



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **37176** | Service: **DTV** | Call **WLTX** | Channel: **15 (UHF)** |  
ID: | Sign:  
File **0000028040**  
Number:  
FRN: **0024376113** | Date **05/06**  
Submitted: **/2019**

## Applicant Information

### Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
<b>PACIFIC AND SOUTHERN, LLC</b>	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 Information

### Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

## Preparer Contact Information

### Preparer Contact Name and Information

Applicant	Address	Phone	Email
<b>Jeffrey Johnson</b> <i>TEGNA</i>	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
<b>Transmitter Related Expenses</b>	Do you have transmitter related expenses?	Yes

**Auxiliary  
Transmitter****Add 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	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
<b>Existing Transmitter Manufacturer and Type</b>	Manufacturer	
	Model	CD3100P1
	Year	2001
	Type	Inductive Output Tube
	IOT Power Type	Single
	Power Capacity	25 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?	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  
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	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.
<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?	Yes
	Size	100.0 square feet
<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**

<b>Name</b>	<b>Description</b>
<b>Mask Filter System</b>	See attached GatesAir quote
<b>RF Accessories</b>	Required for new channel as part of the RF system
<b>Installation and Proof</b>	Required to verify transmitter performance on new channel

**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	CD3100P1
	Year	2001
	Type	Inductive Output Tube
	IOT Power Type	Single
	Power Capacity	25 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?	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.

**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	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.
<b>HVAC Service</b>	Does the replacement transmitter require HVAC Service?	Yes
	Type	Heating and Cooling
	Size	5 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?	Yes
	Size	100.0 square feet
<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**

Name	Description
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<b>RF Accessories</b>	Required for new channel as part of the RF system
<b>Installation and Proof</b>	Required to verify transmitter performance on new channel
<b>Mask Filter System</b>	Required for new channel as part of the RF system

**Antennas**

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

**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?	Yes
	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	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-26DSC-R
Year	2001

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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?	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
	<b>New Antenna Manufacturer and Types</b>	Class
Mounting		Top Mount
Antenna position in stack		Not in Stack
Polarization		Elliptical
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) .....		951.0 kW
Manufacturer		

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 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	7 3/16 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**

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



**Interim  
Antenna**

**New Antenna Costs**

Section	Question	Response
<b>New Antenna Description</b>	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	No
<b>New Antenna Manufacturer and Type</b>	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	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	
	Model	TFU-24WB- R S230 OS
Year	2018	

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

**Other Antenna Costs**

Section	Question	Response
<b>Elbow Complex</b>	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	B
	Feed Line Size	6 1/8 inches
<b>Side Mount Brackets</b>	Do you require the separate purchase of side mount brackets for an 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?	Yes
<b>Sweep Test</b>	Do you require the sweep testing of transmission line and antenna?	Yes

**Interim  
Antenna**

**Other Antenna Cost Not Listed**

Name	Description
Shipping	\$6,800

**Transmission  
Line**

Section	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

**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	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  
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	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.

**Primary  
Transmission  
Line**

**Other Transmission Line Expenses Not Listed**

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

**Interim  
Transmission  
Line**

**New Transmission Line**

Section	Question	Response
<b>New Transmission Line Costs</b>	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Type	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  
Transmission  
Line**

**Other Transmission Line Expenses Not Listed**

Name	Description
<b>TX Line Sweep</b>	Sweep required to verify post-transition channel measures well on new line.

**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	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 Registration	Do you have a tower registration number?	Yes
	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**

**Tower Modification Costs**

Section	Question	Response
<b>Engineering Study</b>	Please what type of engineering study is required, if any:	Study needed for undocumented /poorly documented tower
<b>Tower Reinforcements</b>	Please select whether tower reinforcements are needed:	Major Reinforcements needed

**Primary Tower**

**Tower Rigging Costs**

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

**Primary Tower**

**Other Tower Expenses Not Listed**

Information not provided.

