

Federal Communications Commission

#### (REFERENCE COPY - Not for submission)

### FCC Form 399: Reimbursement Request

Facility ID:	83180	Service: DTS	Call Sign:	KKAI	Channel: 25 (UHF)
File	000002	8496	Oigh.		
Number:					
FRN: 003	2881088	Date	04/08		
		Submitted:	/2019		

#### Applicant Name, Type, and Contact Information

#### Applicant Information

Applicant	Address	Phone	Email	Applicant Type
KAILUA TELEVISION, LLC Doing Business As: KAILUA	CHRISTOPHER RACINE	+1 (808) 591-1683	chris@tonga. com	Limited Liability
TELEVISION, LLC	PO Box 8969 HONOLULU, HI 96810			Company
	United States			

#### Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer	Preparer Contact Name and Information				
Contact Information	Applicant	Address	Phone	Email	
	<b>Christopher Racine</b> President Kailua Television, LLC	Christopher Racine PO Box 8969 Honolulu, HI 96830 United States	+1 (808) 591-1683	chris@tonga.com	

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	KKAI installing new tower, transmitter, antenna, combiner at one DTS site, new transmitter, antenna, combiner at second DTS site. Both sites to be shared with at least one other station. A Memo of Understanding between the licensees is under preparation.

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

Auxiliary	Add Transmitter Information					
Transmitter	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	New Transmitter Costs					
Transmitter	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 Other Transmitter Costs

Transmitter	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	Yes
	Description	UPDATE - 1 /8/18: See Attachment re emergency generator
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 Other Transmitter Cost Not Listed

Transmitter Information not provided.

Auxiliary	Add Transmitter Information					
Transmitter	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	New Transmitter Costs					
Transmitter	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 Other Transmitter Costs

Transmitter	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	Yes
	Description	UPDATE - 1 /8/18: See Attachment re emergency generator
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 Other Transmitter Cost Not Listed

Transmitter Information not provided.

Primary	Existing Transmitter Information			
Transmitter	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		
	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	

### **Existing Transmitter Information**

Primary Transmitter	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	Other Transmitter Costs		
Transmitter	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	WW2-era building being repurposed for transmitter. It will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building). UPDATE: Attachments re generators
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
Number of Days	N/A

#### Primary Transmitter

#### Other Transmitter Cost Not Listed

Name	Description
Electrical meter	New site requires new meter from electric company
Proof of performance	DTS transmitter proof of performance
Emergency Generator	Emergency generator for the site since existing standby generator cannot be taken to the new site.
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.

Primary	Existing Transmitter Information			
Transmitter	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	

### **Existing Transmitter Information**

Primary	New Transmitter Costs			
Transmitter	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	Other Transmitter Costs		
Transmitter	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	New transmitter building will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building). UPDATES - 1/8/18, 2/5 /18: See Attachments re generators
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 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

Primary Transmitter	Other Transmitter Cost Not Listed			
	Name	Description		
	Logo inserter	To provide station identification		
	Electrical meter	New site requires new meter from electric company		
	Related electrical work	Electrical work and related materials (cables, outlets, etc.) to bring power to building and transmitters from meter		
	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		

#### **Other Transmitter Cost Not Listed**

Interim	New Transmitter Costs			
Transmitter	Section	Question	Response	
	New Transmitter	Use	Interim	
		Description of Use	N/A	
		Change Type	Purchase	
		Manufacturer		
		Model	SFT251 U /XE	
		Transmitter Type	Solid State	
		Solid State Cooling	Air Cooled	
		Solid State Power capacity	0.3 kW	
		Justification for New Transmitter	Interim transmitter system required while construction and preparation is completed on permanent transmission locations.	

#### Other Transmitter Costs

Interim

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

### Interim Other Transmitter Cost Not Listed

Transmitter Information not provided.

## Interim New Transmitter Costs

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Transmitter	Section	Question	Response
	New Transmitter	Use	Interim
		Description of Use	N/A
		Change Type	Purchase
		Manufacturer	
		Model	SFT501 U /XE

Transmitter Type	Solid State
Solid State Cooling	Air Cooled
Solid State Power capacity	0.5 kW
Justification for New Transmitter	Interim transmitter system required while construction and preparation is completed on permanent transmission locations.

Interim	Other Transmitter Costs			
Transmitter	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	
		Туре	N/A	
		Size	N/A	
		Other Size	N/A	

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

## Other Transmitter Cost Not Listed

**Transmitter** Information not provided.

Antennas Section		Question	Response
Antenna Rela	ated Expenses	Do you have antenna related expenses?	Yes

Primary	Existing Antenna Information				
Antenna	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

Antenna	Section	Question	Response
	New Antenna	Use	Primary (Main)
	Description	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 Manufacturer and Types	Class	Full Power
		ypes 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
Year
Justification for New Antenna

### Primary Other Antenna Costs

Antenna	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

Primary Antenna Information not provided.

