

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility 83180 Service: DTS Call KKAI Channel: 25 (UHF)

Sign:

0000028496

Number:

ID:

File

FRN: **0032881088** Date **11/07**

Submitted: /2017

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
KAILUA TELEVISION, LLC Doing Business As: KAILUA TELEVISION, LLC	CHRISTOPHER RACINE PO Box 8969 HONOLULU, HI 96810 United States	+1 (808) 593- 5524	MANAGER@KKAI. TV	Limited Liability Company

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email	
[Confidential]				

Preparer Contact Information

Preparer Contact Name and Information

Applicant	Address	Phone	Email
Harry Cole Communications Counsel Fletcher, Heald & Hildreth, LLC	Harry Cole Fletcher, Heald & Hildreth, LLC 1300 N. 17th Street - 11th Floor Arlington, VA 22209 United States	+1 (703) 812- 0483	cole@fhhlaw. com
	Office Otales		

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	KKAI installing new tower, transmitter, antenna, combiner at one DTS site, new transmitter, antenna, combiner at second DTS site. One site to be shared with at least one other station; second site to be shared with five-plus stations. See attached.

Transmitters

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

Auxiliary Transmitter

Add Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Backup transmitter for DTS transmitter
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter	Manufacturer	
Manufacturer and Type	Model	TXUP 2500 LD
	Year	2003
	Туре	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	1.2 kW

Auxiliary Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	SFT 102 U /XE
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	1.2 kW
	Justification for New Transmitter	Existing auxiliary transmitter is 14 years old and cannot be retuned to comply with current standards.

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?	Yes
	Туре	Cooling Only
	Size	5 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

Auxiliary

Transmitter Information not provided.

Other Transmitter Cost Not Listed

Auxiliary Transmitter

Add Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Backup transmitter for main transmitter
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter	Manufacturer	
Manufacturer and Type	Model	TXUP 2500 LD
	Year	2003
	Туре	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	1.2 kW

Auxiliary Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	SFT 102 U /XE
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	1.2 kW
	Justification for New Transmitter	Existing auxiliary transmitter is 14 years old and cannot be retuned to comply with current standards.

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?	Yes
	Туре	Cooling Only
	Size	5 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

Auxiliary

Transmitter Information not provided.

Other Transmitter Cost Not Listed

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	2
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	DUAL SCREEN SERVICE SCT 242 UB
	Year	2001
	Туре	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	2.5 kW

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	SFT 252 U /XE/A
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	2.5 kW
	Justification for New Transmitter	Current transmitter is 16 years old, was already converted from analog to digital, and cannot be retuned to new channel, according to manufacturer.

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	Yes

	Size	3 inches
	Length	120.0 feet
	Other Electrical Service	Yes
	Description	World War II-vintage building being repurposed for DTS transmitter building. It will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building).
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Cooling Only
	Size	5 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	Yes
	Size	620.0 square feet
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

Other Transmitter Cost Not Listed

Name	Description
Related electrical work	Electrical work and related materials (cables, outlets, etc.) to bring power to building and transmitters from meter
Logo inserter	To provide station identification
Transmitter building renovation	A World War II-vintage building will be repurposed for the transmitter building (to include equipment for up to five stations). Work will include repainting, reflooring, lighting, rewiring, refurbishing.
Electrical meter	New site requires new meter from electric company
Proof of performance	DTS transmitter proof of performance

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	1
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter	Manufacturer	
Manufacturer and Type	Model	DUAL SCREEN SERVICE SCT 242 UB
	Year	2001
	Туре	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	2.5 kW

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	SFT 252 U /XE/A
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	5 kW
	Justification for New Transmitter	Current transmitter is 16 years old, was already converted from analog to digital, and cannot be retuned to new channel, according to manufacturer.