**Outside Professional Services Costs**

Section	Question	Response
<p><b>Outside Project Management Services</b></p>	<p>Do you require outside project management services?</p>	<p>Yes</p>
	<p>Number of Hours</p>	<p>852</p>
	<p>Explanation</p>	<p>Fewer PM tasks are needed &amp; OES &amp; 399 work are needed, so the PM total has been reduced to \$150x852hrs (\$127800), a new OES component has been created &amp; funded with part of the \$ removed from PM, &amp; "Prepare &amp; or review reimbursement form" has been increased</p>
<p><b>Outside RF consulting Engineering Services</b></p>	<p>Perform engineering study for new channel assignment and antenna development</p>	<p>Yes</p>
	<p>Prepare engineering section of Form FCC Construction Permit Application</p>	<p>Yes</p>
	<p>For Auxiliary Facility</p>	<p>No</p>
	<p>For Main Facility</p>	<p>Yes</p>
	<p>Prepare engineering section of Form FCC License to Cover Application</p>	<p>Yes</p>
	<p>For Auxiliary Facility</p>	<p>No</p>
	<p>For Main Facility</p>	<p>Yes</p>
	<p>Prepare request for Special Temporary Authority</p>	<p>Yes</p>
	<p>Quantity</p>	<p>2</p>

	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	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	
<b>RF Field Engineering Services</b>	Comprehensive coverage verification via field study	Yes
	RF exposure measurements	Yes
	Additional Field Engineering Service	Yes
	Number of Days	20

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.
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**Outside Professional Services Costs**

**Other Professional Services Expenses Not Listed**

Name	Description
<b>Other Legal Services</b>	Other Legal Services related to the DTV Repack
<b>Pre filing site review</b>	outside engineering firm to review all sites
<b>Other Engineering Services</b>	Other Engineering Services related to the DTV Repack

**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	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
<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?	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**

**Other Expenses Not Listed**

Name	Description
Internal labor	Local and Corporate Labor

**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 ULXTE-40</b>	<b>\$1,183,860.35</b>	<b>\$978,586.89</b>		<b>\$453,850.17</b>	
Mask Filter System	<i>\$37,721.03</i>	\$37,721.03	See attached GatesAir quote	\$18,860.52	N/A
Installation and Proof	<i>\$58,543.75</i>	\$58,543.75	See attached GatesAir quote	\$29,271.86	N/A
RF Accessories	<i>\$60,395.57</i>	\$60,395.57	See attached GatesAir quote	\$30,197.79	N/A
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.	<i>\$25,000.00</i>	\$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)	<i>\$25,000.00</i>	\$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	<i>\$25,000.00</i>	\$25,000.00	New pad required for heat exchangers, transformers, pumps, etc. Equipment must also be shielded.	N/A	N/A
<b>Auxiliary Transmitter ULXTE-40</b>	<b>\$1,158,860.35</b>	<b>\$953,586.89</b>		<b>\$453,850.17</b>	



Installation and Proof	<b><i>\$58,543.75</i></b>	\$58,543.75	See attached GatesAir quote	\$29,271.86	N/A
RF Accessories	<b><i>\$60,395.57</i></b>	\$60,395.57	See attached GatesAir quote	\$30,197.79	N/A
Mask Filter System	<b><i>\$37,721.03</i></b>	\$37,721.03	See attached GatesAir quote	\$18,860.52	N/A
Other -- Building Addition Size: 100.0	<b><i>\$25,000.00</i></b>	\$25,000.00	New pad required for heat exchangers, transformers, pumps, etc. Equipment must also be shielded.	N/A	N/A
Other Electrical Service: Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc.	<b><i>\$25,000.00</i></b>	\$25,000.00	Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc.	\$4,506.73	N/A
3" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$4,900.00	N/A	N/A	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

<b>Sub-total</b>	\$2,342,720.70	\$1,932,173.78	N/A	\$907,700.34	N/A
<b>Total for all systems</b>	\$5,271,847.70	\$4,272,945.13	N/A	\$1,545,639.07	N/A

## Components

Actual Information		
Description	File Name	
Mask Filter System	<b>Component Description:</b> Gates inv #JW30004445-1A Primary TX Mask Filter pmt 2 UL20190319jgv1 <b>Amount:</b> \$6,286.84	
	<b>Component Description:</b> Inv JW30004445-1 WLTX Primary TX Mask Filter 1 3rd dp UL20180719jg v1 <b>Amount:</b> \$12,573.68	
	<hr/>	
	Installation and Proof	<b>Component Description:</b> Inv JW30004445-1 WLTX Primary TX Install 1 3rd dp UL20180719jg v1 <b>Amount:</b> \$19,514.57
<b>Component Description:</b> Gates inv #JW30004445-1A Primary TX Install pmt 2 UL20190319jgv1 <b>Amount:</b> \$9,757.29		

RF Accessories	<p><b>Component Description:</b> Inv JW30004445-1 WLTX Primary TX RF Accessories 1 3rd dp UL20180719jg v1</p> <p><b>Amount:</b> \$20,131.86</p> <p><b>Component Description:</b> Gates inv #JW30004445-1A Primary TX RF Accessories pmt 2 UL20190319jgv1</p> <p><b>Amount:</b> \$10,065.93</p>
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	<p><b>Component Description:</b> Gates inv #JW30004445-1A Primary Transmitter pmt 2 UL20190319jgv1</p> <p><b>Amount:</b> \$123,671.09</p> <p><b>Component Description:</b> Inv JW30004445-1 WLTX Primary Transmitter 1 3rd dp UL20180719jg v1</p> <p><b>Amount:</b> \$247,342.18</p>
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.