Primary	Existing Antenna Information				
Antenna	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)	3.0 kW		

Manufacturer	
Model	10 b
Year	1998

Antenna	Section	Question	Response
	New Antenna	Use	Primary (Main)
	Description	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 T	ypes 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** Primary

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A	r	nte	en	na	

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 MH
	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

# Primary Other Antenna Cost Not Listed

Antenna Information not provided.

Transmissior	n Seffien	Question	Response
	Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

ransmissio	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

# Primary Existing Transmission Line

Primary	New Transmission Line			
Transmissio	n Line Section	Question	Response	
	New Transmission Line Costs	Use	Primary (Main)	
		Description of Use	N/A	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	No	
		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.	

Primary Other Transmission Line Expenses Not Listed

Primary Other Transmission Transmission

Primary	Existing Transmission Line			
Transmissio	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 Line Manufacturer and Type	Manufacturer		
		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	

**Existing Transmission Line** 

Primary	New Transmission Line			
Transmissio	n Line Section	Question	Response	
	New Transmission Line	Use	Primary (Main)	
	Costs	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 re- bent to new positions. New line will be used to accommodate four-five Hawaii "re- pack" stations.	

Primary Other Transmission Line Expenses Not Listed

Primary Other Transmission Transmission

Tower	Section	Question	Response
Equipment And Rigging Costs	Tower Equipment or Rigging Costs Changes	Do you have tower equipment or rigging costs changes?	Yes

Primary	Existing Tower

Primary 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 Registration	Do you have a tower registration number?	Yes
I		ASR Number	1246610
	Coordinates (NAD83 ( North American Datum of	Latitude (NAD83)	21° 25' 19.6" N-
	1983))	Longitude (NAD83)	157° 45' 27.1" W-
		Overall Structure Height	116.14 feet
		Support Structure Height	116.14 feet
		Ground Elevation Above Mean Sea Level (AMSL)	464.89 feet

	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 Modification Costs

Tower

Tower

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

# Primary Tower Rigging Costs

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

Primary<br/>TowerOther Tower Expenses Not ListedInformation not provided.

Primary	Existing Tower			
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 Registration	Do you have a tower registration number?	No	
		ASR Number		
	Coordinates ( <u>NAD83</u> ( North American Datum of 1983))	Latitude (NAD83)	21° 24' 10.1" N-	
		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 Construction Costs		
Tower	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 Rigging Costs

Tower

# SectionQuestionResponseTower Rigging CostsComplex TowerN/AHelicopter Services<br/>RequiredAre helicopter services required?Yes

Primary	Other Tower Expenses Not Listed		
Tower	Name	Description	

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

Management Services       services?         Number of Hours       4         Explanation       F         irr       rr         irr       irr         irr       irr	Yes 400 Proposal involves construction, remodeling, installation at two sites, requiring
Explanation F ir c r ir t	Proposal involves construction, remodeling, installation at two sites,
ir c ru ir t	nvolves construction, remodeling, installation at two sites,
n o s T b s l i i e	management of multiple subcontractors. The work is beyond the scope of licensee's existing personnel.
Outside RF consulting Engineering ServicesPerform engineering study for new channel assignment and antenna developmentYe	Yes
Prepare engineering section of Form FCC Y Construction Permit Application	Yes
For Auxiliary Facility	Yes
For Main Facility	Yes
Prepare engineering section of Form FCC Y License to Cover Application	Yes
For Auxiliary Facility	No
For Main Facility Y	Yes
Prepare request for Special Temporary Y Authority	Yes
Quantity 2	2
Do you have Distributed Transmission N System engineering services?	No
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	1
	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

# Other Professional Services Expenses Not Listed

Outside	Other Professional Services Expenses Not Listed					
Professional	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	Section	Question	Response
Expenses	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	Yes
		Non-zoning permits	Yes
		BLM or NFS Coordination	No
		FCC Construction Permit Minor Change	Yes
		FCC License to Cover Application	Yes
		FCC Special Temporary Authority Application	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 Not Listed

Other	ither Expenses Not Listed				
Expenses	Name	Description			
	Fiber Optic drop	Deliver all repack stations to cable operator (Hawaiian Telcom) by fiber			

## Transmitters

#### Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Transmitter SFT251 U/XE	\$37,530.00	\$37,530.00		\$0.00	
UHF - Air Cooled Solid State Transmitter 0.3 kW	\$37,530.00	\$37,530.00	Please see Bri-Comm Quote 1903- 028	N/A	N/A
Interim Transmitter SFT501 U/XE	\$52,338.00	\$52,338.00		\$0.00	
UHF - Air Cooled Solid State Transmitter 0.5 kW	\$52,338.00	\$52,338.00	N/A	\$0.00	N/A
Primary Transmitter SFT 252 U /XE/A	\$284,155.64	\$240,644.64		\$217,147.01	
Electrical meter	\$4,550.00	\$4,550.00	N/A	\$0.00	N/A
Transmitter building renovation	\$16,800.00	\$16,800.00	N/A	\$0.00	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

