



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **39664** | Service: **DTV** | Call **WCSH** | Channel: **31 (UHF)** |  
ID: | Sign:  
File **0000028041**  
Number:  
FRN: **0024376113** | Date **12/19**  
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>Gary Davis</b> <i>Regional Head of Technology and Operations</i> <i>TEGNA</i>	Gary Davis 8350 Broad Street Suite 2000 Tysons, VA 22102 United States	+1 (404) 873- 9199	gadavis@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	WCSH will construct it's new assigned facility. this will require a new transmitter, antenna and interim antenna and line during the primary facility construction.

**Transmitters**

Section	Question	Response
<b>Transmitter Related Expenses</b>	Do you have transmitter related expenses?	Yes

**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	CDP3200 P2
	Year	2001
	Type	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	50 kW

**Primary Transmitter**

**New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	ULXTE 72
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	47.2 kW
	Justification for New Transmitter	Station has in excess of 10% TPO headroom and is eligible for a 1-Step-Up Allowance. Reimbursable TPO is 36.6 kW based on initial 90-day filing CP. This would require a ULXTE-60. A 1-Step-Up is the ULXTE-72 and is therefore reimbursable.

**Primary Transmitter**

**Other Transmitter Costs**

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No

	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	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

**Primary**      **Other Transmitter Cost Not Listed**  
**Transmitter**      Information not provided.

**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	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- 28DSC-R 4C150
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	Full Power
	Mounting	Side 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) .....	775.0 kW
Manufacturer		

Model	TFU-26DSC /VP-R 4C150
Year	2018
Justification for New Antenna	Station's licensed horizontally polarized, side-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?	
	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?	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

**Primary Antenna**

**Other Antenna Cost Not Listed**

<b>Name</b>	<b>Description</b>
<b>Shipping</b>	\$6,800

**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	650.00 MHz
	Upper Limit	656.00 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 C160
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. TFU-24WB cost is equivalent to a single-channel slot interim antenna. A TFU-24WB 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	\$5,400

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

**Primary Transmission Line**  
**Existing Transmission Line**

Section	Question	Response
Existing Transmission Line Description	Type of change	Utilize Existing
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	Dielectric
	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	1400 feet per run



**Primary Transmission Line**      **Other Transmission Line Expenses Not Listed**

Name	Description
TX Line Sweep	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	1250 feet per run

Justification for New Transmission Line	Interim transmission line is necessary to keep station on air during primary antenna replacement & for duration of assigned phase. 6-1/8" rigid line is required to provide required power rating for replication ERP.
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**Other Transmission Line Expenses Not Listed**

**Interim  
Transmission  
Line**

Name	Description
TX Line Sweep	Sweep required to verify new TX line measures well

**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**

**Add 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	1055705
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	43° 51' 30.0" N-
	Longitude (NAD83)	070° 42' 39.0" W-
	Overall Structure Height	1304.77 feet
	Support Structure Height	1304.77 feet
	Ground Elevation Above Mean Sea Level (AMSL)	1228.33 feet

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Pacific and Southern, LLC
Date Constructed	01/01/1984

**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**

Name	Description
Insurance	Insurance

**Outside Professional Services Costs**

Section	Question	Response
<b>Outside Project Management Services</b>	Do you require outside project management services?	Yes
	Number of Hours	850
	Explanation	Fewer PM tasks are needed & OES & 399 work are needed, so the PM total has been reduced to \$150x850hrs (\$127500), a new OES component has been created & funded with part of the \$ removed from PM, & "Prepare & or review reimbursement form" has been increased
<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	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
<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	It will be necessary to survey the site, plan the equipment, develop specifications for purchasing, & oversee multiple vendor RF projects. Station does not have available personnel or personnel trained in such services.
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**Outside Professional Services Costs**

**Other Professional Services Expenses Not Listed**

Name	Description
<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
<b>Other Legal Services</b>	Other Legal 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**

<b>Name</b>	<b>Description</b>
<b>Insurance</b>	Insurance
<b>Internal labor</b>	Local and Corporate Labor
<b>Tele-handler forklift rental</b>	Tele-handler forklift rental

