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: **6124** | Service: **DTV** | Call Sign: **KPBS** | Channel: **19 (UHF)**

File Number: **0000028658**

FRN: **0002968360** | Date Submitted: **06/07/2018**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
BD. OF TRUSTEES, CAL. STATE UNIV. FOR SAN DIEGO STATE UNIV. Doing Business As: BD. OF TRUSTEES, CAL. STATE UNIV. FOR SAN DIEGO STATE UNIV.	Leon Messenie 5200 CAMPANILE DRIVE SAN DIEGO, CA 92182 United States	+1 (619) 594-1515	lmessenie@kpbs.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
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	See Attachment - "KPBS Repack Project Plan ver2"

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	Retune Existing
	Use	Primary (Main)
	Ownership	Owned
	Owner	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	ROHDE AND SCHWARZ
	Model	NV8620V
	Year	2010

	Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	20 kW

Primary Transmitter

Retuning Transmitter Costs

Section	Question	Response
New IOT Tubes	Number of Tubes (including accessories) needed	N/A
New Mask Filter	Power	30 kW
	Other Power	N/A
New Exciter	Is a new exciter needed?	No

Primary 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	No
	Size	N/A
	Length	N/A
	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
Proof of Performance - Two Exciters	Transmitter Manufacturer to perform a Proof of Performance on the primary transmitter with two exciters operation on CH-19.
Inside RF System - Interconnection	Inside RF System interconnection components to connect transmitter to mask filter I/O, power monitor, and 4 port switch. Includes 4 port switch with switch controller.

Auxiliary Transmitter

Add Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Retune Existing
	Use	Auxiliary (Backup)
	Ownership	Owned
	Owner	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	ROHDE AND SCHWARZ
	Model	NV8610V
	Year	2010
	Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	10 kW

Auxiliary Transmitter

Retuning Transmitter Costs

Section	Question	Response
New IOT Tubes	Number of Tubes (including accessories) needed	N/A
New Mask Filter	Power	30 kW
	Other Power	N/A
New Exciter	Is a new exciter needed?	No

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	No
	Size	N/A
	Length	N/A

	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

Auxiliary Transmitter

Other Transmitter Cost Not Listed

Name	Description
Inside RF System - Interconnection	Inside RF System interconnection components to connect transmitter to mask filter I/O, RF Power Monitor, to 4 port switch.
Proof Of Performance - One Exciter	Transmitter Manufacturer to perform a Proof of Performance on the auxiliary transmitter with one exciter operating on CH-19.

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	Horizontal
	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)	350.0 kW

Manufacturer	
Model	TFU-18GTH-R C170SP CH30
Year	2001

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?	Yes
	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	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	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)	285.0 kW
	Manufacturer	

	Model	TFU18GTH-R C170SP CH19
	Year	2017
	Justification for New Antenna	The current DTV Antenna cannot be re-tuned from CH30 to CH19

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	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?	Yes
	Broadband or Single Channel?	Broadband
	Feed Line Size	3 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
Adapter plate to match tower top	Adapter plate need to mount new antenna to top of tower

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	3 1/8 inches
	Other Diameter	N/A
	Segment Length	19 1/2 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	185 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?	Yes
	Type	Rigid
	Diameter	3 1/8 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	185 feet per run
	Justification for New Transmission Line	The current transmission line at 19'6" for CH30 is not recommended for use at CH19. 20 foot lengths is recommended

Primary Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
Dehydrator System	Dehydrator needed to keep transmission line dry current system is limited in capacity and will not be able to keep new line pressurized.

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?	Candelabra
	Is this tower currently shared with any other stations?	No
	One or more FM, AM or TV radio broadcaster(s)	N/A
	Others Types of Users	N/A
	Is tower documented for structural analysis?	No
	Is tower compliant with Rev G?	Unknown
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1213483
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	32° 41' 52.7" N-
	Longitude (NAD83)	116° 56' 06.3" W-
	Overall Structure Height	214.00 feet
	Support Structure Height	150.00 feet
	Ground Elevation Above Mean Sea Level (AMSL)	2495.00 feet

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	KPBS
Date Constructed	07/17/2001

