.	
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	
Project management of the transition	Component Description:	Osborn inv #29768 Proj Mgt thru June 29 2018
	Amount:	UL20190227jgv1 \$3,462.80
	Component Description:	Inv 29203 WLTX Proj Mgt 180428- 180525 UL20180716jg v2
	Amount:	\$3,575.00
	Component Description:	Osborn inv #28580 Proj mgt thru 180330 UL20190326jgv1
	Amount:	\$600.00
	Component Description:	Osborn inv #28990 Proj mgt 180331- 180427 UL20190326jgv1
	Amount:	\$1,350.00
	Component Description:	Osborn inv #26022 Prof srvcs 170613 - 170728
	Amount:	UL20181108jg v1 \$13,578.11
Prepare and or review reimbursement form	Information not provided.	

Address transition timing and coordination issues w/ other stations and wireless	Information not provided.
Perform engineering study for new channel assignment and antenna development	Information not provided.
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Information not provided.
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.
Prepare request for Special Temporary Authorization	Information not provided.
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.

Other Expenses

Cost Information

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Co Justificati
Other Expenses	\$137,881.00	\$137,276.00		\$3,270.00	
Internal labor	\$21,791.00	\$21,791.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	\$6,000.00	\$6,000.00	40 hours at \$150 per hour to shoot, write and produce market notification spot.	\$3,270.00	N/A
MVPD Notification of Channel Change	\$6,000.00	\$6,000.00	Communication plan to make the MVPD's aware of upcoming changes and testing dates.	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	Per Widelity estimate	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
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A

Local Zoning	\$900.00	\$900.00	3 cents per hundred of value for construction permit.	N/A	N/A
Non-zoning permits	\$25,000.00	\$25,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$25,000.00	\$25,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	\$25,000.00	\$25,000.00	N/A	N/A	N/A
Equipment Storage	\$15,000.00	\$15,000.00	Antenna and RF comoponent storage	N/A	N/A
Sub-total	\$137,881.00	\$137,276.00	N/A	\$3,270.00	N/A
Total for all systems	\$5,271,847.70	\$4,272,945.13	N/A	\$1,545,908.47	N/A

Actual Information Description	File Name	
Internal labor	Information not provided.	
Develop and air announcement of upcoming channel change	Component Description: Amount:	2C Media inv #203806 Creation of channel change announcement UL20181016jgv1 \$3,270.00
MVPD Notification of Channel Change	Information not provided.	

DTV Medical Facility Notification	Information not provided.
FCC Filing Fees - Form 2100 minor change CP application	Information not provided.
FCC Filing Fees - Form 2100 license to cover application	Information not provided.
FCC Filing Fees - Special Temporary Authorization request	Information not provided.
Local Zoning	Information not provided.
Non-zoning permits	Information not provided.
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.
Equipment Delivery and Handling Charges	Information not provided.
Equipment Storage	Information not provided.

Cost Information	Grand Total				
		Predetermined Cost Estimate	Estimated Cost	Actual Cost	
	Total for all systems	\$5,271,847.70	\$4,272,945.13	\$1,545,908.47	

Reimbursem	enrestatus	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. 	
		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.	Jeffrey C Gehman Engineering Associate 06/05/2019

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.

	 The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission. 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. 	
an au name	are, under penalty of perjury, that I am thorized representative of the above- ed applicant for the Authorization(s) fied above.	Jeffrey C Gehman Engineering Associate
		06/05/2019

Attachments