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: **69396** | Service: **DTV** | Call Sign: **KUED** | Channel: **27 (UHF)**

File Number: **0000028860**

FRN: **0001597590** | Date Submitted: **06/13/2018**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
UNIVERSITY OF UTAH Doing Business As: UNIVERSITY OF UTAH	Philip Titus 101 WASATCH DRIVE BLDG. 179 SALT LAKE CITY, UT 84112 United States	+1 (801) 585-3601	ptitus@kued.org	Government Entity

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
Philip Titus *Director of Engineering* *KUED / University of Utah*	Phil Titus 101 South Wasatch Drive Salt Lake City, UT 84112 United States	+1 (801) 585-3601	ptitus@kued.org

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.	Yes
Briefly describe transition plan	See Exhibit A

Transmitters

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

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 and Type	Manufacturer	
	Model	Diamond
	Year	2000
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	10 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	10.8 kW
	Justification for New Transmitter	Unable to tune old transmitter See Exhibit B. CP for move to channel 27 application in process. Unable to construct on 15 due to new antenna design. See Exhibit B1 for channel power calculations and Exhibit B2 for Gates Air quote.

Primary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	300 kVA
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	800.0 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

Information not provided.

Interim Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Interim
	Description of Use	N/A
	Change Type	Purchase
	Manufacturer	
	Model	ULXTE-20
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	12.9 kW
	Justification for New Transmitter	See Exhibit C

Interim Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	300 kVA
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	800.0 feet
	Other Electrical Service	No
	Description	N/A
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	Heating and Cooling

	Size	50 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A
Inside RF System	Is an additional interior RF system required to support this interim transmitter?	Yes

Interim Transmitter

Other Transmitter Cost Not Listed

Information not provided.

Antennas

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

Primary Antenna

Existing Antenna Information

Section	Question	Response
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?	Yes
	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	Bottom
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	8
	Number of Panels	48
	Design power capacity in use	81.0 %
	Lower Limit	590.00 MHz
	Upper Limit	680.00 MHz
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	239.0 kW

Manufacturer	
Model	773 928
Year	1999

Facility ID's and Call Signs of all stations with whom the antenna is shared.

Facility ID	Call Sign
6823	KBYU-TV
68889	KTVX
69582	KUEN
1136	KUCW
35823	KUTV
36607	KJZZ-TV
6359	KSL-TV

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?	Yes
	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	Top Mount
	Antenna position in stack	Bottom
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	8
	Number of Panels/Bays	48
	Lower Limit	482.00 MHz
	Upper Limit	608.00 MHz
	Design power capacity in use	50.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	133.0 kW
	Manufacturer	
	Model	759 25063

	Year	2017
	Justification for New Antenna	The current panel antenna is finely tuned to a specific band, but cannot be retuned to the new band. See Exhibit D. Justification for the Combiner can be found in Exhibit E.

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Type	New
	Number of channels supported	8
	Frequencies of channels supported	Upper and lower frequency
	Frequency	488.0 MHz - 608.0 MHz
	Do you need a combiner output splitter /switcher for dual feed lines?	Yes
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Broadband
	Feed Line Size	6 1/8 inches inches

Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	No
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Primary Antenna

Other Antenna Cost Not Listed

Name	Description
Antenna Installation	Install new panels See Exhibit D

Transmission Line

Section	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	No

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?	Terrain Constrained
	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?	Yes
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1062408
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	40° 39' 33.0" N-

Longitude (NAD83)	112° 12' 10.0" W-
Overall Structure Height	308.40 feet
Support Structure Height	308.40 feet
Ground Elevation Above Mean Sea Level (AMSL)	9035.32 feet
Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	DTV UTAH, LC
Date Constructed	10/28/1999

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
35823	KUTV	DTV
36607	KJZZ-TV	DTV
6359	KSL-TV	DTV
77512	KPNZ	DTV
69582	KUEN	DTV
68889	KTVX	DTV
1136	KUCW	DTV
6823	KBYU-TV	DTV

Other Types of Users

Users
GOGO Air

Primary Tower

Tower Modification Costs

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for documented tower
Tower Reinforcements	Please select whether tower reinforcements are needed:	Major Reinforcements needed

Primary Tower

Tower Rigging Costs

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

Primary Tower

Other Tower Expenses Not Listed

Information not provided.

