

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

71928 Service: DTV Channel: 31 (UHF) Facility Call **WNED-TV** Sign:

File 0000028145

Number:

ID:

FRN: 0003410461 Date 01/24

> Submitted: /2020

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
WESTERN NY PUBLIC BROADCASTING ASSOC. Doing Business As: WNED-TV	JOSEPH C. PUMA PO Box 1263 BUFFALO, NY 14240 United States	+1 (716) 845-7000	jpuma@wned. org	Not-for- Profit

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

Applicant	Address	Phone	Email

The Preparer is same as the reimbursement contact.

Broadcaster Information and **Transition** Plan

Question Response

Will the station be sharing equipment with	Ye
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.	

Yes

Briefly describe transition plan

Sweep line/antenna to asses performance on new channel, remove existing IOT main & backup transmitters & channel-specific indoor RF systems, replace w/solid-state transmitters and appropriate indoor RF systems, tune & optimize antenna/line on new channel

Transmitters

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

Add Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	backup
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter	Manufacturer	
Manufacturer and Type	Model	DCXP
	Year	2002
	Туре	Inductive Output Tube
	IOT Power Type	Single
	Power Capacity	25 kW

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	ULXTE-12
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	8.5 kW
	Justification for New Transmitter	Retuning high-power IOT transmitter from ch.43 to 31 requires a new IOT, new circuit assemblies, "additional costs for sustaining engineering" and exceeds the cost of a properly sized solid- state transmitter. Please see retune quote and letter attached.

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	No
	Size	N/A
	Length	N/A
	Other Electrical Service	Yes
	Description	45 kVA 480v to 208v transformer, includes conduit and primary wiring to auxiliary transmitter
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

Other Transmitter Cost Not Listed

Name	Description
Copper tubing and fittings	Additional lengths of copper coolant tubing & fittings for extended run to outdoor heat exchanger
Conduit and wiring - pump and heat exchanger	Install circuits, conduit and wiring for coolant pump and heat exchanger

Existing Transmitter Information

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	DCXP
	Year	2002
	Туре	Inductive Output Tube
	IOT Power Type	Single
	Power Capacity	25 kW

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-12
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	8.5 kW
	Justification for New Transmitter	Retuning high-power IOT transmitter from ch.43 to 31 requires a new IOT, new circuit assemblies, "additional costs for sustaining engineering" and exceeds the cost of a properly sized solid- state transmitter. Please see retune quote and letter attached.

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	No
	Size	N/A
	Length	N/A
	Other Electrical Service	Yes
	Description	45 kVA 480v to 208v transformer, includes conduit and primary wiring to main transmitter
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

Other Transmitter Cost Not Listed

Name	Description
Dummy Load	Indoor air-cooled broadband dummy load
Coaxial switch controller	Controller for coaxial switch
Coaxial switch	Indoor 4-port 3-1/8" coax antenna line switch to switch between main & aux transmitters
Control cable	Control cable for switch to controller interconnection
Copper tubing and fittings	Additional lengths of copper coolant tubing and fittings for extended run to outdoor heat exchanger
Conduit and wiring - pump and heat exchanger	Install circuits, conduit and wiring for coolant pump and heat exchanger

Antennas

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

Primary Antenna

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Retune Existing
	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?	Yes
Existing Antenna	Class	Full Power
Manufacturer and Type	Mounting	Top Mount
	Antenna position in stack	Not in Stac
	Polarization	Horizontal
	Туре	Broadband Panel
	Number of Stations Supported	1
	Number of Panels	16
	Design power capacity in use	10.0 %
	Lower Limit	470.00 MH

Upper Limit	806.00 MHz
Other Antenna Type	N/A
ERP: (Effective Radiated Power)	175.0 kW
Manufacturer	Dielectric
Model	TUC-05-16 /80H-1
Year	2002

Primary Antenna

Adjustment to Existing Antenna

Section	Question	Response
Sweep Test of Existing Antenna	Do you need a sweep test of existing antenna?	Yes

Primary Antenna

Other Antenna Costs

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	

Primary Antenna

Other Antenna Cost Not Listed

Name	Description
Test transition assembly	Broadband test assembly for initial transmission line & antenna sweep and post channel change sweep & tune, 6-1/8" to Type-N 50 ohm.

