Approved by OMB (Office of Management and Budget) 3060-1178

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID: **70492** | Service: **DTV** | Call Sign: **KUBE-TV** | Channel: **31 (UHF)**

File Number: **0000028493**

FRN: **0029023009** | Date Submitted: **11/29/2019**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
NRJ TV HOUSTON LICENSE CO., LLC	Robert Andrews 722 S. DENTON TAP ROAD SUITE 130 COPPELL, TX 75019 United States	+1 (972) 947-3391	bob@nrjventures.com	Limited Liability Company

Reimbursement Contact Information

Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

Applicant	Address	Phone	Email
The Preparer is same as the reimbursement contact.			

Broadcaster Information and Transition Plan

Question	Response

Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	No
Briefly describe transition plan	Replacement in kind on existing tower at existing location. Will purchase new transmitter to replace non re-tunable IOT system currently in place. Interim antenna will be installed to protect from extensive outages required by tower top work on stations

Transmitters

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

Primary Transmitter

Add 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 and Type	Manufacturer	
	Model	Sigma IOT CD3220P2
	Year	2006
	Type	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	47.2 kW

Primary Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	ULXTE 72
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	42 kW
	Justification for New Transmitter	Current transmitter, no longer supported, not re-tunable. Comparable IOT unit not available from this vendor. See attachment.

Primary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	Yes
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	300 kVA
	Rigid Conduit and Wiring	Yes

	Size	4 inches
	Length	200.0 feet
	Other Electrical Service	No
	Description	N/A
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Type	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
Misc Small Parts	Miscellaneous parts required during transmitter installation
MFR Site Survey	Required to verify installation conditions for transmitter

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	Purchase New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	Yes
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	Yes
Existing Antenna Manufacturer and Type	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	1000.0 kW

Manufacturer	
Model	ATW30H4-ESCH-41H
Year	2007

Primary Antenna

New Antenna Costs

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?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	1000.0 kW
	Manufacturer	

	Model	ATW30HS4-ESCX-31H
	Year	2019
	Justification for New Antenna	Existing antenna is single channel only, not compatible with new repack channel (31)

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
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 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

Primary Antenna

Other Antenna Cost Not Listed

Information not provided.

Interim Antenna

New Antenna Costs

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?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna Manufacturer and Type	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	Broadband Slot
	Number of Stations Supported	1
	Number of Panels/Bays	16
	Lower Limit	470.00 MHz
	Upper Limit	698.00 MHz
	Design power capacity in use	66.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	40.0 kW
	Manufacturer	
	Model	TFU-16WB-R C160
	Year	2018

	Justification for New Antenna	Due to the extensive work required at the candelabra level, substantial outages are predicted. Interim antenna at lower level will keep station on-air. Purchase of an off-the-shelf broadband antenna was cheaper than custom slotted coax single channel ant

Interim Antenna

Other Antenna Costs

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?	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

Interim Antenna

Other Antenna Cost Not Listed

Information not provided.

Transmission Line

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

Primary Transmission Line

Existing Transmission Line

Section	Question	Response
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 Line Manufacturer and Type	Manufacturer	
	Type	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	2100 feet per run

Primary Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	Rigid
	Diameter	8 3/16 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	2100 feet per run
	Justification for New Transmission Line	Repack channel (31) is prohibited on the 19.5 foot sections that are currently installed.

Primary Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

Interim Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Type	Rigid
	Diameter	6 1/8 inches
	Segment Length	19 ¾ '
	Other Segment Length	
	Number of parallel runs	1
	Length	1700 feet per run
	Justification for New Transmission Line	Required to feed interim antenna due to extensive work requiring extended downtime on candelabra top mount antennas

Interim Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

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	Leased
	Is this tower consider Complex?	Candelabra
	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	No
	Is tower documented for structural analysis?	No
	Is tower compliant with Rev G?	No
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1064696
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	29° 34' 16.0" N-
	Longitude (NAD83)	095° 30' 38.0" W-
	Overall Structure Height	1973.07 feet
	Support Structure Height	1842.17 feet
	Ground Elevation Above Mean Sea Level (AMSL)	76.77 feet

Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	American Towers, LLC
Date Constructed	11/19/2001

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
66790	KUGB-CD	DTV
70492	KUBE-TV	DTV
64984	KTMD	DTV
60537	KFTH-DT	DTV
12895	KETH-TV	DTV
24436	KLTJ	DTV
58835	KPXB-TV	DTV