Outside Professional Services Costs

Section	Question	Response
Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	800
	Explanation	The myriad of tasks, the amount of common equipment, the logistics and the implementation is extremely complex and requires coordination between members of DTV Utah, LLC. See Exhibit K.
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	Yes
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	2
	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A

	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting Services	Prepare and file Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	2
	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	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	Yes
	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

Information not provided.

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	No
	FCC License to Cover Application	No
	FCC Special Temporary Authority Application	No
Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
	Does this relocation require Equipment Storage?	Yes
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD Notification of a Channel Change?	Yes

Other Expenses

Other Expenses Not Listed

Name	Description
DTV Utah Operating Agreement Equity Equalization	Per 1998 Operating Agreement. See Exhibit M
Garbage Disposal	Remove General Garbage from Mountain site (Not Equipment Disposal)
KSTU Mask Filter	Adjacent Channel Mask Filter for KSTU channel 28 to protect KUED on channel 27. See Exhibit N.
Road Maintenance	Snowplowing Grating and repairs to existing road to remote mountain top. See Exhibit R.
Temporary Sanatation	For Workers See Exhibit S.
Temporary Storage	For tools and equipment on site and staging area off site. See Exhibit Q.
Transportation Services	Snowcat and Helicopter to move equipment and personnel to remote mountain site. See Exhibit R.

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
Interim Transmitter ULXTE-20	**$1,003,800.00**	**$130,891.00**		**$116,212.54**	
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	$494,500.00	$70,534.00	1/8th Shared Cost	$83,460.30	Please see attached- FCC Incentive Auction Repack Reimbursement Request and Explanation.
50 Ton system	$266,000.00	$31,625.00	1/8th Shared Cost	$27,734.28	N/A
UHF inside RF system including switching	$147,500.00	$17,500.00	1/8th Shared Cost	$1,372.17	N/A
2" Rigid Conduit and Wiring (Cost per foot)	$20,800.00	$2,500.00	1/8th Shared Cost	N/A	N/A
Transformer 3 phase /480v - 300 KVA	$36,800.00	$4,375.00	1/8th shared cost	N/A	N/A
Switchgear - industrial 800 amp	$38,200.00	$4,357.00	1/8th Shared Cost	$3,645.79	N/A
Primary Transmitter ULXTE-12	**$590,300.00**	**$561,300.00**		**$0.00**	

UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	$494,500.00	$470,000.00	N/A	N/A	N/A
Switchgear - industrial 800 amp	$38,200.00	$36,300.00	N/A	$0.00	N/A
Transformer 3 phase /480v - 300 KVA	$36,800.00	$35,000.00	N/A	N/A	N/A
2" Rigid Conduit and Wiring (Cost per foot)	$20,800.00	$20,000.00	N/A	$0.00	N/A
Sub-total	$1,594,100.00	$692,191.00	N/A	$116,212.54	N/A
Total for all systems	$3,494,377.25	$1,602,493.25	N/A	$447,456.83	N/A

Components

Actual Information Description	File Name

UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	**Component Description:**	Transmitter Install Information Added
	Amount:	$5,412.88
	Component Description:	Transmitter - ProgPay 3 - Information added
	Amount:	$21,682.94
	Component Description:	Transmitter - ProgPay 1 - information added
	Amount:	$27,365.14
	Component Description:	Transmitter - ProgPay 2 - information added
	Amount:	$27,365.14
	Component Description:	HD/SD/SDI equipment - Information Added
	Amount:	$514.00
	Component Description:	HD/SD/SDI equipment - Information Added
	Amount:	$459.77
	Component Description:	HD/SD/SDI equipment information added
	Amount:	$660.43