<p>Other Electrical Service: Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc.</p>	<p><b>Component Description:</b> Gates inv #JW30004445-1A Primary TX Electrical pmt 2 UL20190319jgv1</p> <p><b>Amount:</b> \$1,502.24</p> <p><b>Component Description:</b> Inv JW30004445-1 WLTX Primary TX Electrical 1 3rd dp UL20180719jg v1</p> <p><b>Amount:</b> \$3,004.49</p>
<p>Other -- HVAC Service Type: H Size:5 (Other)</p>	<p>Information not provided.</p>
<p>Other -- Building Addition Size: 100.0</p>	<p>Information not provided.</p>
<p>Installation and Proof</p>	<p><b>Component Description:</b> Gates inv #JW30004446-1A Aux TX Install pmt 2 UL20190319jgv1</p> <p><b>Amount:</b> \$9,757.29</p> <p><b>Component Description:</b> Inv JW30004446-1 WLTX Aux TX Install 1 3rd dp UL20180719jg v1</p> <p><b>Amount:</b> \$19,514.57</p>

RF Accessories	<p><b>Component Description:</b> Inv JW30004446-1 WLTX Aux TX RF Accessories 1 3rd dp UL20180719jg v1</p> <p><b>Amount:</b> \$20,131.86</p> <p><b>Component Description:</b> Gates inv #JW30004446-1A Aux TX RF Accessories pmt 2 UL20190319jgv1</p> <p><b>Amount:</b> \$10,065.93</p>
Mask Filter System	<p><b>Component Description:</b> Inv JW30004446-1 WLTX Aux TX Mask Filter 1 3rd dp UL20180719jg v1</p> <p><b>Amount:</b> \$12,573.68</p> <p><b>Component Description:</b> Gates inv #JW30004446-1A Aux TX Mask Filter pmt 2 UL20190319jgv1</p> <p><b>Amount:</b> \$6,286.84</p>
Other -- Building Addition Size: 100.0	Information not provided.

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

**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>Interim Antenna TFU-24WB-R S230 OS</b>	<b>\$290,640.00</b>	<b>\$288,200.00</b>		<b>\$145,496.70</b>	
Shipping	<i>\$6,800.00</i>	\$6,800.00	N/A	N/A	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
UHF - High Power, Side Mount, basic slot antenna, 24 bay,, 1000 kW input, directional,, horizontally polarized	<i>\$235,000.00</i>	\$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
<b>Primary Antenna TFU-28ETT-R S260</b>	<b>\$588,530.00</b>	<b>\$374,748.35</b>		<b>\$108,575.10</b>	
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. ***	\$102,070.35	N/A
New Top Plate	<i>\$25,000.00</i>	\$25,000.00	Existing top-plate and /or bolt pattern may not work for new top-mount antenna	N/A	N/A
Shipping	<i>\$6,400.00</i>	\$6,400.00	N/A	N/A	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
Sweep test of existing antenna	\$6,730.00	\$6,400.00	Per Dielectric estimate	\$2,880.00	N/A
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	\$289,500.00	\$226,823.00	N/A	N/A	N/A
<b>Sub-total</b>	\$879,170.00	\$662,948.35	N/A	\$254,071.80	N/A
<b>Total for all systems</b>	\$5,271,847.70	\$4,272,945.13	N/A	\$1,545,639.07	N/A

## Components

Actual Information	
Description	File Name
Shipping	Information not provided.
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.

<p>UHF - High Power, Side Mount, basic slot antenna, 24 bay,, 1000 kW input, directional,, horizontally polarized</p>	<p><b>Component Description:</b> Die MAN01086 v190502jgv1</p> <p><b>Amount:</b> \$67,702.50</p> <p><b>Component Description:</b> Die inv #MAN00844 Aux ant pmt 1 UL20190226jgv1</p> <p><b>Amount:</b> \$67,702.50</p>
<p>Sweep test of existing antenna</p>	<p>Information not provided.</p>
<p>Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)</p>	<p>Information not provided.</p>
<p>Side mount brackets for high power antennas (if not included in antenna base cost)</p>	<p><b>Component Description:</b> Die MAN01086 v190502jgv1</p> <p><b>Amount:</b> \$5,045.85</p> <p><b>Component Description:</b> Die inv #MAN00844 Aux ant mt brackets pmt 1 UL20190226jgv1</p> <p><b>Amount:</b> \$5,045.85</p>
<p>UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized</p>	<p><b>Component Description:</b> Die MAN00948 v190503jgv1</p> <p><b>Amount:</b> \$102,070.35</p>
<p>New Top Plate</p>	<p>Information not provided.</p>
<p>Shipping</p>	<p>Information not provided.</p>
<p>Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)</p>	<p><b>Component Description:</b> Die MAN00948 v190503jgv1</p> <p><b>Amount:</b> \$3,624.75</p>