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

Primary Transmission

Existing Transmission Line

Section 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	Manufacturer	Dielectric
Type	Туре	Rigid
	Diameter	8 3/16 inches
	Other Diameter	N/A
	Segment Length	Broadband
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1100 feet per run

Primary Transmission La

Other Transmission Line Expenses Not Listed

Adapter-transformer 6-1/8" 75 Ohm to 3-1/8" 50 Ohm transmission line adapter/transformer 8-3/16" to 6-1/8" indoor transmission line reducer assembly Connector Qty (4) 3-1/8" transmission line connectors Qty. (6) 3-1/8" indoor transmission line couplings Field Flange adapter Qty. (4) 3-1/8" field EIA flange to unflanged adapters Indoor transmission line Qty. (7) 10ft. lengths 3-1/8" unflanged transmission line Kit, RF Line Qty (2) 3-1/8" 50 Ohm indoor transmission line and fittings kit. One for each transmitter Pipe Hanger Assembly Qty. (15) 3.5 Pipe hanger assemblies with insulators	n Line Name	Description
reducer assembly Connector Qty (4) 3-1/8" transmission line connectors Coupling Qty. (6) 3-1/8" indoor transmission line couplings Field Flange adapter Qty. (4) 3-1/8" field EIA flange to unflanged adapters Indoor transmission line Qty. (7) 10ft. lengths 3-1/8" unflanged transmission line Kit, RF Line Qty (2) 3-1/8" 50 Ohm indoor transmission line and fittings kit. One for each transmitter Pipe Hanger Assembly Qty. (15) 3.5 Pipe hanger assemblies with	Adapter-transformer	
Coupling Qty. (6) 3-1/8" indoor transmission line couplings Field Flange adapter Qty. (4) 3-1/8" field EIA flange to unflanged adapters Indoor transmission line Qty. (7) 10ft. lengths 3-1/8" unflanged transmission line Kit, RF Line Qty (2) 3-1/8" 50 Ohm indoor transmission line and fittings kit. One for each transmitter Pipe Hanger Assembly Qty. (15) 3.5 Pipe hanger assemblies with	Reducer assembly	
couplings Gty. (4) 3-1/8" field EIA flange to unflanged adapters Indoor transmission line Qty. (7) 10ft. lengths 3-1/8" unflanged transmission line Kit, RF Line Qty (2) 3-1/8" 50 Ohm indoor transmission line and fittings kit. One for each transmitter Pipe Hanger Assembly Qty. (15) 3.5 Pipe hanger assemblies with	Connector	Qty (4) 3-1/8" transmission line connectors
Indoor transmission line Qty. (7) 10ft. lengths 3-1/8" unflanged transmission line Kit, RF Line Qty (2) 3-1/8" 50 Ohm indoor transmission line and fittings kit. One for each transmitter Pipe Hanger Assembly Qty. (15) 3.5 Pipe hanger assemblies with	Coupling	
transmission line Kit, RF Line Qty (2) 3-1/8" 50 Ohm indoor transmission line and fittings kit. One for each transmitter Pipe Hanger Assembly Qty. (15) 3.5 Pipe hanger assemblies with	Field Flange adapter	
Pipe Hanger Assembly Qty. (15) 3.5 Pipe hanger assemblies with	Indoor transmission line	
	Kit, RF Line	
	Pipe Hanger Assembly	

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?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	Yes
	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	Unknown
Existing Tower Structure	Do you have a tower registration number?	Yes
Registration	ASR Number	1033433
Coordinates (NAD83 (North American Datum of	Latitude (NAD83)	43° 01' 48.2 N-
1983))	Longitude (NAD83)	078° 55' 14.1" W-
	Overall Structure Height	1133.84 fee
	Support Structure Height	1067.90 fee
	Ground Elevation Above Mean Sea Level (AMSL)	577.09 feet

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Western New York Public Broadcasting Assocation
Date Constructed	01/01/1986

FM, AM or TV radio broadcasters. Facility ID's, Call Signs and Services of other broadcast stations with whom the tower is shared

Facility ID	Call Sign	Service
71905	WNLO	DTV

Other Types of Users

Users	
LPFM	
Microwave relay	

Primary Tower

Tower Modification Costs

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

Primary Tower

Tower Rigging Costs

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

Primary Tower

Other Tower Expenses Not Listed

Name	Description
Rigging	Crew mobilization, winch, rig & unrig tower to facilitate transmission line and elbow complex retuning (Item #2 on Warmus & Associates quote attached).

