

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

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

ID: Sign:

File **0000028145**

Number:

FRN: **0003410461** Date **07/24**

Submitted: /2019

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

Auxiliary Transmitter

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

Auxiliary Transmitter

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.

Auxiliary 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	40.0 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

Auxiliary Transmitte **Other Transmitter Cost Not Listed**

Transmitter Information not provided.

Primary Transmitter

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

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-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.

Primary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	Yes
	Power	150 kVA
	Rigid Conduit and Wiring	Yes
	Size	3 inches
	Length	40.0 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

Primary Transmitter

Other Transmitter Cost Not Listed

Name	Description
Dummy Load	Indoor air-cooled broadband dummy load
Coaxial switch controller	Controller for coaxial switch

Control cable	Control cable for switch to controller interconnection
Coaxial switch	Indoor 4-port 3-1/8" coax antenna line switch to switch between main & aux transmitters

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	
Microwave relay	
LPFM	

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 Services Expenses Not Listed
Professional Services © Opstsided.

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.

Transmitters

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

			Estimated		
Description	Predetermined Cost Estimate	Estimated Cost	Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter ULXTE-12	\$542,715.16	\$314,264.01		\$96,001.34	
Coaxial switch controller	\$3,408.00	\$3,408.00	Vendor price increase	\$1,136.00	N/A
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	\$494,500.00	\$267,418.85	N/A	\$89,139.62	N/A
Coaxial switch	\$4,800.95	\$4,800.95	Vendor price reduction	\$1,600.32	N/A
Dummy Load	\$12,122.77	\$12,122.77	Vendor price reduction	\$4,040.92	N/A
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$24,300.00	N/A	N/A	N/A
3" Rigid Conduit and Wiring (Cost per foot)	\$2,080.00	\$1,960.00	N/A	N/A	N/A
Control cable	\$253.44	\$253.44	N/A	\$84.48	N/A
Auxiliary Transmitter ULXTE-12	\$496,580.00	\$268,606.45		\$88,882.15	

UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	\$494,500.00	\$266,646.45	N/A	\$88,882.15	N/A
3" Rigid Conduit and Wiring (Cost per foot)	\$2,080.00	\$1,960.00	N/A	N/A	N/A
Sub-total	\$1,039,295.16	\$582,870.46	N/A	\$184,883.49	N/A
Total for all systems	\$1,392,154.68	\$723,499.98	N/A	\$227,174.86	N/A

Components

Actual Information Description	File Name	
Coaxial switch controller		
	Component Description: Amount:	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. \$1,136.00

UHF - Liquid Cooled Solid State Transmitter 8.2 - 13	Component Description:	Amt. represents 1
kW	Component Description.	/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
Coaxial switch		
	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

Dummy Load	_	
	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
Transformer 3 phase/480v - 150 KVA	Information not provided.	
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
Control cable		
	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

State Transmitter 8.2 - 13 kW	Component Description:	Amt. represents 1
	Component Description.	/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
3" Rigid Conduit and Wiring	Information not provided.	

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	
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$2,343.15	N/A
Test transition assembly	\$3,727.92	\$3,727.92	N/A	\$3,727.92	N/A
Sub-total	\$10,457.92	\$10,127.92	N/A	\$6,071.07	N/A
Total for all systems	\$1,392,154.68	\$723,499.98	N/A	\$227,174.86	N/A

Components

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

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		\$11,565.37	
Field Flange adapter	\$762.00	\$762.00	N/A	\$254.00	N/A
Coupling	\$1,480.50	\$1,480.50	N/A	\$493.50	N/A
Connector	\$243.00	\$243.00	N/A	\$81.00	N/A
Pipe Hanger Assembly	\$101.55	\$101.55	N/A	\$33.85	N/A
Kit, RF Line	\$11,886.40	\$11,886.40	N/A	\$3,962.13	N/A
Indoor transmission line	\$3,393.39	\$3,393.39	N/A	\$1,131.13	N/A