Primary Tower

Tower Modification Costs

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for tower with candelabra
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	Candelabra
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	260
	Explanation	See Attachment " KPBS Further Justification for Form 399"
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 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	No
	Quantity	N/A
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	Yes
	FAA Consultation (including preparation of FAA Form 7460)	Yes
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
RF Field Engineering Services	Comprehensive coverage verification via field study	Yes
	RF exposure measurements	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
Additional Legal Expenses	Additional legal expenses for University-license public TV station
Quarterly Progress Reports	FCC-required Quarterly Progress Reports

California Inspector	Site Inspection for compliance with California Building Code regulations
Construction Project Management	General Contractor Project Management
Project Management Consulting	SDSU Representative to interface between the University and General Contractor

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?	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
California Sales Tax	California Sales Tax at 7.75 percent on all tangible items
Shipping Freight	Shipping Antenna, Mask Filters, and other RF Componets to the WIS Storage Yard
California State University System Charge	Required California State University Fee for Financial fund administration

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 NV8620V	**$168,226.00**	**$195,866.00**		**$126,939.00**	
Inside RF System - Interconnection	***$21,826.00***	$21,826.00	Adjusted 6/6/2018 by L. Messenie as a result of the Wireless Infrastructure Service Budgetary Proposal and Wireless Infrastructure Service Invoice 6124AS	$19,643.00	N/A
Proof of Performance - Two Exciters	***$8,600.00***	$8,600.00	N/A	N/A	N/A
UHF and VHF - minor banding issues	$105,200.00	$104,000.00	Adjusted 6/6/2018 by L. Messenie as a result of the Wireless Infrastructure Service Budgetary Proposal and Wireless Infrastructure Service Invoice 6124AS	$52,000.00	50% Deposit for Complex Tower Rigging at time of order.

30 kW mask filter	$32,600.00	$61,440.00	Adjusted 6/6/2018 by L. Messenie as a result of the Wireless Infrastructure Service Budgetary Proposal and Wireless Infrastructure Service Invoice 6124AS	$55,296.00	N/A
Auxiliary Transmitter NV8610V	**$163,786.25**	**$161,720.25**		**$46,376.00**	
30 kW mask filter	$32,600.00	$35,734.00	Adjusted 6/6/2018 by L. Messenie as a result of the Wireless Infrastructure Service Budgetary Proposal and Wireless Infrastructure Service Invoice 6124AS	$32,161.00	N/A
Proof Of Performance - One Exciter	***$4,300.00***	$4,300.00	N/A	N/A	N/A
Inside RF System - Interconnection	***$21,686.25***	$21,686.25	N/A	$14,215.00	N/A
UHF and VHF - minor banding issues	$105,200.00	$100,000.00	N/A	N/A	N/A
Sub-total	$332,012.25	$357,586.25	N/A	$173,315.00	N/A
Total for all systems	$1,699,136.28	$1,479,416.28	N/A	$582,540.63	N/A

Components

Actual Information Description	File Name	
Inside RF System - Interconnection	**Component Description:**	See WIS Invoice 6124BS Item 3 for backup, 40% Payment due prior to mid June 2018 shipping date.
	Amount:	$8,730.00
	Component Description:	See WIS Invoice 6124AS Item 3 for backup, 50% Deposit based on budgetary proposal
	Amount:	$10,913.00
Proof of Performance - Two Exciters	Information not provided.	
UHF and VHF - minor banding issues	**Component Description:**	See WIS Invoice 6124AS Item 6 for backup, 50% Deposit based on budgetary proposal.
	Amount:	$52,000.00

30 kW mask filter	**Component Description:**	See WIS Invoice 6124BS Item 1 for backup, 40% Payment due prior to mid June 2018 shipping date.
	Amount:	$24,576.00
	Component Description:	See WIS Invoice 6124AS Item 1; 50% Deposit based on budgetary proposal.
	Amount:	$30,720.00
30 kW mask filter	**Component Description:**	See WIS Invoice 6124BS Item 2 for backup, 40% Payment due prior to mid June 2018 shipping date.
	Amount:	$14,294.00
	Component Description:	See WIS Invoice 6124AS Item 2 for backup, 50% Deposit based on budgetary proposal
	Amount:	$17,867.00
Proof Of Performance - One Exciter	Information not provided.	