**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 72</b>	<b>\$1,567,800.00</b>	<b>\$1,494,500.00</b>		<b>\$1,280,976.46</b>	
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 35 - 50 kW	\$1,473,000.00	\$1,400,000.00	N/A	\$1,259,443.13	N/A
Other Electrical Service: Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc.	<i>\$64,600.00</i>	\$64,600.00	Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc. See attached /uploaded PDF file titled "ESM 31737 v1911115jgv1.pdf"	\$21,533.33	N/A

Other -- Building Addition Size: 100.0	<b>\$25,000.00</b>	\$25,000.00	New pad required for heat exchangers, transformers, pumps, etc. Equipment must also be shielded.	\$0.00	N/A
<b>Sub-total</b>	\$1,567,800.00	\$1,494,500.00	N/A	\$1,280,976.46	N/A
<b>Total for all systems</b>	\$3,517,314.50	\$3,410,779.50	N/A	\$2,151,625.21	N/A

### Components

Actual Information	
Description	File Name
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	<p><b>Component Description:</b> Gates US0331813 v1911125jgv1</p> <p><b>Amount:</b> \$589,767.57</p> <p><b>Component Description:</b> Gates inv #JW30004554-1 Primary Transmitter 50 pct pmt 1 UL20181205jgv1</p> <p><b>Amount:</b> \$669,675.56</p>
Other Electrical Service: Additional electrical services required for transmitter installation, including heat exchangers, transformers, cooling pumps, etc.	<p><b>Component Description:</b> ESM 32202 v191212jgv2</p> <p><b>Amount:</b> \$21,533.33</p>
Other -- Building Addition Size: 100.0	Information not provided.

**Cost Information**

**Antennas**

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
<b>Interim Antenna TFU-24WB-R C160</b>	<b>\$214,720.00</b>	<b>\$212,280.00</b>		<b>\$142,544.94</b>	
UHF - High Power, Side Mount, basic slot antenna, 24 bay,, 1000 kW input, directional,, horizontally polarized	<i>\$160,480.00</i>	\$160,480.00	N/A	\$140,044.94	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	Per Dielectric quotes	\$2,500.00	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 Widility estimate	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
Shipping	<i>\$5,400.00</i>	\$5,400.00	N/A	N/A	N/A
<b>Primary Antenna TFU-26DSC /VP-R 4C150</b>	<b>\$230,442.00</b>	<b>\$228,002.00</b>		<b>\$187,532.10</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
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$22,000.00	Per Widelity estimate	\$19,575.00	N/A

Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)	\$13,900.00	\$13,200.00	Per Widely estimate	\$9,268.20	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	per Widely estimate	N/A	N/A
UHF - High Power, Side Mount, basic slot antenna, 775 kW input, directional,, elliptically or circularly polarized	<b>\$95,257.55</b>	\$95,257.55	N/A	\$79,344.45	N/A
UHF - High Power, Side Mount, basic slot antenna, 775 kW input, directional,, horizontally polarized	<b>\$79,344.45</b>	\$79,344.45	***System Notice: Estimate adjusted and locked because line has been superseded. ***Per Widely estimate.	\$79,344.45	N/A
<b>Sub-total</b>	\$445,162.00	\$440,282.00	N/A	\$330,077.04	N/A
<b>Total for all systems</b>	\$3,517,314.50	\$3,410,779.50	N/A	\$2,151,625.21	N/A

## Components

Actual Information	
Description	File Name

<p>UHF - High Power, Side Mount, basic slot antenna, 24 bay,, 1000 kW input, directional,, horizontally polarized</p>	<p><b>Component Description:</b> Die MAN01245 v190716jgv1  <b>Amount:</b> \$67,702.50</p>
	<p><b>Component Description:</b> Die MAN01245 v190716jgv1  <b>Amount:</b> \$2,319.97</p>
	<p><b>Component Description:</b> Die MAN00730 v190715jgv1  <b>Amount:</b> \$1,031.10</p>
	<p><b>Component Description:</b> Die MAN00851 v190715jgv1  <b>Amount:</b> \$1,288.87</p>
	<p><b>Component Description:</b> Die MAN00730 v190715jgv1  <b>Amount:</b> \$30,090.00</p>
	<p><b>Component Description:</b> Die MAN00851 v190715jgv1  <b>Amount:</b> \$37,612.50</p>
<p>Sweep test of existing antenna</p>	<p><b>Component Description:</b> Inv 24619 WCSH Sweep UL20180629jg v1  <b>Amount:</b> \$2,500.00</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>Information not provided.</p>

Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.
Shipping	Information not provided.
Shipping	Information not provided.
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.
Side mount brackets for high power antennas (if not included in antenna base cost)	<p><b>Component Description:</b> Die MAN01343 v190805pmv1</p> <p><b>Amount:</b> \$9,787.50</p> <p><b>Component Description:</b> Die inv #MAN00849 Brackets pmt 1 UL20190220jgv1</p> <p><b>Amount:</b> \$9,787.50</p>
Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed)	<p><b>Component Description:</b> Die inv #MAN00849 Elbow complex pmt 1 UL20190220jgv1</p> <p><b>Amount:</b> \$4,634.10</p> <p><b>Component Description:</b> Die MAN01343 v190805pmv1</p> <p><b>Amount:</b> \$4,634.10</p>
Sweep test of existing antenna	Information not provided.



<p>UHF - High Power, Side Mount, basic slot antenna, 775 kW input, directional,, elliptically or circularly polarized</p>	<p><b>Component Description:</b> Die MAN01343 v190805pmv1  <b>Amount:</b> \$773.55</p>
<p>UHF - High Power, Side Mount, basic slot antenna, 775 kW input, directional,, elliptically or circularly polarized</p>	<p><b>Component Description:</b> Die MAN01343 v190805pmv1  <b>Amount:</b> \$78,570.90</p>
<p>UHF - High Power, Side Mount, basic slot antenna, 775 kW input, directional,, horizontally polarized</p>	<p><b>Component Description:</b> Die inv #MAN00849 Fixed flange pmt 1 UL20190220jgv1  <b>Amount:</b> \$773.55</p>
<p>UHF - High Power, Side Mount, basic slot antenna, 775 kW input, directional,, horizontally polarized</p>	<p><b>Component Description:</b> Die inv #MAN00849 Antenna pmt 1 UL20190220jgv1  <b>Amount:</b> \$78,570.90</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>Interim Transmission Line</b>	<b>\$296,400.00</b>	<b>\$282,650.00</b>		<b>\$140,542.20</b>	
Rigid Transmission Line - copper, 6 1/8" broadband	\$290,000.00	\$276,250.00	N/A	\$134,782.20	N/A
TX Line Sweep	<i>\$6,400.00</i>	\$6,400.00	N/A	\$5,760.00	N/A
<b>Primary Transmission Line</b>	<b>\$8,518.00</b>	<b>\$8,518.00</b>		<b>\$7,666.20</b>	
TX Line Sweep	<i>\$8,518.00</i>	\$8,518.00	N/A	\$7,666.20	N/A
<b>Sub-total</b>	<b>\$304,918.00</b>	<b>\$291,168.00</b>	<b>N/A</b>	<b>\$148,208.40</b>	<b>N/A</b>
<b>Total for all systems</b>	<b>\$3,517,314.50</b>	<b>\$3,410,779.50</b>	<b>N/A</b>	<b>\$2,151,625.21</b>	<b>N/A</b>

**Components**

Actual Information	
Description	File Name

Rigid Transmission Line - copper, 6 1/8" broadband	<p><b>Component Description:</b> Die MAN01245 v190716jgv1</p> <p><b>Amount:</b> \$67,391.10</p>
	<p><b>Component Description:</b> Die MAN00730 v190715jgv1</p> <p><b>Amount:</b> \$29,951.60</p>
	<p><b>Component Description:</b> Die MAN00851 v190715jgv1</p> <p><b>Amount:</b> \$37,439.50</p>
TX Line Sweep	<p><b>Component Description:</b> Die MAN01245 v190716jgv1</p> <p><b>Amount:</b> \$2,880.00</p>
	<p><b>Component Description:</b> Die MAN00851 v190715jgv1</p> <p><b>Amount:</b> \$1,600.00</p>
	<p><b>Component Description:</b> Die MAN00730 v190715jgv1</p> <p><b>Amount:</b> \$1,280.00</p>