Primary Tower

Tower Modification Costs

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:	Serious Reinforcements needed

Primary Tower

Tower Rigging Costs

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

Primary Tower

Other Tower Expenses Not Listed

Name	Description
Interim Tower Lease Cost	Expected additional tower lease charges for temporary installation of interim antenna and interim transmission line
Expenses for On-Site Crew	Travel, Lodging, Per Diem for on-site crew

Outside Professional Services Costs

Section	Question	Response
Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	160
	Explanation	Extensive co-ordination and on-site supervision required due to the complex nature of the tower project. Estimated at $100/hr
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 Services	Prepare and file Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	NEPA Section 106 environmental review	Yes
	Environmental Assessment	No
	ASR Modification	Yes
	FAA Consultation (including preparation of FAA Form 7460)	Yes
	Negotiation of Lease and other Matter for Shared Locations	Yes
	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	No
	RF exposure measurements	Yes
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

Outside Professional Services Costs

Other Professional Services Expenses Not Listed

Name	Description
Proj Manager Expenses	Travel, per diem etc expenses for on-site proj mgt

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	Yes
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	Yes
	FCC License to Cover Application	Yes
	FCC Special Temporary Authority Application	Yes
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

Other Expenses Not Listed

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 72	**$1,600,970.00**	**$1,476,992.13**		**$1,453,973.74**	
Misc Small Parts	***$2,000.00***	$2,000.00	N/A	$1,662.88	N/A
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	$1,473,000.00	$1,384,522.13	adjusted June 4, 2019 to match final invoice	$1,384,522.13	N/A
Service entrance 3 phase/800 amp/208 volt	$14,400.00	$12,000.00	N/A	$11,030.42	N/A
Switchgear - industrial 800 amp	$38,200.00	$18,600.00	N/A	$17,000.07	N/A
Transformer 3 phase /480v - 300 KVA	$36,800.00	$32,000.00	N/A	$29,247.44	N/A
4" Rigid Conduit and Wiring (Cost per foot)	$20,200.00	$11,500.00	N/A	$10,510.80	N/A
MFR Site Survey	***$16,370.00***	$16,370.00	Required for proper installation and site planning.	N/A	N/A
Sub-total	$1,600,970.00	$1,476,992.13	N/A	$1,453,973.74	N/A

Total for all systems	$5,051,792.19	$4,115,490.85	N/A	$3,356,980.87	N/A

Components

Actual Information Description	File Name
Misc Small Parts	**Component Description:** Mount for GPS antenna **Amount:** $19.85 **Component Description:** Misc small parts and supplies for transmitter installation **Amount:** $725.47 **Component Description:** Small parts for transmitter installation **Amount:** $917.56

UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	**Component Description:**	## New attachment includes cover letter requested by reviewer. ## Final invoice for materials; installation and freight still to be billed
	Amount:	$376,114.39
	Component Description:	Final Invoice Primary Transmitter
	Amount:	$100,650.02
	Component Description:	ULXTE-72 Transmitter
	Amount:	$453,878.86
	Component Description:	ULXTE-72 Transmitter
	Amount:	$453,878.86

Service entrance 3 phase /800 amp/208 volt	**Component Description:** **Amount:**	25% downpayment $2,741.94
	Component Description: **Amount:**	45% final payment $4,935.52
	Component Description: **Amount:**	Power cords for temporary power to encoders, networking, etc, while main power supply modified for new transmitter $62.63
	Component Description: **Amount:**	30% progress payment $3,290.33
Switchgear - industrial 800 amp	**Component Description:** **Amount:**	25% downpayment $4,250.02
	Component Description: **Amount:**	30% progress payment $5,100.02
	Component Description: **Amount:**	45% final payment $7,650.03

Transformer 3 phase/480v - 300 KVA	**Component Description:** **Amount:**	45% final payment $13,161.35
	Component Description: **Amount:**	30% progress payment $8,774.23
	Component Description: **Amount:**	25% downpayment $7,311.86
4" Rigid Conduit and Wiring (Cost per foot)	**Component Description:** **Amount:**	45% final payment $4,729.86
	Component Description: **Amount:**	25% downpayment $2,627.70
	Component Description: **Amount:**	30% progress payment $3,153.24
MFR Site Survey	Information not provided.	