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	Yes

	Size	3 inches
	Length	128.0 feet
	Other Electrical Service	Yes
	Description	A new transmitter building is being installed. It will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building).
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Cooling Only
	Size	5 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	Yes
	Size	640.0 square fee
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Other Transmitter Cost Not Listed

Name	Description
Related electrical work	Electrical work and related materials (cables, outlets, etc.) to bring power to building and transmitters from meter
Electrical meter	New site requires new meter from electric company
Proof of performance	Main transmitter proof of performance
Building installation	A new building will be obtained and installed, requiring concrete foundation, delivery and installation of building and related work
Logo inserter	To provide station identification

Antennas

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

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	1
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna	Class	Full Power
Manufacturer and Type	Mounting	Side Mount
	Antenna position in stack	Тор
	Polarization	Horizontal
	Туре	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)	15.0 kW

Manufacturer	
Model	AL-8
Year	1998

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?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna	Class	Full Power
Manufacturer and Types	Mounting	Side Mount
	Antenna position in stack	Тор
	Polarization	Horizontal
	Туре	Broadband Panel
	Number of Stations Supported	3
	Number of Panels/Bays	6
	Lower Limit	460.00 MHz
	Upper Limit	620.00 MHz
	Design power capacity in use	80.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	3.0 kW
	Manufacturer	

Model	JUHD 6/1(6) VERY NARROW CARDIOID PATTERN
Year	2017
Justification for New Antenna	Current antenna is nearly 20 years old, cannot accommodate new channel, and cannot be retuned. New antenna will be used by two-three Hawaii stations.

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Туре	New
	Number of channels supported	3
	Frequencies of channels supported	Upper and lower frequency
	Frequency	460.0 MHz - 620.0 MHz
	Do you need a combiner output splitter /switcher for dual feed lines?	No
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?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Other Antenna Cost Not Listed

Information not provided.

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	2
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna	Class	Full Power
Manufacturer and Type	Mounting	Side Mount
	Antenna position in stack	Тор
	Polarization	Horizontal
	Туре	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)	15.0 kW

Manufacturer	
Model	12-bay slot antenna
Year	1998

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?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna	Class	Full Power
Manufacturer and Types	Mounting	Side Mount
	Antenna position in stack	Тор
	Polarization	Horizontal
	Туре	Broadband Panel
	Number of Stations Supported	5
	Number of Panels/Bays	12
	Lower Limit	460.00 MHz
	Upper Limit	620.00 MHz
	Design power capacity in use	80.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	25.0 kW
	Manufacturer	

Model	JUHD 12/2 (24) NARROW CARDIOID PATTERN 20 Kw INPUT
Year	2017
Justification for New Antenna	Current antenna is nearly 20 years old, cannot accommodate new channel, and cannot be retuned. New antenna will be used by two-three Hawaii stations.

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Туре	New
	Number of channels supported	5
	Frequencies of channels supported	Upper and lower frequency
	Frequency	460.0 MHz - 620.0 MHz
	Do you need a combiner output splitter /switcher for dual feed lines?	No
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?	Yes
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?	No

Other Antenna Cost Not Listed

Information not provided.

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

Primary Transmission Line

Existing Transmission Line

on 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	1
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission	Manufacturer	
Line Manufacturer and Type	Туре	Flexible Air
	Diameter	1 5/8 inches
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	0
	Length	132 feet per run

New Transmission Line

Primary Transmission Line Section

New Transmission Line

Costs

	Question	Response
nsmission Line	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Туре	Flexible Air
	Diameter	3 inches
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	132 feet per run
	Justification for New Transmission Line	Existing line is 12-14 years old, deteriorated from exposure to harsh weather, and unable to be moved to new pole and re- bent to new positions. New line will be used to accommodate two-three Hawaii "re- pack" stations.

Other Transmission Line Expenses Not Listed

Primary
Transmission of provided.

Primary Transmission Se

Existing Transmission Line

on 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	2
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission	Manufacturer	
Line Manufacturer and Type	Туре	Flexible Air
	Diameter	1 5/8 inches
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	0
	Length	238 feet per run

New Transmission Line

Primary

Transmission Line
Section

New Transmission Line
Costs

Question	Response
Use	Primary (Main)
Description of Use	N/A
Change Type	Purchase New
Is this a request for upgraded equipment?	No
Туре	Flexible Air
Diameter	3 inches
Other Diameter	N/A
Segment Length	N/A
Other Segment Length	N/A
Number of parallel runs	1
Length	228 feet per run
Justification for New Transmission Line	Existing line is 12-14 years old, deteriorated from exposure to harsh weather, and unable to be moved to new pole and rebent to new positions. New line will be used to accommodate four-five Hawaii "repack" stations.