Inside RF System - Interconnection	**Component Description:**	See WIS Invoice 6124BS Item 5 for backup, 40% Payment due prior to mid June 2018 shipping date.
	Amount:	$4,914.00
	Component Description:	See WIS Invoice 6124BS Item 4 for backup, 40% Payment due prior to mid June 2018 shipping date.
	Amount:	$1,404.00
	Component Description:	See WIS Invoice 6124AS Item 4 for backup, 50% Deposit based on budgetary proposal
	Amount:	$1,755.00
	Component Description:	See WIS Invoice 6124AS Item 5 for backup, 50% Deposit based on budgetary proposal
	Amount:	$6,142.00
UHF and VHF - minor banding issues	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 TFU18GTH-R C170SP CH19	**$286,250.00**	**$325,434.00**		**$290,046.00**	
Sweep test of existing antenna	$6,730.00	$7,360.00	Adjusted 6/6/2018 by L. Messenie as a result of the Wireless Infrastructure Service Budgetary Proposal and Wireless Infrastructure Service Invoice 6124AS	$3,680.00	N/A
Adapter plate to match tower top	***$23,180.00***	$23,180.00	Adjusted 6/6/2018 by L. Messenie as a result of the Wireless Infrastructure Service Budgetary Proposal and Wireless Infrastructure Service Invoice 6124AS	$20,962.00	N/A

UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	$247,000.00	$284,652.00	Adjusted 6/6/2018 by L. Messenie as a result of the Wireless Infrastructure Service Budgetary Proposal and Wireless Infrastructure Service Invoice 6124AS	$256,187.00	N/A
Elbow complex, broadband, at antenna input, per 3 1/8. feedline (if needed)	$9,340.00	$10,242.00	Adjusted 6/6/2018 by L. Messenie as a result of the Wireless Infrastructure Service Budgetary Proposal and Wireless Infrastructure Service Invoice 6124AS	$9,217.00	N/A
Sub-total	$286,250.00	$325,434.00	N/A	$290,046.00	N/A
Total for all systems	$1,699,136.28	$1,479,416.28	N/A	$582,540.63	N/A

Components

Actual Information Description	File Name

Sweep test of existing antenna	**Component Description:** **Amount:**	See WIS Invoice 6124AS Item 8 for backup, 50% Deposit based on budgetary proposal $3,680.00
Adapter plate to match tower top	**Component Description:** **Amount:**	See WIS Invoice 6124BS Item 8 for backup, 40% Payment due prior to mid June 2018 shipping date. $9,372.00
	Component Description: **Amount:**	See WIS Invoice 6124AS Item 10 for backup, 50% Deposit based on budgetary proposal $11,590.00

UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	**Component Description:** **Amount:** **Component Description:** **Amount:**	See WIS Invoice 6124BS Item 6 for backup, 40% Payment due prior to mid June 2018 shipping date. $113,861.00 See WIS Invoice 6124AS Item 7 for backup, 50% Deposit based on budgetary proposal $142,326.00
Elbow complex, broadband, at antenna input, per 3 1/8. feedline (if needed)	**Component Description:** **Amount:** **Component Description:** **Amount:**	See WIS Invoice 6124BS Item 8 for backup, 40% Payment due prior to mid June 2018 shipping date. $4,096.00 See WIS Invoice 6124AS Item 9 for backup, 50% Deposit based on budgetary proposal $5,121.00

Cost Information

Transmission Line

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmission Line	**$24,054.25**	**$38,596.25**		**$30,404.00**	
Rigid Transmission Line - copper, 3 1/8"	$19,240.00	$33,782.00	Adjusted 6/6/2018 by L. Messenie as a result of the Wireless Infrastructure Service Budgetary Proposal and Wireless Infrastructure Service Invoice 6124AS	$30,404.00	N/A
Dehydrator System	***$4,814.25***	$4,814.25	Required to keep moisture out of inside the new transmission line.	N/A	N/A
Sub-total	$24,054.25	$38,596.25	N/A	$30,404.00	N/A
Total for all systems	$1,699,136.28	$1,479,416.28	N/A	$582,540.63	N/A