Cost Information

Antennas

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna TFU-16WB-R C160	**$325,730.00**	**$119,035.00**		**$118,884.99**	
UHF . Broadband Slot, Side Mount, 16 bay, 40 kW input, directional, horizontally polarized	$129,500.00	$14,787.00	Note that the first two invoices for this antenna, totaling $97,848, were submitted in a different category, so the final expense in this category is actually $97,848 plus $14,787 = $112,635	$14,787.00	N/A
Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	$6,249.99	N/A
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	$189,500.00	$97,848.00	***System Notice: Estimate adjusted and locked because line has been superseded. ***	$97,848.00	N/A

Primary Antenna ATW30HS4-ESCX-31H	**$338,770.19**	**$258,856.52**		**$258,706.52**	
UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, directional,, elliptically or circularly polarized	***$42,540.19***	$42,540.19	The Fund Administrator requested we enter the fourth invoice for this antenna in a new line for "side mount" antennas. The first three invoices are all shown under "top mount" so the two lines must be added together to get the total cost of the antenna	$42,540.19	N/A
Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	$6,250.00	N/A

UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	$289,500.00	$209,916.33	***System Notice: Estimate adjusted and locked because line has been superseded. ***Increased with submission of final invoice on 8/4/2019 to reflect actual final cost. Original cost estimate assumed nearly $20,000 of discount would be applied to the antenna, but that discount was applied by ERI to the transmission line instead	$209,916.33	N/A
Sub-total	$664,500.19	$377,891.52	N/A	$377,591.51	N/A
Total for all systems	$5,051,792.19	$4,115,490.85	N/A	$3,356,980.87	N/A

Components

Actual Information Description	File Name	
UHF . Broadband Slot, Side Mount, 16 bay, 40 kW input, directional, horizontally polarized	**Component Description:** **Amount:**	Final payment for interim antenna, including freight $14,787.00

Sweep test of existing antenna	**Component Description:** **Amount:**	Final Installment Interim Antenna Sweep $1,086.52
	Component Description: **Amount:**	30% deposit. Sweep Test - Interim Antenna /Trans Line $1,725.97
	Component Description: **Amount:**	Sweep Test - progress billing $3,437.50
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	**Component Description:** **Amount:**	Antenna - UHF $48,924.00
	Component Description: **Amount:**	Antenna - UHF $48,924.00
UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, directional,, elliptically or circularly polarized	**Component Description:** **Amount:**	Fourth installment primary antenna $42,540.19

Sweep test of existing antenna	**Component Description:**	Sweep Test - Progress Billing
	Amount:	$3,437.50
	Component Description:	Final Installment - Antenna Sweep
	Amount:	$1,086.13
	Component Description:	Sweep Test of antenna. First invoice representing 30% of total
	Amount:	$1,726.37

UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	**Component Description:**	Primary Antenna progress billing
	Amount:	$49,710.00
	Component Description:	New Primary Antenna. First invoice, representing 30% of cost
	Amount:	$68,654.27
	Component Description:	moved to new line in 399 per request to update model number and change to side mount
	Amount:	N/A
	Component Description:	Primary Antenna - 3rd Progress Billing (Prior to Ship)
	Amount:	$91,552.06

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
Interim Transmission Line	**$343,400.00**	**$293,000.00**		**$271,008.06**	
Rigid Transmission Line - copper, 6 1/8"	$343,400.00	$293,000.00	N/A	$271,008.06	N/A
Primary Transmission Line	**$728,700.00**	**$569,953.00**		**$544,427.98**	
Rigid Transmission Line - copper, 8 3 /16"	$728,700.00	$569,953.00	N/A	$544,427.98	N/A
Sub-total	$1,072,100.00	$862,953.00	N/A	$815,436.04	N/A
Total for all systems	$5,051,792.19	$4,115,490.85	N/A	$3,356,980.87	N/A

Components

Actual Information Description	File Name	
Rigid Transmission Line - copper, 6 1/8"	**Component Description:**	Interim Transmission Line Connectors - 50% deposit
	Amount:	$1,779.90

Component Description:	Fourth Invoice Interim Transmission Line. Includes additional parts (hangers, etc.) identified at time of install
Amount:	$39,028.15
Component Description:	Additional parts to convert interim facility operation from pre-repack channel 41 to post-repack ch 31
Amount:	$6,207.88
Component Description:	Rental of lift and purchase of nitrogen for interim line commissioning
Amount:	$937.72
Component Description:	Interim Trans Line - progress payment (prior to ship)
Amount:	$93,669.20
Component Description:	30% deposit
Amount:	$78,605.09
Component Description:	Interim Transmission Line progress billing
Amount:	$49,000.22