TX Line Sweep

**Component Description:** Die inv #MAN00849  
Sweep pmt 1  
UL20190220jgv1  
**Amount:** \$2,880.00

**Component Description:** Die MAN01343  
v190805pmv1  
**Amount:** \$953.10

**Component Description:** Die inv #MAN00849  
Trans test pmt 1  
UL20190220jgv1  
**Amount:** \$953.10

**Component Description:** Die MAN01343  
v190805pmv1  
**Amount:** \$2,880.00

**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>\$669,300.00</b>	<b>\$636,500.00</b>		<b>\$311,897.25</b>	
Insurance	<i>\$11,500.00</i>	\$11,500.00	See attached /uploaded PDF file titled "Tower Eng 3080 v191126jgv1.pdf"	\$9,846.25	N/A
Tall Tower (greater than 500')	\$210,500.00	\$200,000.00	Per Widality estimate	N/A	N/A
Major tower reinforcement /modifications	\$421,000.00	\$400,000.00	N/A	\$294,186.00	N/A
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	\$7,865.00	N/A
<b>Sub-total</b>	<b>\$669,300.00</b>	<b>\$636,500.00</b>	N/A	<b>\$311,897.25</b>	N/A
<b>Total for all systems</b>	<b>\$3,517,314.50</b>	<b>\$3,410,779.50</b>	N/A	<b>\$2,151,625.21</b>	N/A

**Components**

Actual Information Description	File Name
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Insurance	<p><b>Component Description:</b> Tower Eng 3080 v191126jgv1</p> <p><b>Amount:</b> \$9,846.25</p>
Tall Tower (greater than 500')	Information not provided.
Major tower reinforcement /modifications	<p><b>Component Description:</b> FDH SIN000929 v191219jgv1</p> <p><b>Amount:</b> \$134,325.50</p> <p><b>Component Description:</b> FDH SIN000486 v191219jgv1</p> <p><b>Amount:</b> \$134,325.50</p> <p><b>Component Description:</b> Tower Eng inv #Final 2776 Structural Analysis UL20190402jgv1</p> <p><b>Amount:</b> \$25,535.00</p>
Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	<p><b>Component Description:</b> TEC Final 3137 v191212jgv1</p> <p><b>Amount:</b> \$3,750.00</p> <p><b>Component Description:</b> WCSH TI inv #0104904-IN Structural Analysis UL20180831jg v2</p> <p><b>Amount:</b> \$4,115.00</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>\$374,450.00</b>	<b>\$393,250.00</b>		<b>\$63,227.16</b>	
Other Legal Services	<i>\$10,000.00</i>	\$10,000.00	Other Legal Services related to the DTV Repack	\$424.09	N/A
Other Engineering Services	<i>\$11,250.00</i>	\$11,250.00	Fewer PM tasks are needed & OES & 399 work are needed, so the PM total has been reduced to \$150x850hrs (\$127500), a new OES component has been created & funded with part of the \$ removed from PM, & "Prepare & or review reimbursement form" has been increased	\$5,197.50	N/A

Additional Field Engineering Service, 20 Days	<b><i>\$50,000.00</i></b>	\$50,000.00	\$2,500 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 Widality estimate	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	Per Widality 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
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$7,360.00	\$7,000.00	Per Widality estimate	N/A	N/A



Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	Per Widality estimate	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	Per Widality estimate	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	per Widality estimate	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	Per Widality estimate	N/A	N/A
Pre filing site review	<b>\$23,000.00</b>	\$23,000.00	N/A	N/A	N/A

Project management of the transition	\$134,300.00	\$150,000.00	It will be necessary to schedule and coordinate multiple vendors, complete progress reports, and update Schedule 399s. Station does not have available personnel or personnel trained in project management for such complex projects.	\$47,943.07	N/A
Prepare request for Special Temporary Authorization	\$4,100.00	\$3,000.00	Per Widely estimate	N/A	N/A