Sweep test of existing antenna	<b>Component Description:</b> Die MAN00948 v190503jgv1 <b>Amount:</b> \$2,880.00
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	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
<b>Interim Transmission Line</b>	<b>\$384,560.00</b>	<b>\$249,992.00</b>		<b>\$219,631.14</b>	
TX Line Sweep	<i>\$6,400.00</i>	\$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
<b>Primary Transmission Line</b>	<b>\$499,400.00</b>	<b>\$302,305.00</b>		<b>\$130,825.46</b>	
TX Line Sweep	<i>\$6,400.00</i>	\$6,400.00	N/A	N/A	N/A
Rigid Transmission Line - copper, 7 3/16"	\$493,000.00	\$295,905.00	Per Dielectric quote	\$130,825.46	N/A
<b>Sub-total</b>	<b>\$883,960.00</b>	<b>\$552,297.00</b>	N/A	<b>\$350,456.60</b>	N/A
<b>Total for all systems</b>	<b>\$5,271,847.70</b>	<b>\$4,272,945.13</b>	N/A	<b>\$1,545,639.07</b>	N/A

**Components**

Actual Information	
Description	File Name

TX Line Sweep	<p><b>Component Description:</b> Die inv #MAN00844 Aux ant sweep pmt 1 UL20190226jgv1</p> <p><b>Amount:</b> \$2,880.00</p> <p><b>Component Description:</b> Die MAN01086 v190502jgv1</p> <p><b>Amount:</b> \$2,880.00</p>
Rigid Transmission Line - copper, 6 1/8" broadband	<p><b>Component Description:</b> Die MAN01086 v190502jgv1</p> <p><b>Amount:</b> \$103,281.57</p> <p><b>Component Description:</b> Die MAN01086 v190502jgv1</p> <p><b>Amount:</b> \$3,654.00</p> <p><b>Component Description:</b> Die inv #MAN00844 Aux line pmt 1 UL20190226jgv1</p> <p><b>Amount:</b> \$103,281.57</p> <p><b>Component Description:</b> Die inv #MAN00844 Aux ant TLSCRs pmt 1 UL20190226jgv1</p> <p><b>Amount:</b> \$3,654.00</p>
TX Line Sweep	Information not provided.

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Rigid Transmission Line -  
copper, 7 3/16"

**Component Description:** Die MAN00948  
v190503jgv1  
**Amount:** \$3,017.25

**Component Description:** Die MAN00948  
v190503jgv1  
**Amount:** \$127,808.21

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**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 TOWER</b>	<b>\$657,800.00</b>	<b>\$625,000.00</b>		<b>\$7,400.00</b>	
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 Widely estimate	N/A	N/A
<b>Sub-total</b>	<b>\$657,800.00</b>	<b>\$625,000.00</b>	N/A	<b>\$7,400.00</b>	N/A
<b>Total for all systems</b>	<b>\$5,271,847.70</b>	<b>\$4,272,945.13</b>	N/A	<b>\$1,545,639.07</b>	N/A

**Components**

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

Major tower reinforcement /modifications	Information not provided.
Tall Tower (greater than 500')	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
<b>Outside Professional Services</b>	<b>\$370,316.00</b>	<b>\$363,250.00</b>		<b>\$22,740.33</b>	
Other Engineering Services	<i>\$10,800.00</i>	\$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	<i>\$19,000.00</i>	\$19,000.00	N/A	N/A	N/A
Other Legal Services	<i>\$10,000.00</i>	\$10,000.00	Other Legal Services related to the DTV Repack	\$174.42	N/A

Additional Field Engineering Service, 20 Days	<b><i>\$50,000.00</i></b>	\$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 Widely estimates	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	Per Widely estimate	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	Per Widely estimate	N/A	N/A
Prepare request for Special Temporary Authorization	\$4,100.00	\$3,000.00	Per Widely estimate	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	Per Widely estimate	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	Per Widely estimate	N/A	N/A

Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	Per Widely estimate	N/A	N/A
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Prepare and or review reimbursement form	\$2,630.00	\$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

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 form" has been increased	\$22,565.91	N/A
<b>Sub-total</b>	\$370,316.00	\$363,250.00	N/A	\$22,740.33	N/A
<b>Total for all systems</b>	\$5,271,847.70	\$4,272,945.13	N/A	\$1,545,639.07	N/A

### Components

Actual Information	
Description	File Name
Other Engineering Services	Information not provided.
Pre filing site review	Information not provided.
Other Legal Services	<p><b>Component Description:</b> Covington inv #60796723 Various Legal UL20181024jgv1</p> <p><b>Amount:</b> \$174.42</p>
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.
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.
Prepare request for Special Temporary Authorization	Information not provided.
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Information not provided.
Perform engineering study for new channel assignment and antenna development	Information not provided.

Address transition timing and coordination issues w/ other stations and wireless	Information not provided.
Prepare and or review reimbursement form	Information not provided.
Project management of the transition	<p><b>Component Description:</b> Osborn inv #26022 Prof svcs 170613 - 170728 UL20181108jg v1</p> <p><b>Amount:</b> \$13,578.11</p> <p><b>Component Description:</b> Osborn inv #29768 Proj Mgt thru June 29 2018 UL20190227jgv1</p> <p><b>Amount:</b> \$3,462.80</p> <p><b>Component Description:</b> Osborn inv #28990 Proj mgt 180331-180427 UL20190326jgv1</p> <p><b>Amount:</b> \$1,350.00</p> <p><b>Component Description:</b> Inv 29203 WLTX Proj Mgt 180428-180525 UL20180716jg v2</p> <p><b>Amount:</b> \$3,575.00</p> <p><b>Component Description:</b> Osborn inv #28580 Proj mgt thru 180330 UL20190326jgv1</p> <p><b>Amount:</b> \$600.00</p>

**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>\$137,881.00</b>	<b>\$137,276.00</b>		<b>\$3,270.00</b>	
Internal labor	<i>\$21,791.00</i>	\$21,791.00	N/A	N/A	N/A
MVPD Notification of Channel Change	<i>\$6,000.00</i>	\$6,000.00	Communication plan to make the MVPD's aware of upcoming changes and testing dates.	N/A	N/A
Develop and air announcement of upcoming channel change	<i>\$6,000.00</i>	\$6,000.00	40 hours at \$150 per hour to shoot, write and produce market notification spot.	\$3,270.00	N/A
Equipment Storage	<i>\$15,000.00</i>	\$15,000.00	Antenna and RF component storage	N/A	N/A
Equipment Delivery and Handling Charges	<i>\$25,000.00</i>	\$25,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	<i>\$25,000.00</i>	\$25,000.00	N/A	N/A	N/A
Non-zoning permits	<i>\$25,000.00</i>	\$25,000.00	N/A	N/A	N/A



Local Zoning	<i>\$900.00</i>	\$900.00	3 cents per hundred of value for construction permit.	N/A	N/A
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 minor change CP application	\$1,110.00	\$1,070.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	Per Widely estimate	N/A	N/A
<b>Sub-total</b>	\$137,881.00	\$137,276.00	N/A	\$3,270.00	N/A
<b>Total for all systems</b>	\$5,271,847.70	\$4,272,945.13	N/A	\$1,545,639.07	N/A

## Components

Actual Information	
Description	File Name
Internal labor	Information not provided.
MVPD Notification of Channel Change	Information not provided.

Develop and air announcement of upcoming channel change	<p><b>Component Description:</b> 2C Media inv #203806 Creation of channel change announcement UL20181016jgv1</p> <p><b>Amount:</b> \$3,270.00</p>
Equipment Storage	Information not provided.
Equipment Delivery and Handling Charges	Information not provided.
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.
Non-zoning permits	Information not provided.
Local Zoning	Information not provided.
FCC Filing Fees - Special Temporary Authorization request	Information not provided.
FCC Filing Fees - Form 2100 license to cover application	Information not provided.
FCC Filing Fees - Form 2100 minor change CP application	Information not provided.
DTV Medical Facility Notification	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>	\$5,271,847.70	\$4,272,945.13	\$1,545,639.07

**Reimbursement Status**

<b>Question</b>	<b>Response</b>
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
	<b>Submission of Estimated Expenses Statements</b>	<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.

<p>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.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p><b>Jeffrey C Gehman</b>  <i>Engineering Associate</i></p> <p>05/06/2019</p>

**Attachments**