50 Ton system	**Component Description:** Cooling System Evaluation - Information Added **Amount:** $153.79 **Component Description:** HVAC Work - Information added. **Amount:** $16,416.66 **Component Description:** HVAC Work - Information Added **Amount:** $11,163.83
UHF inside RF system including switching	**Component Description:** Additional Flex Line for DTV Xmit **Amount:** $328.09 **Component Description:** Dell Computer for Control System **Amount:** $190.05 **Component Description:** Transmission Line 25% Down Payment- Information Added **Amount:** $201.09 **Component Description:** Final Transmission Line **Amount:** $652.94
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.
Transformer 3 phase/480v - 300 KVA	Information not provided.

Switchgear - industrial 800 amp	**Component Description:** **Amount:** **Component Description:** **Amount:**	Electrical Panel - Information Added $496.60 Transmiter Power Transformer Panel- Information Added $3,149.19
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	Information not provided.	
Switchgear - industrial 800 amp	Information not provided.	
Transformer 3 phase/480v - 300 KVA	Information not provided.	
2" Rigid Conduit and Wiring (Cost per foot)	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
Primary Antenna 759 25063	**$436,593.00**	**$394,713.00**		**$294,059.67**	
New combiner, cost per channel (without antenna)	$84,200.00	$185,000.00	1/8th Shared Cost See exhibit E	$207,651.42	See in attachment- FCC Incentive Auction Repack Reimbursement Request and Explanation.
UHF - High Power Top Mount Eight Station broadband panel antenna horizontally polarized	***$168,286.00***	$168,286.00	1/8th Shared Cost	$65,175.78	N/A
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	$13,700.00	$1,625.00	1/8th Shared Cost	$2,369.99	FCC application was originally applied for with a 1/8 amount but reimbursements are being requested at 1/6
Combiner output splitting /switching for dual feed lines, if applicable	$126,000.00	$0.00	Included in Combiner Cost see Exhibit E	N/A	N/A

Sweep test of existing antenna	$6,730.00	$2,125.00	1/8th Shared Cost	$3,179.79	Please see attached- FCC Incentive Auction Repack Reimbursement Request and Explanation.
Antenna Installation	***$37,677.00***	$37,677.00	1/8th Shared Cost See Exhibit D	$15,682.69	N/A
Sub-total	$436,593.00	$394,713.00	N/A	$294,059.67	N/A
Total for all systems	$3,494,377.25	$1,602,493.25	N/A	$447,456.83	N/A

Components

Actual Information Description	File Name

New combiner, cost per channel (without antenna)	**Component Description:**	Combiner - Prog Pay 1 Down payment request by email. Wire transferred - Information added
	Amount:	$22,679.37
	Component Description:	Travel Reimbursement - Information added.
	Amount:	$216.88
	Component Description:	80KW Cooling System - Information Added
	Amount:	$3,320.18
	Component Description:	Combiner - Prog Pay 3 - Information added.
	Amount:	$90,717.49
	Component Description:	Combiner - Prog Pay 2 - Information added.
	Amount:	$90,717.50

UHF - High Power Top Mount Eight Station broadband panel antenna horizontally polarized	**Component Description:** **Amount:**	Antenna Factory Test - Information added $5,142.50
	Component Description: **Amount:**	Antenna 25% Down Payment - Information Added $7,710.92
	Component Description: **Amount:**	Nitrogen Generation (plus Tax) Information added. $4,445.39
	Component Description: **Amount:**	Material 25% Down Payment - Information Added $47,876.97
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	**Component Description:** **Amount:**	Reroute KPNZ transmitter line (minus Install) Information Added $1,060.49
	Component Description: **Amount:**	KPNZ Line Reroute labor/install $1,309.50
Combiner output splitting /switching for dual feed lines, if applicable	Information not provided.	

