

Federal Communications Commission

# (REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility ID: File Number:	49439 000002	Service: <b>DTV</b> 7699	Call Sign:	WNEO	Channel: <b>29 (UHF)</b>
FRN: <b>000</b>	2940336	Date Submitted:	01/28 /2020		

### Applicant Name, Type, and Contact Information

### Applicant Information

Applicant	Address	Phone	Email	Applicant Type
NORTHEASTERN	Anthony	+1	adennis@westernreservepublicmedia.	Not-for-
EDUCATIONAL	Dennis	(330)	org	Profit
<b>TELEVISION OF</b>	1750	677-		
OHIO, INC.	CAMPUS	4549		
	CENTER			
	DRIVE			
	P.O.			
	BOX			
	5191			
	KENT,			
	OH			
	44240			
	United			
	States			

#### Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer	Preparer Contact Name a	nd Information		
Contact Information	Applicant	Address	Phone	Email

Robert Gehman	Robert Gehman	+1 (352)	bob@kesslerandgehman
ConsultingEngineer	507 NW 60	332-3157	com
Kessler and Gehman	Street		
Associates, Inc.	Suite D		
	Gainesville, FL		
	32607		
	United States		

Broadcaster	Question	Response	
Information and Transition Plan	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	Retune transmitter, replace antenna and line. Acquire interim transmitter, antenna and line for continued operation during construction and duration of the assigned phase. Map and analyze tower; design and implement modifications if required.	

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

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	CTT-U- DCXP-2H		
		Year	2003		
		Туре	Inductive Output Tube		
		IOT Power Type	Two		
		Power Capacity	40 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	Existing transmitter is an MSDC			

# Primary 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	No
		Size	N/A
		Length	N/A
		Other Electrical Service	No
		Description	N/A
	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?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Transmitter         Name         Description           Transmitter Electrical         Transmitter Electrical         Transmitter Electrical	Primary	Other Transmitter Cost Not Listed			
Transmitter Electrical Transmitter Electrical	Transmitter	Name	Description		
		Transmitter Electrical	Transmitter Electrical		

Interim	New Transmitter Costs		
Transmitter	Section	Question	Response
	New Transmitter	Use	Interim
		Description of Use	N/A
		Change Type	Purchase
		Manufacturer	
		Model	TBD
		Transmitter Type	Solid State
		Solid State Cooling	Liquid Cooled
		Solid State Power capacity	31 kW
		Justification for New Transmitter	To keep the station on the air while re- tuning the MSDC and for the duration of the assigned phase.

# Interim Other Transmitter Costs

Transmitter	Section	Question	Response
	Electrical Service	Service Entrance (3 phases 800A 208V)	No
		Switchgear (industrial 800 amp)	Yes
		Transformer (480V)	Yes
		Power	150 kVA
		Rigid Conduit and Wiring	Yes
		Size	3 inches
		Length	100.0 feet

	Other Electrical Service	No
	Description	N/A
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?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A
Inside RF System	Is an additional interior RF system required to support this interim transmitter?	Yes

# Interim Other Transmitter Cost Not Listed

Transmitter Information not provided.

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?	No	
		Is antenna in operating condition?	Yes	
		Is antenna located on or in close proximity to an antenna farm?	No	
	Existing Antenna Manufacturer and Type	Class	Full Power	
		Mounting	Top Mount	
		Antenna position in stack	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)	500.0 kW	

Manufacturer	
Model	TFU-42J
Year	2003

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?	No
		Ownership	Owned
		Owner	N/A
		Is antenna shared?	No
		Is antenna directional?	No
		Will antenna be located on or in close proximity to an antenna farm?	No
	New Antenna	Class	Full Power
	Manufacturer and Types	Mounting	Top Mount
		Antenna position in stack	Not in Stack
		Polarization	Horizontal
		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)	365.0 kW
		Manufacturer	
		Model	TBD
		Year	2018

ustification for New Antenna

# Primary Other Antenna Costs

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
	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	8 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

PrimaryOther Antenna Cost Not ListedAntennaInformation not provided.

Interim	New Antenna Costs			
Antenna	Section	Question	Response	
	New Antenna Description	Use	Interim	
		Description of Use	N/A	
		Change Type	Purchase New	
		Ownership	Owned	
		Owner	N/A	
		Is antenna shared?	No	
		Is antenna directional?	No	
		Will antenna be located on or in close proximity to an antenna farm?	No	
	New Antenna Manufacturer and Type	Class	Full Power	
		Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		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)	500.0 kW	
		Manufacturer		
		Model	ATW29H3- HSO10-29H	
		Year	2018	

An interim
antenna is
necessary
to keep
station on
the air
during
primary
antenna
replacemer
and for the
duration of
the
assigned
phase.
Station will
attempt to
rent if
renting is
available at
time of
acquisition.