Components

Actual Information Description	File Name

Rigid Transmission Line - copper, 3 1/8"	**Component Description:**	See WIS Invoice 6124BS Item 9 for backup, 40% Payment due prior to mid June 2018 shipping date.
	Amount:	$13,513.00
	Component Description:	See WIS Invoice 6124AS Item 11 for backup, 50% Deposit based on budgetary proposal
	Amount:	$16,891.00
Dehydrator System	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	**$441,000.00**	**$151,300.00**		**$73,150.00**	
Structural engineering tower load study for a documented tower with candelabra	$20,000.00	$19,000.00	N/A	$7,000.00	N/A
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	$421,000.00	$132,300.00	Adjusted 6/6/2018 by L. Messenie as a result of the Wireless Infrastructure Service Budgetary Proposal and Wireless Infrastructure Service Invoice 6124AS	$66,150.00	N/A
Sub-total	$441,000.00	$151,300.00	N/A	$73,150.00	N/A
Total for all systems	$1,699,136.28	$1,479,416.28	N/A	$582,540.63	N/A

Components

Actual Information Description	File Name

Structural engineering tower load study for a documented tower with candelabra	**Component Description:** **Amount:**	Line 2 Tower Mapping & Line 3 Structural Analysis $7,000.00
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	**Component Description:** **Amount:**	See WIS Invoice 6124AS Item 12 for backup, 50% Deposit based on budgetary proposal $66,150.00

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	**$445,675.00**	**$436,905.00**		**$15,625.63**	
Additional Legal Expenses	***$10,000.00***	$10,000.00	Legal cost for advice and consultation and assistance for University-owned public TV station at complex multi-tenant antenna farm site.	$7,042.20	N/A
RF Exposure Measurements	$21,050.00	$20,000.00	N/A	N/A	N/A
Comprehensive coverage verification via field study, if needed	$84,200.00	$80,000.00	N/A	N/A	N/A
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	$2,105.00	$2,000.00	N/A	N/A	N/A

Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	$2,365.00	$2,250.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	$5,260.00	$5,000.00	N/A	$1,082.52	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	$1,687.50	N/A
Perform engineering study for new channel assignment and antenna development	$7,360.00	$7,000.00	N/A	$787.50	N/A
Address transition timing and coordination issues w/ other stations and wireless	$2,630.00	$2,500.00	N/A	$43.65	N/A

Prepare and or review reimbursement form	$2,630.00	$2,500.00	N/A	$314.28	N/A
Project management of the transition	$41,080.00	$39,000.00	N/A	$4,150.00	N/A
Project Management Consulting	***$13,500.00***	$13,500.00	Project Management consulting services to interface between San Diego State University and the project General Contractor. Also looks out for SDSU interests during construction projects	N/A	N/A
Construction Project Management	***$236,255.00***	$236,255.00	This is for the General Contractor hired by the University for the Repack Project. General contractor	N/A	N/A

California Inspector	***$5,400.00***	$5,400.00	Required by the California State University system to ensure compliance with California Building codes	N/A	N/A
ASR modification (prepare FCC Form 854)	$2,105.00	$2,000.00	N/A	N/A	N/A
Quarterly Progress Reports	***$5,000.00***	$5,000.00	Prepare and file FCC-required progress reports for repacked station throughout transition.	$517.98	N/A
Sub-total	$445,675.00	$436,905.00	N/A	$15,625.63	N/A
Total for all systems	$1,699,136.28	$1,479,416.28	N/A	$582,540.63	N/A

Components

Actual Information Description	File Name	
Additional Legal Expenses	**Component Description:**	Line 1 & 3 - Telephone call with Leon Messenie re repack and Review FCC Public Notice on initial allocation of repack funds
	Amount:	$125.13

Component Description: Line 3,4,5,6,8,9,10,11,13,14 - See invoice for details
Amount: $1,131.99

Component Description: Line 1 - Prepare for Telephone call with KPBS team to discuss University procedures and amending the FCC Form 399
Amount: $392.85

Component Description: Legal services regarding reimbursement and amending the FCC 399 Form
Amount: $2,531.70