Adapter- transformer	\$2,676.24	\$2,676.24	Vendor (Dielectric) price increased from original 2017 quote (#45508 WNED indoor transmission line, item #1 - attached). Actual shipping cost of \$46.44 was less than original estimate of \$269.71.	\$2,676.24	Orig. estimate from quote #45508 item #1 (attached- 45508 WNED indoor transmission line) was \$2337.60 plus \$269.71 est. shipping. Vendor raised the price to \$2629.80, partially offset by lower than est. shipping of \$46.44 for a new subtotal of
Poducor	¢2 022 52	¢2 022 52	NI/A	¢2 022 52	\$2676.24
Reducer assembly	\$2,933.52	\$2,933.52	N/A	\$2,933.52	N/A
Sub-total	\$23,476.60	\$23,476.60	N/A	\$11,565.37	N/A
Total for all systems	\$1,392,154.68	\$723,499.98	N/A	\$227,174.86	N/A

Components

Actual Information	
Description	File Name

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 GatesAir invoice #JW30004673-1 which is for the total 1/3 down payment required on all items. \$254.00
for qty.(4) Field Flange adapters, item #24 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.
Flange adapters, item #24 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.
item #24 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.
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.
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.
ULXTE-12MA4-24 attached), part of GatesAir invoice #JW30004673-1 which is for the total 1/3 down payment required on all items.
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GatesAir invoice #JW30004673-1 which is for the total 1/3 down payment required on all items.
#JW30004673-1 which is for the total 1/3 down payment required on all items.
which is for the total 1/3 down payment required on all items.
total 1/3 down payment required on all items.
payment required on all items.
on all items.
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.

Connector		
	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
Pipe Hanger Assembly		
	Component Description:	Amount represents
		7 milount roproconto
		1/3 down payment
	,	
		1/3 down payment
	,	1/3 down payment for qty. (15) Pipe
		1/3 down payment for qty. (15) Pipe Hanger
		1/3 down payment for qty. (15) Pipe Hanger Assemblies, item
		1/3 down payment for qty. (15) Pipe Hanger Assemblies, item #26 on GatesAir quote #Q-81639
		1/3 down payment for qty. (15) Pipe Hanger Assemblies, item #26 on GatesAir quote #Q-81639
		1/3 down payment for qty. (15) Pipe Hanger Assemblies, item #26 on GatesAir quote #Q-81639 (WNED-TV ULXTE
		1/3 down payment for qty. (15) Pipe Hanger Assemblies, item #26 on GatesAir quote #Q-81639 (WNED-TV ULXTE 12MA4-24
		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
		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
		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
		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
		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

Kit, RF Line		
	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
Indoor transmission line		
	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.
		on an nems.

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

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	
Rigging	\$21,100.00	\$21,100.00	N/A	N/A	N/A
Tall Tower (greater than 500')	\$210,500.00	\$0.00	N/A	N/A	N/A
Sub-total	\$231,600.00	\$21,100.00	N/A	\$0.00	N/A
Total for all systems	\$1,392,154.68	\$723,499.98	N/A	\$227,174.86	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 Outside Professional Services	Predetermined Cost Estimate \$59,275.00	Estimated Cost \$58,175.00	Estimated Cost Justification	Actual Cost \$24,654.93	Actual Cost Justification
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

form Sub-total	\$59,275.00	\$58,175.00	N/A	\$24,654.93	N/A
Prepare and or review reimbursement	\$2,630.00	\$2,500.00	N/A	\$423.00	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	\$7,360.00	\$7,000.00	N/A	N/A	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 and File FCC Form 2100 (main), Construction Permit Application					

Actual Information Description	File Name	
Additional Field Engineering Service, 7 Days	Component Description: Amount:	Additional field engineering services, Warmus & Associates original quote #TS17-039 Item #3 (partial). \$20,321.93
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: Amount:	Review, preparation and filing of Construction Permit application. Reflects items 1-3 on invoice. \$735.00
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	
Perform engineering study for new channel assignment and antenna development	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	Engineering study /evaluation and preparation of Construction Permit Application - engineering section \$3,175.00

	FCC form 399. Reflects items 4 &
Amount:	5 on invoice \$423.00

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
Other Expenses	\$28,050.00	\$27,750.00		\$0.00	
MVPD Notification of Channel Change	\$1,500.00	\$1,500.00	N/A	N/A	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	\$11,250.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Sub-total	\$28,050.00	\$27,750.00	N/A	\$0.00	N/A
Total for all systems	\$1,392,154.68	\$723,499.98	N/A	\$227,174.86	N/A

Components

Information not provided.

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$1,392,154.68	\$723,499.98	\$227,174.86

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

07/24/2019

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

07/24/2019

Attachments