Sweep test of existing antenna	**Component Description:**	Existing Antenna Test- Information Added
	Amount:	$2,828.08
	Component Description:	Impedance Transformer Rent - Information added.
	Amount:	$351.71
Antenna Installation	**Component Description:**	Site Survey 25% Down Payment - Information Added
	Amount:	$1,310.83
	Component Description:	Transmission Line Final Payment - Information Added
	Amount:	$869.72
	Component Description:	Bullet Installation 25% Down Payment- Information Added
	Amount:	$1,748.05
	Component Description:	Installation 25% Down Payment - Information added.
	Amount:	$11,754.09

Cost Information

Transmission Line

Information not provided.

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 TOWER	**$854,600.00**	**$101,500.00**		**$226.66**	
Structural engineering tower load study for well documented tower	$12,600.00	$1,500.00	1/8th Shared Cost	$226.66	N/A
Major tower reinforcement /modifications	$421,000.00	$50,000.00	1/8th Shared Cost	N/A	N/A
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	$421,000.00	$50,000.00	1/8th Shared Cost	N/A	N/A
Sub-total	$854,600.00	$101,500.00	N/A	$226.66	N/A
Total for all systems	$3,494,377.25	$1,602,493.25	N/A	$447,456.83	N/A

Components

Actual Information Description	File Name

Structural engineering tower load study for well documented tower	**Component Description:** **Amount:**	Structural Assessment - Information Added $226.66
Major tower reinforcement /modifications	Information not provided.	
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	Information not provided.	

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	**$280,195.00**	**$85,750.00**		**$19,591.39**	
RF Exposure Measurements	$21,050.00	$2,500.00	1/8th Shared Cost	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	$7,360.00	$7,000.00	N/A	$1,536.20	N/A
Attorney Fees - Negotiation of lease and other matters for shared locations	$4,210.00	$4,000.00	N/A	$2,627.81	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	$5,260.00	$5,000.00	N/A	$231.86	N/A
Prepare request for Special Temporary Authorization	$4,100.00	$3,000.00	N/A	N/A	N/A
Project management of the transition	$126,400.00	$28,000.00	1/8th Shared Cost	$12,180.94	N/A

Prepare and or review reimbursement form	$2,630.00	$2,500.00	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	N/A	N/A
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	$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	N/A	N/A
Comprehensive coverage verification via field study, if needed	$84,200.00	$10,000.00	1/8th Shared Cost	N/A	N/A
Perform engineering study for new channel assignment and antenna development	$7,360.00	$7,000.00	N/A	$3,000.00	N/A

Address transition timing and coordination issues w/ other stations and wireless	$2,630.00	$2,500.00	N/A	$14.58	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
RF Consulting Engineer Fees-Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	$2,105.00	$2,000.00	N/A	N/A	N/A
RF Consulting Engineer Fees-Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	$1,580.00	$1,500.00	N/A	N/A	N/A
Sub-total	$280,195.00	$85,750.00	N/A	$19,591.39	N/A
Total for all systems	$3,494,377.25	$1,602,493.25	N/A	$447,456.83	N/A

Components

Actual Information Description	File Name
RF Exposure Measurements	Information not provided.

Attorney Fees - Prepare and File request for Special Temporary Authorization	**Component Description:** **Amount:** **Component Description:** **Amount:**	Legal Fees - WBK - Information Added $876.75 KUED paid legal fees to Covington Burling - Information added $659.45
Attorney Fees - Negotiation of lease and other matters for shared locations	**Component Description:** **Amount:** **Component Description:** **Amount:** **Component Description:** **Amount:**	Legal Consulting- Information added $501.40 Legal Consulting - Information Added $165.91 Legal Consulting - Information added $1,960.50
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	**Component Description:** **Amount:** **Component Description:** **Amount:**	Legal Fees Information added $29.16 Legal Fees - CB - Information Added $202.70
Prepare request for Special Temporary Authorization	Information not provided.	
Project management of the transition		