# Interim Other Antenna Costs

### Antenna

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	No
	Broadband or Single Channel?	N/A
	Feed Line Size	N/A
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	
	Air Dryer	Air Dryer	

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

Primary	Existing Transmission Line				
Transmissio	n Line Section	Question	Response		
	Existing Transmission Line Description	Type of change	Purchase New		
		Use	Primary (Main)		
		Description of Use	N/A		
		Ownership	Owned		
		Owner	N/A		
		Site	N/A		
		Is the existing transmission line shared with another station or stations?	No		
		Is Transmission Line in operating condition?	Yes		
	Existing Transmission	Manufacturer			
	Line Manufacturer and Type	Туре	Rigid		
		Diameter	8 3/16 inches		
		Other Diameter	N/A		
		Segment Length	19 1/2 inches		
		Other Segment Length	N/A		
		Number of parallel runs	1		
		Length	920 feet per run		

Primary	New Transmission Line		
Transmission	New Transmission Line Costs	Question	Response
		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	19 1/2 inches
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	920 feet per run
		Justification for New Transmission Line	Station is budgeting for new transmission line in case the sweep of the existing line is found to be unacceptable.

Other Transmission Line Expenses Not Listed Transmission

Interim	New Transmission Line				
Transmissio	Section	Question	Response		
	New Transmission Line Costs	Use	Interim		
		Description of Use	N/A		
		Change Type	Purchase New		
		Туре	Flexible Air		
		Diameter	5 inches		
		Segment Length	N/A		
		Other Segment Length			
		Number of parallel runs	1		
		Length	820 feet per run		
		Justification for New Transmission Line	An interim transmission line is necessary for the interim antenna to keep station on the air during primary antenna replacement and for the duration of the assigned phase. Station will attempt to rent if renting is available at time of acquisition.		

# Other Transmission Line Expenses Not Listed Transmission

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

#### **Existing Tower** Primarv

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Т	C	)V	V	е	r	

Section	Question	Response
Existing Tower	Type of change	Modify Existing
Description	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	Do you have a tower registration number?	Yes
Structure Registration	ASR Number	1021036
Coordinates (NAD83	Latitude (NAD83)	40° 54' 23.2" N-
(North American Datum of 1983))	Longitude (NAD83)	080° 54' 39.3" W-
	Overall Structure Height	766.07 feet
	Support Structure Height	702.42 feet
	Ground Elevation Above Mean Sea Level (AMSL)	1274.92 feet
	Structure Type	TOWER - Free Standing or Guyed Structure

Tower Owner	NORTHEASTERN EDUCATIONAL TV OF OHIO INC
Date Constructed	01/15/1990

### **Tower Modification Costs**

# Primary Tower

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 Reinforcements needed

# **Tower Rigging Costs** Primary Tower

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

# Other Tower Expenses Not Listed

Primary Tower Information not provided.

Outside	Section	Question	Response
Professional	Management Services	Do you require outside project management services?	Yes
		Number of Hours	20
		Explanation	It will be necessary to schedule and coordinate multiple vendors, complete progress reports, and update Schedule 399. Station does not have available personnel or personnel trained in project management for such complex projects.
	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	1
	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	1
	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	No
	Additional Field Engineering Service	Yes

Number of Days	14
Justification	It will be necessary to survey the site, plan the equipment, develop specifications for purchasing, and oversee multiple vendor RF projects. Station does not have available personnel or personnel trained in such services.

Outside	Other Professional Services Expenses	Not Listed
Professional	Services Costs	Description
	Other Engineering Services	Other Engineering Services

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	No
		Non-zoning permits	Yes
		BLM or NFS Coordination	No
		FCC Construction Permit Minor Change	No
		FCC License to Cover Application	No
		FCC Special Temporary Authority Application	No
	Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
		Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
		Does this relocation require Equipment Storage?	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	Other Expenses Not Listed		
Expenses	Name	Description	
	Simulcast FCC required spots and crawls	Simulcast FCC required spots and crawls	

# Transmitters

### 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 Transmitter TBD	\$1,163,450.00	\$1,105,500.00		\$0.00	
UHF inside RF system including switching	\$147,500.00	\$140,000.00	The UHF inside RF system is included in the online Cost Catalog and was pre-filled as a Predetermined Cost Estimate with a value of \$140,000.	N/A	N/A
3" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$4,900.00	N/A	N/A	N/A
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$24,300.00	N/A	N/A	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	\$947,000.00	\$900,000.00	N/A	N/A	N/A
Primary Transmitter ULXTE-40	\$983,500.00	\$771,800.92		\$720,270.92	