Outside Professional

Section	Question	Response
Services Costs Outside Project Management Services	Do you require outside project management services?	No
	Number of Hours	N/A
	Explanation	N/A
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	No
	Quantity	N/A
	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	No
Quantity	N/A
NEPA Section 106 environmental review	No
Environmental Assessment	No
ASR Modification	No
FAA Consultation (including preparation of FAA Form 7460)	No
Negotiation of Lease and other Matter for Shared Locations	No
Prepare or Review FCC Form 399 for Reimbursement	Yes
Address transition timing and coordination issues w/ other stations and wireless providers	No
Comprehensive coverage verification via field study	No
RF exposure measurements	No
Additional Field Engineering Service	Yes
Number of Days	7

RF Field Engineering

Services

Justification	Disassemble
	&
	deconstruct
	old high-
	power,
	channel-
	specific RF
	systems &
	plumbing.
	Tune and
	optimize
	antenna,
	elbow
	complex &
	line
	sections.
	Post-
	transition
	sweep test
	of entire
	system
	following
	retuning.
	Issue report.
	See vendor
	quote items
	3 & 4
	attached

Outside Professional

Other Professional Services Expenses Not Listed

I Services Costs	Description
Misc. repack legal services and fees	Misc. legal costs & fees associated with repack

Other Expenses

Section	Question	Response
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	No
	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?	No
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD Notification of a Channel Change?	Yes

Other Expenses Not Listed

Expenses Information not provided.

Cost Information

Transmitters

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter ULXTE-12	\$526,418.36	\$299,337.21		\$262,578.98	
Conduit and wiring - pump and heat exchanger	\$2,616.00	\$2,616.00	Cost represents 1/2 of MJM Electric Quote # 1594 attached.	N/A	N/A
Copper tubing and fittings	\$1,113.70	\$1,113.70	Cost represents 1/2 of GatesAir Change Order-1 attached.	\$1,113.70	N/A
Control cable	\$253.44	\$253.44	N/A	\$253.44	N/A
Coaxial switch	\$4,800.95	\$4,800.95	Vendor price reduction	\$4,800.95	N/A
Coaxial switch controller	\$3,408.00	\$3,408.00	Vendor price increase	\$3,408.00	N/A
Dummy Load	\$12,122.77	\$12,122.77	Vendor price reduction	\$12,122.77	N/A

Other Electrical Service: 45 kVA 480v to 208v transformer, includes conduit and primary wiring to main transmitter	\$7,603.50	\$7,603.50	Cost represents 1/2 of MJM Electric Quote # 1593 attached.	\$2,850.00	N/A
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	\$494,500.00	\$267,418.85	N/A	\$238,030.12	N/A
Auxiliary Transmitter ULXTE-12	\$505,833.20	\$277,979.65		\$241,221.42	
Conduit and wiring - pump and heat exchanger	\$2,616.00	\$2,616.00	Cost represents 1/2 of MJM Electric Quote # 1594 attached.	N/A	N/A
Copper tubing and fittings	\$1,113.70	\$1,113.70	Cost represents 1/2 of GatesAir Change Order-1 attached.	\$1,113.70	N/A
Other Electrical Service: 45 kVA 480v to 208v transformer, includes conduit and primary wiring to auxiliary transmitter	\$7,603.50	\$7,603.50	Cost represents 1/2 of MJM Electric Quote # 1593 attached.	\$2,850.00	N/A

UHF - Liquid	\$494,500.00	\$266,646.45	N/A	\$237,257.72	N/A
Cooled Solid					
State					
Transmitter					
8.2 - 13 kW					
Sub-total	\$1,032,251.56	\$577,316.86	N/A	\$503,800.40	N/A
Total for all systems	\$1,387,361.08	\$712,696.38	N/A	\$563,653.00	N/A

Components

Actual Information Description	File Name	
Conduit and wiring - pump and heat exchanger	Information not provided.	
Copper tubing and fittings		
	Component Description:	Amount represents 1/2 GatesAir change order #1 (Q-83408) - addl. copper tubing & accessories - attached
	Amount:	\$1,113.70

Control cable

Component Description: Amount represents

2nd 1/3 payment for the Control Cable, item #19 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24 attached), part of GatesAir invoice #JW30004673-2 for the next 1/3

payment due prior to shipment for all

items

Amount: \$84.48

Component Description: Amount represents

1/3 down payment for the Control Cable, item #19 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24 attached), part of GatesAir invoice #JW30004673-1 which is for the total 1/3 down payment required on all items.