Prepare and or review reimbursement form	\$2,630.00	\$13,750.00	Fewer PM tasks are needed & OES & 399 work are needed, so the PM total has been reduced to \$150x850hrs (\$127500), a new OES component has been created & funded with part of the \$ removed from PM, & "Prepare & or review reimbursement form" has been increased	\$9,662.50	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
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	Per Widality estimate	N/A	N/A
ASR modification (prepare FCC Form 854)	\$2,105.00	\$2,000.00	N/A	N/A	N/A
<b>Sub-total</b>	\$374,450.00	\$393,250.00	N/A	\$63,227.16	N/A
<b>Total for all systems</b>	\$3,517,314.50	\$3,410,779.50	N/A	\$2,151,625.21	N/A

## Components

**Actual Information****Description****File Name**

Other Legal Services

<b>Component Description:</b>	Covington 60801029 v190712jgv2
<b>Amount:</b>	\$144.71
<b>Component Description:</b>	Covington 60801032 v190715jgv2
<b>Amount:</b>	\$70.43
<b>Component Description:</b>	Covington inv #60796723 Various Legal UL20181024jgv1
<b>Amount:</b>	\$174.42
<b>Component Description:</b>	Covington 60801029 v190513pmv1
<b>Amount:</b>	\$164.44
<b>Component Description:</b>	Covington 60801032 v190530jgv2
<b>Amount:</b>	\$70.43
<b>Component Description:</b>	Covington 60805585 v190513pmv1
<b>Amount:</b>	\$34.53

Other Engineering Services	<p><b>Component Description:</b> Osborn 35807 v191219jgv1</p> <p><b>Amount:</b> \$4,110.00</p> <p><b>Component Description:</b> Osborn inv #29834 Other Eng Srvcs UL20190325jgv1</p> <p><b>Amount:</b> \$1,087.50</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.
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 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.	
Pre filing site review	Information not provided.	
Project management of the transition	<b>Component Description:</b> <b>Amount:</b>	Osborn 35393 v191219jgv1 \$2,449.00
	<b>Component Description:</b> <b>Amount:</b>	Osborn 32824 v190614pmv1 \$1,575.00
	<b>Component Description:</b> <b>Amount:</b>	Osborn 31149 v191219jgv1 \$1,425.00
	<b>Component Description:</b> <b>Amount:</b>	Osborn 32198 v191219jgv1 \$1,275.00
	<b>Component Description:</b> <b>Amount:</b>	Osborn 35807 v191219jgv1 \$2,865.00
	<b>Component Description:</b> <b>Amount:</b>	Osborn 36184 v191219jgv1 \$2,025.00
	<b>Component Description:</b> <b>Amount:</b>	Osborn 34998 v191219jgv1 \$1,801.00
	<b>Component Description:</b> <b>Amount:</b>	Osborn 33848 v191219jgv1 \$1,800.00

**Component Description:** Osborn 31786  
v191219jgv1  
**Amount:** \$1,350.00

**Component Description:** Osborn 31604  
v191219jgv1  
**Amount:** \$975.00

**Component Description:** Osborn 30480  
v191219jgv1  
**Amount:** \$1,500.00

**Component Description:** Osborn 30002  
v191219jgv1  
**Amount:** \$1,050.00

**Component Description:** Osborn 34578  
v190813jgv1  
**Amount:** \$1,425.00

**Component Description:** Osborn 32965  
v190617pmv1  
**Amount:** \$675.00

**Component Description:** Osborn inv #26020  
Prof svcs 170608 -  
170728  
UL20181107jg v1  
**Amount:** \$19,453.07

**Component Description:** Osborn 33663  
v190815jgv2  
**Amount:** \$1,425.00

**Component Description:** Osborn inv #28991  
Proj mgt 180331-  
180427  
UL20190325jgv1  
**Amount:** \$1,275.00

**Component Description:** Osborn inv #29834  
Proj mgt 180526-  
180629  
UL20190325jgv1  
**Amount:** \$1,800.00

**Component Description:** Inv 29205 WCSH  
Proj Mgt 180428-  
180525  
UL20180706jg v1  
**Amount:** \$1,425.00

**Component Description:** Osborn inv #28581  
Proj mgt thru  
180330  
UL20190325jgv1  
**Amount:** \$375.00

Prepare request for  
Special Temporary  
Authorization

Information not provided.