Transmitter Electrical	\$36,500.00	\$36,500.00	See attached /uploaded PDF file titled "Priest 000166 v200120jgv1. pdf"	\$18,250.00	N/A
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	\$947,000.00	\$735,300.92	See attached / uploaded PDF file titled "Gates US0334211 Prim TX Bal Due v200128jgv1. pdf"	\$702,020.92	N/A
Sub-total	\$2,146,950.00	\$1,877,300.92	N/A	\$720,270.92	N/A
Total for all systems	\$3,873,845.45	\$3,541,567.38	N/A	\$974,580.01	N/A

### Components

Actual Information Description	File Name	
UHF inside RF system including switching	Information not provided.	
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
Transformer 3 phase/480v - 150 KVA	Information not provided.	
Switchgear - industrial 800 amp	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	Information not provided.	
Transmitter Electrical		
	Component Description: Amount:	Priest 000166 v200120jgv1 \$18,250.00

UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	Component Description: Amount:	Gates JW3004686V.1 Prim TX 1-3rd pmt 1 v191010jgv4 \$241,166.39
	Component Description:	Gates
		JW3004686V.2
		Prim TX 1-3rd pmt
		2 v191225jgv1
	Amount:	\$241,166.39
	Component Description:	Gates US0334211
		Prim TX Bal Due
		v200128jgv1
	Amount:	\$219,688.14

### 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 ATW29H3- HSO10-29H	\$185,318.45	\$174,803.45		\$157,323.09	
Air Dryer	\$4,298.45	\$4,298.45	N/A	\$3,868.59	N/A
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$4,800.00	N/A	\$4,320.00	N/A
Sweep test of existing antenna	\$6,730.00	\$6,250.00	N/A	\$5,625.00	N/A
UHF - High Power, Side Mount, basic slot antenna, 500 kW input, horizontally polarized	\$145,880.00	\$145,880.00	N/A	\$131,292.00	N/A

Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$13,575.00	N/A	\$12,217.50	N/A
Primary Antenna TBD	\$268,980.00	\$266,611.00		\$0.00	
UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	\$247,000.00	\$235,000.00	N/A	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	See quote attached; item 4. to sweep new primary line and antenna.	N/A	N/A
Elbow complex, single channel, at antenna input, per 8 3/16. feedline (if needed)	\$15,250.00	\$25,211.00	See Dielectric quote attached	N/A	N/A
Sub-total	\$454,298.45	\$441,414.45	N/A	\$157,323.09	N/A
Total for all systems	\$3,873,845.45	\$3,541,567.38	N/A	\$974,580.01	N/A

# Components

Description	File Name	
Air Dryer		
	Component Description:	ERI WNEO-002
		Int line dryer 30
		pct pmt 1
		v190814jgv1
	Amount:	\$1,289.53
	Component Description:	ERI WNEO-37763
		Int line dryer 30
		pct pmt 2
		v191223jgv1
	Amount:	\$1,289.53
	Component Description:	ERI WNEO-37763-
		1 Int line dryer 30
		pct pmt 3
		v191223jgv1
	Amount:	\$1,289.53
Pattern scatter analysis for side mount high/med power		
antennas (if not included in	Component Description:	ERI WNEO-37763-
antenna base cost)		1 Int ant patt scatt
,		30 pct pmt 3
		v191223jgv1
	Amount:	\$1,440.00
	Component Descriptions	
	Component Description:	ERI WNEO-002
		Int ant patt scatt
		30 pct pmt 1
	Amount:	v190814jgv1 \$1,440.00
		φ1,440.00
	Component Description	ERI WNEO-37763
	Component Description:	
		Int ant patt scatt
		30 pct pmt 2
	Amount:	v191223jgv1 \$1,440.00
	Amount.	<b>Φ1,440.00</b>

Sweep test of existing antenna	Component Description:	ERI WNEO-002 Int ant sweep 30 pct pmt 1
	Amount:	v190814jgv1 \$1,875.00
	Component Description:	ERI WNEO-37763 Int ant sweep 30 pct pmt 2
	Amount:	v191223jgv1 \$1,875.00
	Component Description:	ERI WNEO-37763- 1 Int ant sweep 30 pct pmt 3 v191223jgv1
	Amount:	\$1,875.00
UHF - High Power, Side Mount, basic slot antenna,		
500 kW input, horizontally polarized	Component Description:	ERI WNEO-002 Int ant 30 pct pmt 1 v190814jgv1
	Amount:	\$43,764.00
	Component Description:	ERI WNEO-37763 Int ant 30 pct pmt 2 v191223jgv1
	Amount:	\$43,764.00
	Component Description:	ERI WNEO-37763- 1 Int ant 30 pct
		pmt 3 v191223jgv1
	Amount:	\$43,764.00