Component Description: Line 1,3,4,5 - See invoice for details
Amount: $331.74

Component Description: Line 1 & 2 Emails regarding Repack
Amount: $130.95

Component Description: Line 1 - Email regarding FCC Auction Close
Amount: $43.65

Component Description: Line 2 & 4 - Email regarding tower status and Work on Repack cost reimbursement filings
Amount: $439.41

	Component Description: **Amount:** **Component Description:** **Amount:**	Line 1 - Work on KPBS repack issues regarding University procurement processes. $87.30 Line 2,4,5,7,9,10,11 - See invoice for details $1,827.48
RF Exposure Measurements	Information not provided.	
Comprehensive coverage verification via field study, if needed	Information not provided.	
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	Information not provided.	
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.	

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	**Component Description:** **Amount:**	Line 1,3,6,12 - see invoice for details $439.41
	Component Description: **Amount:**	Line 1,2,7,12 - See invoice for details $453.96
	Component Description: **Amount:**	Line 1 - Prepare FCC Minor Change application $189.15
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:**	Line Item 2 - Develop ERP and parameters for initial CP application $1,687.50
Perform engineering study for new channel assignment and antenna development	**Component Description:** **Amount:**	Various discussions regarding implementation of repack to ch-19 $262.50
	Component Description: **Amount:**	Line Item 1 - Channel Assignment Review $525.00

Address transition timing and coordination issues w/ other stations and wireless	**Component Description:** **Amount:**	Line 2 - issues regarding timing of notifications to MVPD's $43.65
Prepare and or review reimbursement form	**Component Description:** **Amount:**	Line 8 - Review and correspondence re 1876 form $113.49
	Component Description: **Amount:**	Line 2 - Review 1876 form and channel assignment $87.30
	Component Description: **Amount:**	Line 3 - Telephone call re FCC Post auction Repack and 1876 Form $113.49
Project management of the transition	**Component Description:** **Amount:**	Line 1 Project Management & Engineering $4,150.00
Project Management Consulting	Information not provided.	
Construction Project Management	Information not provided.	
California Inspector	Information not provided.	
ASR modification (prepare FCC Form 854)	Information not provided.	

Quarterly Progress Reports	**Component Description:**	Line 1 - Email regarding 2017 Third Quarter Progress Report
	Amount:	$43.65
	Component Description:	Line 2 - Email Reminder of Quarterly Transition Progress Report due Jan 10, 2018
	Amount:	$43.65
	Component Description:	Line 2 - Analysis and review re repack transition quarterly progress report deadline and submission status for KPBS-TV
	Amount:	$37.83
	Component Description:	Line 2 - Work on Quarterly Progress Report for repack and review with Leon Messenie of KPBS
	Amount:	$392.85

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	**$170,144.78**	**$169,594.78**		**$0.00**	
California State University System Charge	***$79,033.00***	$79,033.00	California State University required fee for project fund financial administration	N/A	N/A
Shipping Freight	***$16,000.00***	$16,000.00	Estimate Freight cost from Dielectric to deliver antenna, mask filters, transmission line and support items to tower rigger storage yard.	N/A	N/A
California Sales Tax	***$33,016.78***	$33,016.78	N/A	N/A	N/A
MVPD Notification of Channel Change	***$1,000.00***	$1,000.00	N/A	N/A	N/A

Develop and air announcement of upcoming channel change	***$2,545.00***	$2,545.00	Please see attached KPBS Rate Card, KPBS Production Estimate, and Calculation Document	N/A	N/A
Equipment Storage	***$7,500.00***	$7,500.00	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	$11,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	***$12,000.00***	$12,000.00	N/A	N/A	N/A
Sub-total	$170,144.78	$169,594.78	N/A	$0.00	N/A
Total for all systems	$1,699,136.28	$1,479,416.28	N/A	$582,540.63	N/A

Components

Information not provided.

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	$1,699,136.28	$1,479,416.28	$582,540.63

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.	**Leon Messenie** *Director of Engineering, KPBS* 06/07/2018

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.	**Leon Messenie** *Director of Engineering, KPBS* 06/07/2018

Attachments