Amount: \$84.48

Component Description: Amount represents

final 1/3 payment for the Control Cable, item #19 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24

attached).

Amount: \$84.48

Coaxial switch

Component Description: Amount represents

2nd 1/3 payment for the coaxial switch, item #17 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24 attached), part of GatesAir invoice #JW30004673-2

payment due prior to shipment for all

for the next 1/3

items

Amount: \$1,600.32

Component Description: Amount represents

1/3 down payment for the Coaxial switch, item #17 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24 attached), part of GatesAir invoice #JW30004673-1 which is for the total 1/3 down payment required on all items.

Amount: \$1,600.32

Component Description: Amount represents

final 1/3 payment for the coaxial switch, item #17 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24

attached).

Amount: \$1,600.31

Coaxial switch controller

Component Description: Amount represents

2nd 1/3 payment for the Coaxial switch controller, item #18 on

GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24 attached), part of GatesAir invoice #JW30004673-2 for the next 1/3 payment due prior to shipment for all

items

Amount: \$1,136.00

Component Description: Amount represents

1/3 down payment for the Coaxial switch controller, item #18 on

GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24 attached), part of GatesAir invoice #JW30004673-1 which is for the total 1/3 down payment required on all items.

Amount: \$1,136.00

Component Description: Amount represents

final 1/3 payment for the coaxial switch controller, item #18 on

GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24

attached).

Amount: \$1,136.00

Dummy Load

Component Description: Amount represents

2nd 1/3 payment for the Dummy Load, item #21 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24 attached), part of GatesAir invoice #JW30004673-2 for the next 1/3 payment due prior

to shipment for all

items

Amount: \$4,040.92

Component Description: Amount represents

1/3 down payment for the Dummy Load, item #21 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24 attached), part of GatesAir invoice #JW30004673-1 which is for the total 1/3 down payment required on all items.

Amount: \$4,040.92

Component Description: Amount represents

final 1/3 payment for the Dummy Load, item #21 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24

attached).

Amount: \$4,040.93

Other Electrical Service: 45 kVA 480v to 208v transformer, includes conduit and primary wiring to main transmitter

Component Description: 1/2 cost of partial

payment for materials and installation per MJM Electric quote #1593 attached

Amount: \$2,850.00

UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW

Component Description: Amt. represents

2nd 1/3 pmt. prior to shipment, inv. #JW30004673-2 for (1) UHF Solid State transmitter, incl. qty.(1) of items 1-10, qty.(4) of item 11, qty.(1) of items 12-16 and 1/2 of item 27 on GatesAir quote Q-81639 (WNED-TV ULXTE-12MA4-24

attached)

Amount: \$89,139.62

Component Description: Amt. represents 1

/3 down payment per invoice #JW30004673-1 for (1) UHF Solid State transmitter, incl. qty.(1) of items 1-10, qty.(4) of item 11, qty.(1) of items 12-16 and 1/2 of item 27 on GatesAir quote Q-81639 (WNED-TV ULXTE-12MA4-24

attached)

Amount: \$89,139.62

	Component Description: Amount:	Amt. represents remaining payment (without installation charge) for (1) UHF Solid State transmitter (Primary) incl. qty. (1) of items 1-10, qty.(4) of item 11, qty.(1) of items 12-16 on GatesAir quote Q-81639 (WNED-TV ULXTE-12MA4-24 attached). \$59,750.88
Conduit and wiring - pump and heat exchanger	Information not provided.	
Copper tubing and fittings	Component Description: Amount:	Amount represents 1/2 GatesAir change order #1 (Q-83408) - addl. copper tubing & accessories - attached \$1,113.70
Other Electrical Service: 45 kVA 480v to 208v transformer, includes conduit and primary wiring to auxiliary transmitter	Component Description: Amount:	1/2 cost of partial payment for materials and installation per MJM Electric quote #1593 attached \$2,850.00
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW		