Other Transmission Line Expenses Not Listed

Primary
Transmission of 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?	No
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	No
	Is tower documented for structural analysis?	No
	Is tower compliant with Rev G?	Unknown
Existing Tower Structure	Do you have a tower registration number?	Yes
Registration	ASR Number	1246610
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	21° 25' 19.6" N-
	Longitude (NAD83)	157° 45' 27.1" W-
	Overall Structure Height	116.14 fee
	Support Structure Height	116.14 fee
	Ground Elevation Above Mean Sea Level (AMSL)	464.89 fee

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	General Telcourier, Inc.
Date Constructed	01/01/1990

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
89714	KUPU	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:	Minor Reinforcements needed

Primary Tower

Tower Rigging Costs

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

Primary Tower Other Tower Expenses Not Listed

Information not provided.

Primary Tower

Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Construct New
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	No
	Is tower documented for structural analysis?	No
	Is tower compliant with Rev G?	Unknown
Existing Tower Structure	Do you have a tower registration number?	No
Registration	ASR Number	
Coordinates (NAD83 (North American Datum of	Latitude (NAD83)	21° 24' 10.1" N-
1983))	Longitude (NAD83)	158° 05' 52.2" W-
	Overall Structure Height	100.00 feet
	Support Structure Height	100.00 feet
	Ground Elevation Above Mean Sea Level (AMSL)	2765.00 feet
	Structure Type	POLE - Any type of Pole
	Tower Owner	Palehua Ranch, LLC
	Date Constructed	07/09/2017

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
89714	KUPU	DTV

Primary Tower

Tower Construction Costs

Section	Question	Response
Construct New Tower	Use	Primary (Main)
	Description of Use	N/A
	Is this a request for upgraded equipment?	No
	Height	100.00 feet
	Justification for New Tower	Existing pole is termite- ridden and unable to support new mounts and hanging of new transmission line. Other factors support replacement of existing pole with a new pole. See attachment.

Primary Tower

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	N/A
Helicopter Services Required	Are helicopter services required?	Yes

Primary Tower

Other Tower Expenses Not Listed

Name	Description
114	2000p

Tower installation expenses	Site preparation (clearing, concrete, hole
	drilling), rigging and related items

Outside Professional

Section	Question	Response
Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	280
	Explanation	Proposal involves construction, remodeling, installation at two sites, requiring management of multiple subcontractors. The work is beyond the scope of licensee's existing personnel.
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?	No
	Critical Facility	N/A

	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting	Prepare and file Form FCC Construction Permit Application	Yes
Services	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	No
	Quantity	N/A
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	No
	FAA Consultation (including preparation of FAA Form 7460)	No
	Negotiation of Lease and other Matter for Shared Locations	Yes
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	No
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

Other Professional Services Expenses Not Listed

Services Costs	Description
Other legal work - local	Local counsel to assist with leases, utility companies, cable companies, other stations
Other engineering work - local	Local engineering to assist with design and preparation of two separate sites and installation of equipment at both sites.

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	No
	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	Yes
	FCC License to Cover Application	Yes
	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
Fiber Optic drop	Deliver all repack stations to cable operator (Hawaiian Telcom) by fiber

Transmitters

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter SFT 252 U /XE/A	\$194,840.00	\$151,329.00		\$54,344.30	
Proof of performance	\$2,800.00	\$2,800.00	N/A	N/A	N/A
Electrical meter	\$4,550.00	\$4,550.00	N/A	N/A	N/A
Transmitter building renovation	\$16,800.00	\$16,800.00	N/A	N/A	N/A
Logo inserter	\$0.00	\$0.00	N/A	N/A	N/A
Related electrical work	\$9,100.00	\$9,100.00	N/A	\$9,100.00	N/A
Other Building Addition Size: 620.0	\$0.00	\$0.00	N/A	N/A	N/A
5 Ton system	\$20,250.00	\$4,200.00	N/A	N/A	N/A

Other Electrical Service: World War II-vintage building being repurposed for DTS transmitter building. It will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building).	\$9,100.00	\$9,100.00	N/A	\$43,444.30	See attached invoice. Work includes preparation of site for use by four additional broadcaster involved in channel repack.
3" Rigid Conduit and Wiring (Cost per foot)	\$6,240.00	\$1,800.00	N/A	\$1,800.00	N/A
UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	\$126,000.00	\$102,979.00	N/A	N/A	N/A
Primary Transmitter SFT 252 U /XE/A	\$286,081.00	\$133,254.00		\$0.00	
Logo inserter	\$0.00	\$0.00	N/A	N/A	N/A
Building installation	\$2,025.00	\$2,025.00	N/A	N/A	N/A
Proof of	\$2,800.00	\$2,800.00	N/A	N/A	N/A