Side mount brackets for high power antennas (if not included in antenna base cost)	Component Description:	ERI WNEO-002 Int ant side mt bkts 30 pct pmt 1
	Amount:	v190814jgv1 \$4,072.50
	Component Description:	ERI WNEO-37763 Int ant side mt bkts 30 pct pmt 2
	Amount:	v191223jgv1 \$4,072.50
	Component Description:	ERI WNEO-37763- 1 Int ant side mt bkts 30 pct pmt 3
	Amount:	v191223jgv1 \$4,072.50
UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	Information not provided.	
Sweep test of existing antenna	Information not provided.	
Elbow complex, single channel, at antenna input, per 8 3/16. feedline (if needed)	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	\$86,100.00	\$50,365.01		\$45,328.50	
Flexible Air Transmission Line - dielectric, 5"	\$86,100.00	\$50,365.01	N/A	\$45,328.50	N/A
Primary Transmission Line	\$266,800.00	\$253,920.00		\$0.00	
Rigid Transmission Line - copper, 7 3 /16"	\$266,800.00	\$253,920.00	N/A	N/A	N/A
Sub-total	\$352,900.00	\$304,285.01	N/A	\$45,328.50	N/A
Total for all systems	\$3,873,845.45	\$3,541,567.38	N/A	\$974,580.01	N/A

## Components

Actual Information	
Description	File Name

Flexible Air Transmission Line - dielectric, 5"		
	Component Description:	ERI WNEO-37763
		Int line 30 pct pmt
	•	2 v191223jgv1
	Amount:	\$15,109.50
	Component Description:	ERI WNEO-002
		Int line 30 pct pmt
		1 v190814jgv1
	Amount:	\$15,109.50
	Component Description:	ERI WNEO-37763-
		1 Int line 30 pct
		pmt 3
		v191223jgv1
	Amount:	\$15,109.50
Rigid Transmission Line - copper, 7 3/16"	Information not provided.	

#### **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		\$0.00	
Tall Tower (greater than 500')	\$210,500.00	\$200,000.00	N/A	N/A	N/A
Major tower reinforcement /modifications	\$421,000.00	\$400,000.00	N/A	N/A	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	N/A	N/A
Sub-total	\$657,800.00	\$625,000.00	N/A	\$0.00	N/A
Total for all systems	\$3,873,845.45	\$3,541,567.38	N/A	\$974,580.01	N/A

## Components

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 Cc Justificat
Outside Professional Services	\$160,280.00	\$192,500.00		\$16,590.50	
Other Engineering Services	\$10,000.00	\$10,000.00	Cost estimate for other engineering services such as RF calculations, evolving transition plan calculations, bid spec prep / distribution / award recommendation / etc and discussion, etc.	\$75.00	N/A
Additional Field Engineering Service, 14 Days	\$28,000.00	\$28,000.00	N/A	\$525.00	Additiona Enginee Service V

Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	\$0.00	Comprehe covera verification field str WNEO. 1 are measurer to be use basis compar with the transit measurer See th Consul Engine WNEO I quote atta for refere
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	\$3,680.00	\$3,500.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	N/A	N/A

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$1,173.50	Attor section o FC Constru Perr Applic Main F
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$3,000.00	Engine section of FC Constr Per Applic Main F WNEC the Con Engin WNEC quote at for refe
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$7,000.00	Engine study fo char assigr and an develo WN
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	N

Total for all systems	\$3,873,845.45	\$3,541,567.38	N/A	\$974,580.01	N//
Sub-total	\$160,280.00	\$192,500.00	N/A	\$16,590.50	N/#
to Cover Application					
(main), License					
Form 2100					
section of FCC					
engineering					
Prepare	\$1,580.00	\$1,500.00	N/A	N/A	N//
Authorization					
Temporary					
Special					
Prepare request for	\$2,050.00	\$1,500.00	N/A	N/A	N//
Durana	<b>\$0.050.00</b>	¢4 500 00	N1/A	N1/A	N1//
management of the transition					
Project	\$3,160.00	\$29,250.00	N/A	N/A	N/A
			KGA.		
			submission by		
			invoice prep and		
			Actual Cost		
			and ongoing		
			amendments,		
			subsequent 399		
			anticipated		
form			initial 399 amendment,		
reimbursement			includes the		
review			estimate		
Prepare and or	\$2,630.00	\$15,000.00	The cost	\$4,817.00	N/A