Component Description: Amt. represents

2nd 1/3 pmt. prior to shipment, inv. JW30004673-2 for Aux. Transmitter, inc. qty.(1) of items 1-8, qty.(1) of item 10, qty.(4) of item 11, qty.(1) of items 13-16 and 1/2 of item 27 on

GatesAir quote Q-81639 (WNED-TV ULXTE-12MA4-24

attached)

Amount: \$88,882.15

Component Description: Amt. represents 1

/3 down pmt. per

invoice

#JW30004673-1 for the Aux. Transmitter, inc. qty.(1) of items 1-8, qty.(1) of item 10, qty.(4) of item 11, qty.(1) of items 13-16 and 1/2 of item 27 on GatesAir quote #Q-81639

(WNED-TV ULXTE-

12MA4-24 attached)

Amount: \$88,882.15

Component Description: Amt. represents

remaining payment (without installation charge) for Aux.
Transmitter, inc.
qty.(1) of items 1-8,
qty.(1) of item 10,
qty.(4) of item 11,
qty.(1) of items 1316 on GatesAir
quote Q-81639
(WNED-TV ULXTE-

12MA4-24 attached)

Amount: \$59,493.42

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
Primary Antenna TUC-05-16 /80H-1	\$10,457.92	\$10,127.92		\$6,071.07	
Test transition assembly	\$3,727.92	\$3,727.92	N/A	\$3,727.92	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$2,343.15	N/A
Sub-total	\$10,457.92	\$10,127.92	N/A	\$6,071.07	N/A
Total for all systems	\$1,387,361.08	\$712,696.38	N/A	\$563,653.00	N/A

Components

Actual Information Description	File Name	
Test transition assembly		
	Component Description: Amount:	Test transition assembly, item #2 on invoice, includes 1/2 of total shipping cost \$3,727.92
Sweep test of existing antenna	Component Description:	Sweep test of
	Amount:	existing antenna & line \$2,343.15

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
Primary Transmission Line	\$23,476.60	\$23,476.60		\$23,476.60	
Pipe Hanger Assembly	\$101.55	\$101.55	N/A	\$101.55	N/A
Kit, RF Line	\$11,886.40	\$11,886.40	N/A	\$11,886.40	N/A
Indoor transmission line	\$3,393.39	\$3,393.39	N/A	\$3,393.39	N/A
Field Flange adapter	\$762.00	\$762.00	N/A	\$762.00	N/A
Coupling	\$1,480.50	\$1,480.50	N/A	\$1,480.50	N/A
Connector	\$243.00	\$243.00	N/A	\$243.00	N/A
Reducer assembly	\$2,933.52	\$2,933.52	N/A	\$2,933.52	N/A

Adapter-	\$2,676.24	\$2,676.24	Vendor	\$2,676.24	Orig.
transformer			(Dielectric)		estimate
			price		from quote
			increased		#45508 item
			from original		#1
			2017 quote		(attached-
			(#45508		45508
			WNED		WNED
			indoor		indoor
			transmission		transmission
			line, item #1		line) was
			- attached).		\$2337.60
			Actual		plus
			shipping		\$269.71 est
			cost of		shipping.
			\$46.44 was		Vendor
			less than		raised the
			original		price to
			estimate of		\$2629.80,
			\$269.71.		partially
					offset by
					lower than
					est.
					shipping of
					\$46.44 for a
					new
					subtotal of
					\$2676.24
Sub-total	\$23,476.60	\$23,476.60	N/A	\$23,476.60	N/A
Total for all systems	\$1,387,361.08	\$712,696.38	N/A	\$563,653.00	N/A

Components

Actual Information	
Description	File Name

Pipe Hanger Assembly

Component Description: Amount represents

2nd 1/3 payment for qty. (15) Pipe

Hanger

Assemblies, item #26 on GatesAir quote #Q-81639 (WNED-TV ULXTE-

12MA4-24

attached), part of GatesAir invoice #JW30004673-2 for the next 1/3 payment due prior to shipment for all

items

Amount: \$33.85

Component Description: Amount represents

1/3 down payment for qty. (15) Pipe

Hanger

Assemblies, item #26 on GatesAir quote #Q-81639 (WNED-TV ULXTE-

12MA4-24

attached), part of GatesAir invoice #JW30004673-1 which is for the total 1/3 down payment required

on all items.

Amount: \$33.85

Component Description: Amount represents

final 1/3 payment for qty. (15) Pipe

Hanger

Assemblies, item #26 on GatesAir quote #Q-81639 (WNED-TV ULXTE-

12MA4-24 attached).