	Component Description:	Interim Transmission Line Connectors
	Amount:	$1,779.90
Rigid Transmission Line - copper, 8 3/16"	**Component Description:**	Impedance Transformer and Fine Matcher
	Amount:	$4,599.33
	Component Description:	Final custom-cut connecting pieces - EIN corrected -
	Amount:	$2,019.74
	Component Description:	Final Installment Primary Trans Line
	Amount:	$76,567.77
	Component Description:	Primary Trans Line Progress Billing
	Amount:	$102,401.73
	Component Description:	Primary Trans Line Progress Billing (prior to ship)
	Amount:	$192,881.69
	Component Description:	Primary transmission line. First Invoice for 30% of cost
	Amount:	$165,957.72

Cost Information

Tower Equipment and Rigging Costs

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower GTOWER	**$1,566,000.00**	**$1,220,504.00**		**$601,820.17**	
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	$421,000.00	$756,629.00	10/4/2019: increased by $207,833 to cover cost of interim antenna and transmission line removal, per ERI quote 20190830-621, a copy of which is attached 11/29/2019: increased by $31,796 to cover cost of four invoices (one ATC, three ERI)	$544,995.17	N/A
Expenses for On-Site Crew	***$28,300.00***	$28,300.00	Expense for on-site crew for tower, antenna and line work. See attachment.	N/A	N/A

Interim Tower Lease Cost	***$38,400.00***	$38,400.00	Need to lease space on tower for interim antenna and interim transmission line. Updated 9/24/2018 per final agreement with American Tower	$38,400.00	N/A
Serious tower reinforcement /modifications	$1,052,000.00	$375,000.00	N/A	($3,750.00)	N/A
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	$26,300.00	$22,175.00	N/A	$22,175.00	N/A
Sub-total	$1,566,000.00	$1,220,504.00	N/A	$601,820.17	N/A
Total for all systems	$5,051,792.19	$4,115,490.85	N/A	$3,356,980.87	N/A

Components

Actual Information Description	File Name
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	

Component Description:	Refund of 50% of weather day charges previously billed on invoice 52861
Amount:	($5,850.00)
Component Description:	Refund of 50% of weather day charges previously billed on invoice 53334
Amount:	($2,925.00)
Component Description:	Refund of 50% of weather day charges previously billed on invoice 53236
Amount:	($15,275.00)
Component Description:	Final Installment Primary Antenna and Trans Line Installation
Amount:	$46,006.91
Component Description:	Extra labor costs for site preparation due to muddy conditions
Amount:	$8,100.00
Component Description:	Backhoe rental for placing gravel and mats in muddy area to support repack tower crew equipment
Amount:	$3,426.67

Component Description:	Refund of 50% of weather day charges previously billed on invoice 52755
Amount:	($1,950.00)
Component Description:	Crane rental and labor for extraction of equipment from muddy tower site following completion of repack work
Amount:	$6,817.50
Component Description:	Weather Days May 28 and 29
Amount:	$4,550.00
Component Description:	Charges for restoring site access in muddy conditions for tower crew equipment, and for repairing elevator cable that broke while in use by KUBE tower crew
Amount:	$13,452.00
Component Description:	Installation of interim antenna and transmission line. Progress billing.
Amount:	$114,308.15

Component Description:	Interim Antenna and Trans Line Rigging Costs, 30% Deposit
Amount:	$57,394.17
Component Description:	"Weather Day" charges for 6 person crew Feb 26, 27 and 28, 2019 installing interim trans line and antenna
Amount:	$11,700.00
Component Description:	Installation of antenna and transmission line. First invoice for 30% of costs.
Amount:	$73,126.54
Component Description:	Weather Days May 1, 11, 18, 21, 22.
Amount:	$10,075.00
Component Description:	Final 15% installment installation of interim trans line and antenna
Amount:	$36,130.68
Component Description:	"Weather Day" charges for April 6, 10, 12, 17, 19, 21, 23, 24, 2019 installing primary trans line and antenna
Amount:	$30,550.00

	Component Description: **Amount:**	Installation of primary antenna and transmission line. Progress billing. $145,607.55
	Component Description: **Amount:**	"Weather Day" charges for May 8 and 10, 2019 installing primary trans line and antenna $5,850.00
	Component Description: **Amount:**	"Weather Day" charges for 6 person crew, Feb 5, 2019, installing interim transmission line and antenna $3,900.00
Expenses for On-Site Crew	Information not provided.	
Interim Tower Lease Cost	**Component Description:** **Amount:**	Interim Tower Lease $38,400.00