Electrical meter	\$4,550.00	\$4,550.00	N/A	N/A	N/A
Related electrical work	\$0.00	\$0.00	N/A	N/A	N/A
Other Building Addition Size: 640.0	\$4,200.00	\$4,200.00	N/A	N/A	N/A
5 Ton system	\$20,250.00	\$4,200.00	N/A	N/A	N/A
Other Electrical Service: A new transmitter building is being installed. It will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building).	\$9,100.00	\$9,100.00	N/A	N/A	N/A
3" Rigid Conduit and Wiring (Cost per foot)	\$6,656.00	\$3,400.00	N/A	N/A	N/A
UHF - Air Cooled Solid State Transmitter 4 - 6 kW	\$236,500.00	\$102,979.00	N/A	N/A	N/A

Auxiliary Transmitter SFT 102 U /XE	\$146,250.00	\$120,000.00		\$0.00	
5 Ton system	\$20,250.00	\$0.00	N/A	N/A	N/A
UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	\$126,000.00	\$120,000.00	N/A	N/A	N/A
Auxiliary Transmitter SFT 102 U /XE	\$146,250.00	\$120,000.00		\$0.00	
5 Ton system	\$20,250.00	\$0.00	N/A	N/A	N/A
UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	\$126,000.00	\$120,000.00	N/A	N/A	N/A
Sub-total	\$773,421.00	\$524,583.00	N/A	\$54,344.30	N/A
Total for all systems	\$2,123,149.03	\$1,668,666.03	N/A	\$128,293.55	N/A

Actual Information Description	File Name
Proof of performance	Information not provided.
Electrical meter	Information not provided.
Transmitter building renovation	Information not provided.
Logo inserter	Information not provided.

Related electrical work		
	Component Description:	The total invoice covers electrical work under three separate categories, including \$9,100 for "related electrical work"
	Amount:	\$9,100.00
Other Building Addition Size: 620.0	Information not provided.	
5 Ton system	Information not provided.	
Other Electrical Service: World War II-vintage building being repurposed for DTS transmitter building. It will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building).	Component Description: Amount:	The total invoice covers electrical work under three separate categories, including \$43,444.30 for "other electrical service" relating to preparation of the Mauna Kapu transmitter site. \$43,444.30
3" Rigid Conduit and Wiring (Cost per foot)	Component Description: Amount:	The total invoice covers electrical work under three separate categories, including \$1,800 for 3" rigid conduit and wiring at the Mauna Kapu transmitter site \$1,800.00
UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	Information not provided.	

Logo inserter	Information not provided.
Building installation	Information not provided.
Proof of performance	Information not provided.
Electrical meter	Information not provided.
Related electrical work	Information not provided.
Other Building Addition Size: 640.0	Information not provided.
5 Ton system	Information not provided.
Other Electrical Service: A new transmitter building is being installed. It will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building).	Information not provided.
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.
UHF - Air Cooled Solid State Transmitter 4 - 6 kW	Information not provided.
5 Ton system	Information not provided.
UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	Information not provided.
5 Ton system	Information not provided.
UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	Information not provided.

Antennas

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Antenna JUHD 6/1 (6) VERY NARROW CARDIOID PATTERN	\$167,540.00	\$114,000.00		\$0.00	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$0.00	N/A	N/A	N/A
New combiner, cost per channel (without antenna)	\$84,200.00	\$54,400.00	N/A	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A

UHF - High Power, Side Mount, broadband panel, 6 bay,, 3 kW input, horizontally polarized	\$48,200.00	\$48,200.00	See attachment.	N/A	N/A
Primary Antenna JUHD 12/2 (24) NARROW CARDIOID PATTERN 20 Kw INPUT	\$155,550.00	\$160,575.00		\$0.00	
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$0.00	N/A	N/A	N/A
New combiner, cost per channel (without antenna)	\$84,200.00	\$112,375.00	Combiner is designed for use by up to five stations in the Hawaii repack. KKAI licensee is acquiring the combiner itself for joint use by participating stations.	N/A	N/A

UHF - High	\$48,200.00	\$48,200.00	N/A	N/A	N/A
Power,					
Side					
Mount,					
broadband					
panel, 12					
bay,, 25					
kW input,					
horizontally					
polarized					
Sub-total	\$323,090.00	\$274,575.00	N/A	\$0.00	N/A
Total for	\$2,123,149.03	\$1,668,666.03	N/A	\$128,293.55	N/A
all systems					

Information not provided.