Amount: \$33.85

Kit, RF Line

Component Description: Amount represents

2nd 1/3 payment for qty. (2) RF Line kits, item #20 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24 attached), part of GatesAir invoice #JW30004673-2 for the next 1/3 payment due prior

to shipment for all

items

Amount: \$3,962.13

Component Description: Amount represents

1/3 down payment for qty. (2) RF Line kits, item #20 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24 attached), part of GatesAir invoice #JW30004673-1 which is for the total 1/3 down payment required on all items.

Amount: \$3,962.13

Component Description: Amount represents

Final 1/3 payment for qty. (2) RF Line kits, item #20 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24

attached).

Amount: \$3,962.14

Indoor transmission line

Component Description: Amount represents

2nd 1/3 payment for qty. (7) Indoor Transmission Line 10 ft., item #22 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24 attached), part of GatesAir invoice #JW30004673-2 for the next 1/3 payment due prior to shipment for all

items

Amount: \$1,131.13

Component Description: Amount represents

1/3 down payment for qty. (7) Indoor Transmission Line 10 ft., item #22 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24 attached), part of GatesAir invoice #JW30004673-1 which is for the total 1/3 down payment required on all items.

Amount: \$1,131.13

Component Description: Amount represents

Final 1/3 payment for qty. (7) Indoor Transmission Line 10 ft., item #22 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24

attached).

Amount: \$1,131.13

Field Flange adapter

Component Description: Amount represents

2nd 1/3 payment for qty.(4) Field Flange adapters, item #24 on

GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24 attached), part of GatesAir invoice #JW30004673-2 for the next 1/3 payment due prior to shipment for all

items

Amount: \$254.00

Component Description: Amount represents

1/3 down payment for qty.(4) Field Flange adapters, item #24 on

GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24 attached), part of

attached), part of GatesAir invoice #JW30004673-1 which is for the total 1/3 down payment required on all items.

Amount: \$254.00

Component Description: Amount represents

Final 1/3 payment for qty.(4) Field Flange adapters, item #24 on

GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24

attached).

Amount: \$254.00

Coupling

Component Description: Amount represents

2nd 1/3 payment for qty. (6) 3-1/8" couplings, item #23 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24 attached), part of GatesAir invoice #JW30004673-2 for the next 1/3 payment due prior

to shipment for all

items

Amount: \$493.50

Component Description: Amount represents

1/3 down payment for qty. (6) 3-1/8" couplings, item #23 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-24 attached), part of GatesAir invoice #JW30004673-1 which is for the total 1/3 down payment required on all items.

Amount: \$493.50

Component Description: Amount represents

Final 1/3 payment for qty. (6) 3-1/8" couplings, item #23 on GatesAir quote #Q-81639 (WNED-TV ULXTE-12MA4-

24 attached).

Amount: \$493.50

Connector

Component Description: Amount represents

2nd 1/3 payment for qty. (4) 3-1/8" connectors, item #25 on GatesAir quote #Q-81639 (WNED-TV ULXTE-

12MA4-24

attached), part of GatesAir invoice #JW30004673-2 for the next 1/3 payment due prior to shipment for all

items

Amount: \$81.00

Component Description: Amount represents

1/3 down payment for qty. (4) 3-1/8" connectors, item #25 on GatesAir quote #Q-81639 (WNED-TV ULXTE-

12MA4-24

attached), part of GatesAir invoice #JW30004673-1 which is for the total 1/3 down payment required on all items.

Amount: \$81.00

Component Description: Amount represents

Final 1/3 payment for qty. (4) 3-1/8" connectors, item #25 on GatesAir quote #Q-81639 (WNED-TV ULXTE-

12MA4-24 attached).

Amount: \$81.00

Reducer assembly		
	Component Description:	Reducer assembly,
		item #1 on invoice,
		includes 1/2 of total
		shipping cost
	Amount:	\$2,933.52
Adapter-transformer		
	Component Description:	Shipping &
		handling, Dielectric
		Adapter-
		Transformer.
	Amount:	\$46.44
	Component Description:	Qty.(1) Adapter-
		Transformer as per
		Dielectric quote
		#1698741 dated 4
		/12/2019 attached
	Amount:	\$2,629.80

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
Primary Tower TOWER	\$231,600.00	\$21,100.00		\$0.00	
Tall Tower (greater than 500')	\$210,500.00	\$0.00	N/A	N/A	N/A
Rigging	\$21,100.00	\$21,100.00	N/A	N/A	N/A
Sub-total	\$231,600.00	\$21,100.00	N/A	\$0.00	N/A
Total for all systems	\$1,387,361.08	\$712,696.38	N/A	\$563,653.00	N/A

Components

Information not provided.