Prepare and or review  
reimbursement form

**Component Description:** Osborn 35393  
v191219jgv1  
**Amount:** \$1,400.00

**Component Description:** Osborn 31149  
v191219jgv1  
**Amount:** \$525.00

**Component Description:** Osborn 35807  
v191219jgv1  
**Amount:** \$635.00



**Component Description:** Osborn 32198  
v191219jgv1  
**Amount:** \$525.00

**Component Description:** Osborn 36184  
v191219jgv1  
**Amount:** \$400.00

**Component Description:** Osborn 34998  
v191219jgv1  
**Amount:** \$605.00

**Component Description:** Osborn 33848  
v191219jgv1  
**Amount:** \$405.00

**Component Description:** Osborn 30002  
v191219jgv1  
**Amount:** \$422.50

**Component Description:** Osborn 32965  
v190617pmv1  
**Amount:** \$550.00

**Component Description:** Osborn 34578  
v190813jgv1  
**Amount:** \$995.00

**Component Description:** Osborn inv #28991  
Amend 399 Form  
UL20190325jgv1  
**Amount:** \$3,200.00

**Component Description:** Osborn 33663  
v190815jgv2  
**Amount:** N/A

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.
ASR modification (prepare FCC Form 854)	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>\$155,684.50</b>	<b>\$155,079.50</b>		<b>\$17,238.90</b>	
Tele-handler forklift rental	<i>\$4,042.50</i>	\$4,042.50	See attached / uploaded PDF file titled "WD Matthews PS107127 v191219jgv1.pdf"	\$4,042.50	N/A
Internal labor	<i>\$24,052.00</i>	\$24,052.00	N/A	N/A	N/A
Insurance	<i>\$11,500.00</i>	\$11,500.00	Insurance coverage. Please see the attached /uploaded PDF file titled "WCSH - TEC Services Agreement (9-19-2019 TEC signed).pdf"	N/A	N/A
MVPD Notification of Channel Change	<i>\$6,000.00</i>	\$6,000.00	Execute communication plan to the MVPD's about the up coming 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, edit, and post spot for audience awareness.	\$3,270.00	N/A

Disposal Costs (for equipment and other waste, net of any salvage value)	<i>\$25,000.00</i>	\$25,000.00	N/A	\$9,926.40	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 for construction permit.	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	Per Widely 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
Equipment Storage	<i>\$15,000.00</i>	\$15,000.00	Six months of storage per Dielectric rate card for 2 flatbeds of equipment.	N/A	N/A
Equipment Delivery and Handling Charges	<i>\$25,000.00</i>	\$25,000.00	N/A	N/A	N/A
<b>Sub-total</b>	\$155,684.50	\$155,079.50	N/A	\$17,238.90	N/A

<b>Total for all systems</b>	\$3,517,314.50	\$3,410,779.50	N/A	\$2,151,625.21	N/A
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## Components

Actual Information	
Description	File Name
Tele-handler forklift rental	<p><b>Component Description:</b> WD Matthews PS107127 v191219jgv1</p> <p><b>Amount:</b> \$4,042.50</p>
Internal labor	Information not provided.
Insurance	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>

Disposal Costs (for equipment and other waste, net of any salvage value)	<b>Component Description:</b> Pine Tree 2354482 v191219pmv1 <b>Amount:</b> \$145.60
	<b>Component Description:</b> Pine Tree 2373227 v191219jgv1 <b>Amount:</b> \$140.40
	<b>Component Description:</b> Pine Tree 2324400 v191219pmv1 <b>Amount:</b> \$140.40
	<b>Component Description:</b> N Pride inv #7910 Transmitter Demo UL20190402jgv1 <b>Amount:</b> \$9,500.00
Non-zoning permits	Information not provided.
Local Zoning	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.
Equipment Storage	Information not provided.
Equipment Delivery and Handling Charges	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>	\$3,517,314.50	\$3,410,779.50	\$2,151,625.21

**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.

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*

12/19/2019

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.

**Jeffrey C  
Gehman**  
*Engineering  
Associate*

12/19/2019

## Attachments