Serious tower reinforcement /modifications	**Component Description:**	Zeroed out and entered new component because this one has status "Denied" so subtotals aren't working properly
	Amount:	N/A
	Component Description:	Refund of previously reimbursed costs that were refunded by American Tower
	Amount:	($97,500.00)
	Component Description:	Serious Tower Reinforcement /Modification
	Amount:	$93,750.00
Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	**Component Description:**	Tower Structural Engineering Analysis
	Amount:	$9,775.00
	Component Description:	Tower mapping
	Amount:	$12,400.00

Cost Information

Outside Professional Services

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	**$101,882.00**	**$132,740.20**		**$91,611.41**	
Project management of the transition	$25,280.00	$66,527.20	11/29/2019: increased by $42,372.50 per actual invoices received	$66,527.20	N/A
Proj Manager Expenses	***$10,112.00***	$10,112.00	Weather delays in project in Houston extended construction period 2 months past original schedule, significantly increasing the number of required trips to Houston.	$10,111.76	N/A
RF Exposure Measurements	$21,050.00	$15,000.00	N/A	$3,750.00	N/A

FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	$2,105.00	$1,400.00	N/A	N/A	N/A
ASR modification (prepare FCC Form 854)	$2,105.00	$500.00	N/A	N/A	N/A
NEPA Section 106 environmental review, if needed	$6,310.00	$5,400.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	$3,680.00	$4,301.00	Required additional STA for interim operation on post-auction channel due to extensive weather delays with primary facility construction	$4,300.95	N/A
Attorney Fees - Negotiation of lease and other matters for shared locations	$4,210.00	$4,000.00	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	$223.50	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	$5,260.00	$5,000.00	N/A	N/A	N/A
Prepare request for Special Temporary Authorization	$2,050.00	$1,750.00	actual invoice from RF Engineering consultant	$1,750.00	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	$2,000.00	N/A
Perform engineering study for new channel assignment and antenna development	$7,360.00	$7,000.00	N/A	$650.00	N/A

Prepare and or review reimbursement form	$2,630.00	$2,500.00	N/A	$2,298.00	N/A
Address transition timing and coordination issues w/ other stations and wireless	$2,630.00	$2,500.00	N/A	N/A	N/A
Sub-total	$101,882.00	$132,740.20	N/A	$91,611.41	N/A
Total for all systems	$5,051,792.19	$4,115,490.85	N/A	$3,356,980.87	N/A

Components

Actual Information Description	File Name	
Project management of the transition	**Component Description:** **Amount:**	Project Management $41,350.00
	Component Description: **Amount:**	Project Management $1,022.50
	Component Description: **Amount:**	Project Management $2,500.00
	Component Description: **Amount:**	Project management $1,395.00
	Component Description: **Amount:**	Project management $625.00

Component Description:	Fixed fee charged by tower landlord for management of timelines and schedules during the repack
Amount:	$9,480.00
Component Description:	Project Management
Amount:	$4,654.70
Component Description:	Professional services
Amount:	$250.00
Component Description:	Project Management
Amount:	$5,000.00
Component Description:	Project management
Amount:	$250.00

Proj Manager Expenses	**Component Description:**	Trip expenses for project management
	Amount:	$426.60
	Component Description:	Trip Expenses for Proj Mgmt
	Amount:	$2,533.09
	Component Description:	Trip Expenses for Proj Mgmt
	Amount:	$2,202.38
	Component Description:	Project management - site survey and meetings
	Amount:	$595.51
	Component Description:	Trip Expenses for Proj Mgmt
	Amount:	$2,382.87
	Component Description:	Trip Expenses related to preparation of initial 399 cost estimates
	Amount:	$512.18
	Component Description:	Project Manager's Expense
	Amount:	$871.48
	Component Description:	Trip expenses for project management
	Amount:	$587.65

RF Exposure Measurements	**Component Description:** **Amount:** **Component Description:** **Amount:**	Zeroed out per Reimbursement Team instructions N/A RF Exposure Measurements $3,750.00
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.	
NEPA Section 106 environmental review, if needed	Information not provided.	