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
Outside Professional Services	\$61,775.00	\$60,675.00		\$24,954.93	
Misc. repack legal services and fees	\$2,500.00	\$2,500.00	N/A	\$300.00	N/A
Additional Field Engineering Service, 7 Days	\$36,925.00	\$36,925.00	5 days, \$5275 /day f/5-man crew for disassembly & deconstruction of old high- power channel- specific RF systems & plumbing. 2 days, \$5275 /day f/5-man crew to tune & optimize antenna/line & conduct post- transition sweep. See vendor quote items 3 & 4 attached	\$20,321.93	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	\$735.00	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$3,175.00	Included engineering study and calculation of transmission system losses on post repack channel in order to insure accuracy
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	N/A	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	\$423.00	N/A
Sub-total	\$61,775.00	\$60,675.00	N/A	\$24,954.93	N/A
Total for all systems	\$1,387,361.08	\$712,696.38	N/A	\$563,653.00	N/A

Description	File Name	
Misc. repack legal services		
and fees	Component Description: Amount:	Legal fee - repacking service - prepare and send client transition schedule timetable for repack \$300.00
Additional Field Engineering		
Additional Field Engineering Service, 7 Days	Component Description: Amount:	Additional field engineering services, Warmu & Associates original quote #TS17-039 Item #3 (partial). \$20,321.93
Attorney Fees -Prepare and	Information not provided.	\$20,321.93
File FCC Form 2100 (main), License to Cover Application	·	
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description:	Review, preparation and filing of Construction
	Amazunt	Permit application Reflects items 1-on invoice.
	Amount:	\$735.00
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	Component Description:	Engineering study /evaluation and
Application		preparation of
		Construction
		Permit Application - engineering
		section
	Amount:	\$3,175.00
Perform engineering study for new channel assignment and antenna development	Information not provided.	
Prepare and or review		
reimbursement form	Component Description:	Review and file
	Component Becompacin	FCC form 399.
		Reflects items 4 &
		5 on invoice
	Amount:	\$423.00

Other Expenses

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

			Fathard . 1		
Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$27,800.00	\$20,000.00		\$5,350.00	
MVPD Notification of Channel Change	\$1,250.00	\$1,250.00	Please see RF Notifications Quote # LS- 20190901- A attached	\$1,250.00	N/A
Develop and air announcement of upcoming channel change	\$2,500.00	\$2,500.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	\$7,500.00	\$7,500.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$3,750.00	Please see RF Notifications Quote # LS- 20190801- A attached.	\$3,750.00	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$5,000.00	\$5,000.00	N/A	\$350.00	N/A
Sub-total	\$27,800.00	\$20,000.00	N/A	\$5,350.00	N/A
Total for all systems	\$1,387,361.08	\$712,696.38	N/A	\$563,653.00	N/A

Components

Actual Information Description	File Name	
MVPD Notification of Channel Change	Component Description: Amount:	MVPD Notifications per RF Notifications quote# LS- 20190901-A attached \$1,250.00
Develop and air announcement of upcoming channel change	Information not provided.	
Equipment Delivery and Handling Charges	Information not provided.	
DTV Medical Facility Notification	Component Description: Amount:	Medical notification service per RF Notifications quote # LS-20190801-A attached \$3,750.00
Disposal Costs (for equipment and other waste, net of any salvage value)	Component Description: Amount:	Dumpster service for disposal of construction debris \$350.00

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$1,387,361.08	\$712,696.38	\$563,653.00

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

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.

- 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.
- 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.
- 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.

- 4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- 5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
- 7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Joseph
Puma
Vice
President
Engineering
and
Technology

01/24/2020

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).

- 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.
- The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.
- 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).
- 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 abovenamed applicant for the Authorization(s) specified above. Joseph
Puma
Vice
President
Engineering
and
Technology

01/24/2020

Attachments