Transmission Line

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cos Justification
Primary Transmission Line	\$7,788.00	\$12,280.00		\$0.00	
Flexible Air Transmission Line - dielectric, 3"	\$7,788.00	\$12,280.00	Two separate lengths of transmission line is required: a length of 3" line from the transmitter to the combiner, and another length of 4" line from the combiner to the antenna.	N/A	N/A
Primary Transmission Line	\$13,452.00	\$25,080.00		\$0.00	
Flexible Air Transmission Line - dielectric, 3"	\$13,452.00	\$25,080.00	Two separate lengths of transmission line is required: a length of 3" line from the transmitter to the combiner, and another length of 4" line from the combiner to the antenna.	N/A	N/A

Sub-total	\$21,240.00	\$37,360.00	N/A	\$0.00	N/A
Total for all systems	\$2,123,149.03	\$1,668,666.03	N/A	\$128,293.55	N/A

Information not provided.

Tower Equipment and Rigging Costs

Description	Predetermined Cost Estimate	Estimated Cost	Cost Justification	Actual Cost	Actual Cos Justification
Primary Tower POLE	\$0.00	\$0.00		\$0.00	
Primary Tower TOWER	\$268,500.00	\$55,800.00		\$0.00	
Short Tower (less than 500')	\$84,200.00	\$0.00	N/A	N/A	N/A
Minor tower reinforcement /modifications	\$158,000.00	\$30,800.00	See attachment	N/A	N/A
Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study	\$26,300.00	\$25,000.00	N/A	N/A	N/A
Primary Tower	\$257,450.00	\$173,250.00		\$29,539.50	
Tower Helicopter Lift	\$21,000.00	\$21,000.00	Helicopter necessary to deliver new pole to site. Estimated three-hour project at \$7,000 /hour.	N/A	N/A
Short Tower (less than 500')	\$84,200.00	\$0.00	N/A	N/A	N/A

New tower	\$93,500.00	\$93,500.00	See attachment	N/A	N/A
Tower installation expenses	\$58,750.00	\$58,750.00	See attachment.	\$29,539.50	N/A
Sub-total	\$525,950.00	\$229,050.00	N/A	\$29,539.50	N/A
Total for all systems	\$2,123,149.03	\$1,668,666.03	N/A	\$128,293.55	N/A

Actual Information Description	File Name	
Short Tower (less than 500')	Information not provided.	
Minor tower reinforcement /modifications	Information not provided.	
Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	Information not provided.	
Tower Helicopter Lift	Information not provided.	
Short Tower (less than 500')	Information not provided.	
New tower	Information not provided.	
Tower installation expenses	Component Description:	Preparatory work re tower installation at Mauna Kapu site
	Amount:	\$29,539.50

Outside Professional Services

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost
Outside Professional Services	\$269,950.00	\$403,000.00		\$39,624.75	
Other engineering work - local	\$68,900.00	\$68,900.00	N/A	\$0.00	N/A
Other legal work - local	\$25,000.00	\$25,000.00	N/A	N/A	N/A
RF Exposure Measurements	\$21,050.00	\$20,000.00	Station is a DTS facility, which entails two separate transmission systems.	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	N/A	N/A

Attorney Fees - Negotiation of lease and other matters for shared locations	\$4,210.00	\$42,000.00	Two separate transmission systems are planned to be shared at two different sites with five other repack stations, entailing negotiations /drafting with five other parties. Also, major channel change proposal will be submitted for KKAI. See attachment.	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$4,500.00	Station is a DTS facility, which entails two separate transmission systems.	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$10,000.00	Station is a DTS facility, which entails two separate transmission systems.	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$3,000.00	Station is a DTS facility, which entails two separate transmission systems.	N/A	N/A

Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$14,000.00	Station is a DTS facility, which entails two separate transmission systems.	\$6,900.00	N/A
Prepare and or review reimbursement form	\$2,630.00	\$7,500.00	Station is a DTS facility, which entails two separate transmission systems.	N/A	N/A
Project management of the transition	\$44,240.00	\$122,100.00	Project includes two separate transmitter sites (main and DTS), with installation of new tower /pole at one site, new building at the other, and substantial refurbishment of existing building for transmitter housing. See attachment.	\$32,724.75	See attached invoice. Total for work was under estimated cost, but tax charges resulted ir \$724.25 overage.
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$6,000.00	Station is a DTS facility, which entails two separate transmission systems.	N/A	N/A
Sub-total	\$269,950.00	\$403,000.00	N/A	\$39,624.75	N/A
Total for all	\$2,123,149.03	\$1,668,666.03	N/A	\$128,293.55	N/A

Actual Information Description	File Name	
Other engineering work - local	Component Description: Amount:	Local engineering work - install diesel generator for transmitter \$54,971.34
Other legal work - local	Information not provided.	
RF Exposure Measurements	Information not provided.	
Comprehensive coverage verification via field study, if needed	Information not provided.	
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	Information not provided.	
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	

Component Description:	Consulting
	engineering
	services
	concerning
	preparation of
	spectrum repack
	engineering
Amount:	\$6,250.00
Component Description:	Consulting
	engineering
	services relative to
	maximization of
	KKAI facilities
Amount:	\$3,500.00
Component Description:	Consulting
	services
	concerning
	interference
	analysis
Amount:	\$650.00
Information not provided.	
Component Description:	Project
	management re
	preparation of
	Mauna Kapu
	transmitter site
Amount:	\$32,724.75
Information not provided.	
	Amount: Component Description: Amount: Information not provided. Component Description:

Other Expenses

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$209,498.03	\$200,098.03		\$4,785.00	
Fiber Optic drop	\$177,603.03	\$177,603.03	See attachment.	N/A	N/A
Equipment Delivery and Handling Charges	\$11,000.00	\$11,000.00	Estimated cost of delivery of transmitters, antennas to Hawaii	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$1,400.00	\$1,400.00	Old transmitters, antennas cannot be used, must be scrapped.	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A

	<u> </u>	<u>.</u> .		<u>.</u> .	
FCC Filing Fees - Form 2100 minor change CP application	\$1,110.00	\$1,070.00	N/A	\$4,785.00	As explained in the attachment because of anticipated interference problems, Kailua Television LLC was required to propose a channel (channel 29) other than the channel (25) initially identified by the FCC for KKAI.
DTV Medical Facility Notification	\$11,550.00	\$2,200.00	N/A	N/A	N/A
Equipment Storage	\$2,500.00	\$2,500.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	\$2,000.00	\$2,000.00	Estimated cost of production /broadcast of channel change announcements	N/A	N/A
MVPD Notification of Channel Change	\$2,000.00	\$2,000.00	N/A	N/A	N/A
Sub-total	\$209,498.03	\$200,098.03	N/A	\$4,785.00	N/A
Total for all systems	\$2,123,149.03	\$1,668,666.03	N/A	\$128,293.55	N/A

Actual Information Description	File Name	
Fiber Optic drop	Information not provided.	
Equipment Delivery and Handling Charges	Information not provided.	
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.	
FCC Filing Fees - Form 2100 license to cover application	Information not provided.	
FCC Filing Fees - Form 2100 minor change CP application	Component Description: Amount:	Application fee for major change application. See attachment. \$4,785.00
DTV Medical Facility Notification	Information not provided.	
Equipment Storage	Information not provided.	
Develop and air announcement of upcoming channel change	Information not provided.	
MVPD Notification of Channel Change	Information not provided.	

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$2,123,149.03	\$1,668,666.03	\$128,293.55

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

Section Question Response

Submission of Estimated Expenses Statements

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.

- 1. The Authorized
 Person signing
 below certifies that he
 /she is authorized to
 submit this TV
 Broadcaster
 Relocation Fund
 Reimbursement
 Form on behalf of
 the above-named
 entity.
- 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.
- 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.

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

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

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Christopher Racine President

11/07/2017

Attachments