Component Description:	Consulting /Project Mgmt- Information added
Amount:	$916.62
Component Description:	Consulting /Project Mgmt - Information added
Amount:	$891.87
Component Description:	Consulting /Project Mgmt - Information Added
Amount:	$445.45
Component Description:	Consulting /Project Mgmt - information added
Amount:	$521.19
Component Description:	Consulting /Project Mgmt - Information Added
Amount:	$1,102.36
Component Description:	Consulting /Project Mgmt - Information added
Amount:	$703.95
Component Description:	Consulting /Project Mgmt - Information added
Amount:	$699.66

Component Description:	Consulting /Project Mgmt - Information Added
Amount:	$696.62
Component Description:	Consulting /Project Mgmt - Information added
Amount:	$742.45
Component Description:	Consulting /Project Mgmt - Information added
Amount:	$358.38
Component Description:	Consulting /Project Mgmt- Information added
Amount:	$359.68
Component Description:	Consulting /Project Mgmt- Information added
Amount:	$545.14
Component Description:	Consulting /Project Mgmt - Information Added
Amount:	$908.37
Component Description:	Carnovale Consulting - Information Added
Amount:	$2,763.54

	Component Description: **Amount:**	Consulting /Project Mgmt - information added $525.66
Prepare and or review reimbursement form	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Information not provided.	
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	Information not provided.	
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	
Comprehensive coverage verification via field study, if needed	Information not provided.	
Perform engineering study for new channel assignment and antenna development	**Component Description:** **Amount:**	Repack Consulting - Information added $3,000.00
Address transition timing and coordination issues w/ other stations and wireless	**Component Description:** **Amount:**	Legal Fees- Adjacent Channel Notice - Information Added $14.58
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	

RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Information not provided.
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	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	**$328,889.25**	**$328,339.25**		**$17,366.57**	
Transportation Services	***$5,000.00***	$5,000.00	1/8th Shared Cost for inclement weather	$1,979.98	N/A
Temporary Storage	***$4,000.00***	$4,000.00	Warehouse and pods	$1,960.83	N/A
Temporary Sanatation	***$3,000.00***	$3,000.00	1/8th Shared Cost	N/A	N/A
Road Maintenance	***$10,000.00***	$10,000.00	1/8th Shared Cost	N/A	N/A
KSTU Mask Filter	***$6,756.25***	$6,756.25	See Exhibit N. Price is 1 /8th Share	$5,013.05	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	***$25,000.00***	$25,000.00	1/8th Shared Cost based on general experience acquired by staff plus individual station costs for transmitter.	N/A	N/A
Equipment Delivery and Handling Charges	***$8,125.00***	$8,125.00	1/8th Shared Cost	$3,458.87	N/A

Equipment Storage	***$4,000.00***	$4,000.00	1125 per month for 16 months plus pod storage on mountains. 1/8th Shared Cost. See Exhibit Q	$2,256.34	N/A
Develop and air announcement of upcoming channel change	***$20,000.00***	$20,000.00	N/A	N/A	N/A
MVPD Notification of Channel Change	***$5,000.00***	$5,000.00	N/A	N/A	N/A
DTV Utah Operating Agreement Equity Equalization	***$223,083.00***	$223,083.00	See Exhibit M	N/A	N/A
Garbage Disposal	***$1,500.00***	$1,500.00	1/8th Shared Cost	$312.50	N/A
Non-zoning permits	***$1,875.00***	$1,875.00	1/8th Shared Cost estimated from past experience. County will not furnish estimates.	N/A	N/A
DTV Medical Facility Notification	$11,550.00	$11,000.00	N/A	$2,385.00	N/A
Sub-total	$328,889.25	$328,339.25	N/A	$17,366.57	N/A
Total for all systems	$3,494,377.25	$1,602,493.25	N/A	$447,456.83	N/A