Attorney Fees - Prepare and File request for Special Temporary Authorization	**Component Description:** **Amount:**	Attorney Fees STA for Interim Operation on post-auction channel $819.50
	Component Description: **Amount:**	Fees for STA to change Phase from 2 to 3 $1,341.00
	Component Description: **Amount:**	Interim Facility STA $828.00
	Component Description: **Amount:**	Attorney fees- Prepare Special Temporary Authorization $759.00
	Component Description: **Amount:**	Interim facility STA Extension follow-up $44.50
	Component Description: **Amount:**	Interim Facility STA extension for another 6 months $508.95
Attorney Fees - Negotiation of lease and other matters for shared locations	Information not provided.	
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	**Component Description:** **Amount:**	Attorney Fees License-to-cover $223.50

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.	
Prepare request for Special Temporary Authorization	**Component Description:** **Amount:**	Prepare engineering portion of STA application for interim facility operation $1,750.00
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:** **Amount:** **Component Description:** **Amount:**	Revise and edit Form 2100 Construction Permit Application $250.00 Prepare Construction Permit Application (Main) $1,750.00
Perform engineering study for new channel assignment and antenna development	**Component Description:** **Amount:**	Interference study of repack channel 31 $650.00

Prepare and or review reimbursement form	**Component Description:** **Amount:**	Assistance with 399 preparation $298.00
	Component Description: **Amount:**	Form 399 preparation $2,000.00
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	

Cost Information

Other Expenses

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	**$46,340.00**	**$44,410.00**		**$16,548.00**	
MVPD Notification of Channel Change	***$5,000.00***	$5,000.00	Legal Fees for research, and delivery of notices.	$1,865.00	N/A
Develop and air announcement of upcoming channel change	***$400.00***	$400.00	Cost for outside contractor to create spot. 2 hrs.	N/A	N/A
Equipment Delivery and Handling Charges	***$12,000.00***	$12,000.00	Shipping charge est for antenna, and lines.	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	***$15,000.00***	$15,000.00	Proper disposal of old transmitter, lines and fittings.	$5,093.00	N/A
Non-zoning permits	***$750.00***	$750.00	N/A	N/A	N/A

FCC Filing Fees - Special Temporary Authorization request	$195.00	$790.00	A six month extension triggered an additional $200 filing fee. A change from Phase 2 to Phase 3 due to weather delays required another $200 filing fee. An STA for interim op on post-auction channel required another $200 filing fee.	$790.00	N/A
FCC Filing Fees - Form 2100 license to cover application	$335.00	$335.00	N/A	$335.00	N/A
FCC Filing Fees - Form 2100 minor change CP application	$1,110.00	$1,070.00	N/A	N/A	N/A
DTV Medical Facility Notification	$11,550.00	$9,065.00	N/A	$8,465.00	N/A
Sub-total	$46,340.00	$44,410.00	N/A	$16,548.00	N/A
Total for all systems	$5,051,792.19	$4,115,490.85	N/A	$3,356,980.87	N/A

Components

Actual Information Description	File Name	
MVPD Notification of Channel Change	**Component Description:** **Amount:**	Notifications of channel change sent to MVPD's $1,865.00
Develop and air announcement of upcoming channel change	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:** **Amount:** **Component Description:** **Amount:**	Dumpster costs for disposal of packing materials for the transmitter, antennas, and transmission line $1,438.00 Dumpster costs for disposal of packing materials for the transmitter, antennas, and transmission line $1,498.00 Dumpster costs for disposal of packing materials for the transmitter, antennas, and transmission line $2,157.00
Non-zoning permits	Information not provided.	

FCC Filing Fees - Special Temporary Authorization request	**Component Description:** **Amount:**	Interim STA extension filing fee $200.00
	Component Description: **Amount:**	Interim STA on post-auction channel $200.00
	Component Description: **Amount:**	Legal STA Filing Fee for Phase change from 2 to 3 $200.00
	Component Description: **Amount:**	Filing Fees $190.00
FCC Filing Fees - Form 2100 license to cover application	**Component Description:** **Amount:**	Licence-to-cover filing fee $335.00
FCC Filing Fees - Form 2100 minor change CP application	Information not provided.	
DTV Medical Facility Notification	**Component Description:** **Amount:**	Notifications to Medical Facilities of Upcoming Channel Change $8,465.00

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	$5,051,792.19	$4,115,490.85	$3,356,980.87

Reimbursement Status

Question	Response
The facility has ceased operating on its pre-auction channel.	Yes
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.	
	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 above-named applicant for the Authorization(s) specified above.	**Jeff Hazelrigg** *CFO* 11/29/2019

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).	
	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. 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) .
6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

	8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission. 9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.	
	I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.	**Jeff Hazelrigg** *CFO* 11/29/2019

Attachments