# Components

Actual Information Description	File Name	
Other Engineering Services		
	Component Description:	KGA 930-44 v191220jgv1
	Amount:	\$75.00

Additional Field Engineering Service, 14		
Days	Component Description:	Additional Field
24,0		Engineering
		Service WNEO Sit
		Prep
	Amount:	\$300.00
	Component Description:	Credit Memo
		requested by FCC
		for WNEO
	Amount:	(\$300.00)
		(*000.00)
	Component Decertation	Additional Field
	Component Description:	Additional Field
		Engineering Service WNEO Sit
	Amount:	Prep \$225.00
		φ223.00
	Component Description:	WNEO - Additiona
		Field Engineering
		Service - Budget
		meeting and RF
	A	Inventory
	Amount:	\$300.00
Comprehensive coverage		
verification via field study,	Component Description:	Comprehensive
if needed		coverage
		verification via field
		study WNEO
	Amount:	\$31,718.50
	Component Description:	Comprehensive
		Coverage
		Verification, Field
		Strength
		Measurements
		WNFO
	Amount:	WNEO \$31,718.50

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	Component Description:	Attorney section of Form FCC Construction Permi Application Main Facility WNEO
	Amount:	\$134.00
	Component Description:	Attorney section of Form FCC Construction Permi Application Main Facility WNEO
	Component Description: Amount:	Form FCC Construction Permit
		Form FCC Construction Permit Application Main Facility WNEO

Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Component Description:	Engineering section of Form FCC Construction Permit Application Main Facility WNEO. See KGA Quote attached. \$3,000.00
Perform engineering study for new channel assignment and antenna development	Component Description: Amount:	Engineering study for new channel assignment and antenna development WNEO \$7,000.00
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	
Prepare and or review reimbursement form	Component Description: Amount:	KGA 930-70 v191220jgv1 \$1,925.00
	Component Description: Amount:	Prepare or Review FCC Form 399 for Reimbursement WNEO \$2,500.00
	Component Description:	Prepare or Review FCC Form 399 for Reimbursement WNEO Attorney Review
Project management of the transition	Amount: Information not provided.	\$392.00

Prepare request for Special Temporary Authorization	Information not provided.
Prepare engineering section of FCC Form 2100 (main), License to Cover 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 Cost Justification
Other Expenses	\$101,617.00	\$101,067.00		\$35,067.00	
MVPD Notification of Channel Change	\$2,000.00	\$2,000.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	\$0.00	\$0.00	N/A	N/A	N/A
Equipment Storage	\$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
Disposal Costs (for equipment and other waste, net of any salvage value)	\$28,820.00	\$28,820.00	See attached Quote and Invoices by Priest Construction	\$28,820.00	N/A
Non-zoning permits	\$3,000.00	\$3,000.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A

Simulcast FCC required spots and crawls	\$6,247.00	\$6,247.00	See uploaded / attached PDF file titled "Litewire 11491 v200124jgv1. pdf"	\$6,247.00	N/A
Sub-total	\$101,617.00	\$101,067.00	N/A	\$35,067.00	N/A
Total for all systems	\$3,873,845.45	\$3,541,567.38	N/A	\$974,580.01	N/A

# Components

Actual Information Description	File Name	
MVPD Notification of Channel Change	Information not provided.	
Develop and air announcement of upcoming channel change	Information not provided.	
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)	Component Description: Amount: Component Description:	Priest 000155 v190823jgv1 \$14,410.00 Priest 000146 v190508pmv1
	Amount:	\$14,410.00
Non-zoning permits	Information not provided.	
DTV Medical Facility Notification	Information not provided.	

Simulcast FCC required		
spots and crawls	Component Description:	Litewire 11491
		v200124jgv1
	Amount:	\$6,247.00

Cost Information	Grand Total				
		Predetermined Cost Estimate	Estimated Cost	Actual Cost	
	Total for all systems	\$3,873,845.45	\$3,541,567.38	\$974,580.01	

Reimbursem	entestiatus	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.	
		<ol> <li>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> </ol>	
		2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.	
		<b>3.</b> 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.	<b>Jeffrey C</b> <b>Gehman</b> <i>Engineering</i> <i>Associate</i>
	01/28/2020

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).	
		<ol> <li>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> </ol>	
		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- d applicant for the Authorization(s) ied above.	Jeffrey C Gehman Engineering Associate
		01/28/2020

## Attachments