Components

Actual Information Description	File Name	
Transportation Services	**Component Description:**	Snowcat to Site (Group Portion Only) - Information Added
	Amount:	$108.33
	Component Description:	Snowcat to Site - Information added
	Amount:	$216.66
	Component Description:	Transportation - Antenna Inspections- Information added
	Amount:	$507.50
	Component Description:	Transportation - Antenna Inspections- Information added
	Amount:	$676.66
	Component Description:	Snowcat to Site
	Amount:	$108.33
	Component Description:	Transportation- Structural Survey - Information added
	Amount:	$362.50

Temporary Storage	**Component Description:** **Amount:**	Storage Pods- Information Added $1,927.50
	Component Description: **Amount:**	Container Positioning Labor Information Added $33.33
Temporary Sanatation	Information not provided.	
Road Maintenance	Information not provided.	
KSTU Mask Filter	**Component Description:** **Amount:**	KSTU Mask Filter (minus install)- Information Added $5,013.05
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.	
Equipment Delivery and Handling Charges	**Component Description:** **Amount:**	Forklift Transportation - Information added $40.83
	Component Description: **Amount:**	Equipment Handling Apr - Information added $28.33
	Component Description: **Amount:**	Equipment Handling - Information added $77.91

Component Description:	Howe Rental Forklift Payments - Information added.
Amount:	$955.98
Component Description:	Equipment Handling - Information added
Amount:	$42.50
Component Description:	Equipment Handling - Information added
Amount:	$70.83
Component Description:	Equipment Handling - Information added
Amount:	$14.16
Component Description:	Forklift Rental - Information Added
Amount:	$503.82
Component Description:	Equipment Handling - Information Added
Amount:	$56.66
Component Description:	Equipment Handling Feb - Information Added
Amount:	$14.16
Component Description:	Equipment Handling - Information added
Amount:	$100.00

	Component Description:	Forklift Rental 5/14-8/06/2018 - Information added
	Amount:	$1,553.69
Equipment Storage		
	Component Description:	Warehouse Lease - Information added
	Amount:	$187.50
	Component Description:	Pallet Jack - Information added
	Amount:	$139.68
	Component Description:	Warehouse Lease - Information added
	Amount:	$187.50
	Component Description:	Warehouse Lease - Information Added
	Amount:	$187.50
	Component Description:	Warehouse Lease - Information Added
	Amount:	$187.50
	Component Description:	Warehouse Lease- Information added
	Amount:	$187.50
	Component Description:	Warehouse Lease- Information Added
	Amount:	$187.50

	Component Description: **Amount:**	Warehouse Lease - June - Information added $308.33
	Component Description: **Amount:**	Warehouse Lease Rate Increase for May - Information added $120.83
	Component Description: **Amount:**	Warehouse Lease Rate Increase for May - Information added $187.50
	Component Description: **Amount:**	Warehouse Lease - Information added $187.50
	Component Description: **Amount:**	Warehouse Lease - Information added $187.50
Develop and air announcement of upcoming channel change	Information not provided.	
MVPD Notification of Channel Change	Information not provided.	
DTV Utah Operating Agreement Equity Equalization	Information not provided.	
Garbage Disposal	**Component Description:** **Amount:**	Dumpster Service - Information Added $312.50

Non-zoning permits	Information not provided.
DTV Medical Facility Notification	**Component Description:** Medical Facility Notice **Amount:** $2,385.00

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	$3,494,377.25	$1,602,493.25	$447,456.83

Reimbursement Status

Question	Response
The facility has ceased operating on its pre-auction channel.	No
Construction of final facilities or all necessary modifications are complete.	No
All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out procedures with the Fund Administrator.	No

Certification

Section	Question	Response
Submission of Estimated Expenses Statements	WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.	
	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.	**Rebecca Davis , Davis .** *Chief Financial Officer* 06/13/2018

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.	**Rebecca Davis , Davis .** *Chief Financial Officer* 06/13/2018

Attachments