Cooled in the Solid State attached Transmitter explanation 1 - 2.5 kW in its initial estimate the licensee inadverter failed to include the cost of the tax associate the solution of the solu						
Conduit and         Wiring (Cost per foot)         Other       \$0.00       \$0.00       N/A       N/A       N/A         Electrical       Service:       WW2-era       Heradow and the service of the serv	Cooled Solid State Transmitter	\$126,000.00	\$102,979.00	N/A	\$107,831.37	attached explanation in its initia estimate th licensee inadvertent failed to include the cost of the
ElectricalImage: state	Conduit and Wiring (Cost	\$6,240.00	\$1,800.00	N/A	\$1,800.00	N/A
	Electrical Service: WW2-era building being repurposed for transmitter. It will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building). UPDATE: Attachments re	\$0.00	\$0.00	N/A	N/A	N/A

Other Building Addition Size: 620.0	\$0.00	\$0.00	N/A	N/A	N/A
Proof of performance	\$2,800.00	\$2,800.00	N/A	N/A	N/A
Emergency Generator	\$54,971.34	\$54,971.34	Station currently has access to a standby generator at the primary site. The station cannot take the standby generator to the new site.	\$54,971.34	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).	\$43,444.30	\$43,444.30	***System Notice: Estimate adjusted and locked because line has been superseded. ***	\$43,444.30	See attached invoice. Work includes preparation of site for use by four additional broadcasters involved in channel repack.
Primary Transmitter SFT 252 U /XE/A	\$277,461.79	\$124,634.79		\$5,030.79	

Building installation	\$2,025.00	\$2,025.00	N/A	N/A	N/A
Proof of performance	\$2,800.00	\$2,800.00	N/A	N/A	N/A
Related electrical work	\$0.00	\$0.00	N/A	N/A	N/A
Electrical meter	\$5,030.79	\$5,030.79	Per invoices received	\$5,030.79	N/A
Logo inserter	\$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
UHF - Air Cooled Solid State Transmitter 4 - 6 kW	\$236,500.00	\$102,979.00	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

Other	\$0.00	\$0.00	N/A	N/A	N/A
Electrical					
Service:					
New					
transmitter					
building will					
require					
installation					
of a new					
electrical					
meter and					
related					
costs					
(including					
running line					
from the					
meter to the					
transmitter					
building).					
UPDATES -					
1/8/18, 2/5					
/18: See					
Attachments					
re					
generators					
5 Ton	\$20,250.00	\$4,200.00	N/A	N/A	N/A
system					
Auxiliary Transmitter	\$201,221.34	\$201,201.70		\$54,971.34	
SFT 102 U /XE					
/XE	\$20,250,00	\$26,220,26	Diago coo	NI/A	NI/A
<b>/XE</b> 5 Ton	\$20,250.00	\$26,230.36	Please see	N/A	N/A
/XE	\$20,250.00	\$26,230.36	the attached	N/A	N/A
<b>/XE</b> 5 Ton	\$20,250.00	\$26,230.36	the attached invoice from	N/A	N/A
<b>/XE</b> 5 Ton	\$20,250.00	\$26,230.36	the attached invoice from 808 Air	N/A	N/A
<b>/XE</b> 5 Ton	\$20,250.00	\$26,230.36	the attached invoice from 808 Air Conditioning,	N/A	N/A
<b>/XE</b> 5 Ton	\$20,250.00	\$26,230.36	the attached invoice from 808 Air Conditioning, LLC #	N/A	N/A
<b>/XE</b> 5 Ton	\$20,250.00	\$26,230.36	the attached invoice from 808 Air Conditioning,	N/A	N/A
<b>/XE</b> 5 Ton	\$20,250.00 \$54,971.34	\$26,230.36 \$54,971.34	the attached invoice from 808 Air Conditioning, LLC #	N/A \$54,971.34	N/A N/A
<b>/XE</b> 5 Ton system			the attached invoice from 808 Air Conditioning, LLC # 20181004		
/XE 5 Ton system Other			the attached invoice from 808 Air Conditioning, LLC # 20181004 Emergency		
/XE 5 Ton system Other Electrical			the attached invoice from 808 Air Conditioning, LLC # 20181004 Emergency Generator		
/XE 5 Ton system Other Electrical Service:			the attached invoice from 808 Air Conditioning, LLC # 20181004 Emergency Generator Set for		
/XE 5 Ton system Other Electrical Service: UPDATE - 1			the attached invoice from 808 Air Conditioning, LLC # 20181004 Emergency Generator Set for transmitter		
/XE 5 Ton system Other Electrical Service: UPDATE - 1 /8/18: See			the attached invoice from 808 Air Conditioning, LLC # 20181004 Emergency Generator Set for transmitter site. See		
/XE 5 Ton system Other Electrical Service: UPDATE - 1 /8/18: See Attachment re			the attached invoice from 808 Air Conditioning, LLC # 20181004 Emergency Generator Set for transmitter site. See Justification		
/XE 5 Ton system Other Electrical Service: UPDATE - 1 /8/18: See Attachment			the attached invoice from 808 Air Conditioning, LLC # 20181004 Emergency Generator Set for transmitter site. See Justification		

Transmitter SFT 102 U						
Space         Space <th< td=""><td>Cooled Solid State Transmitter</td><td>\$126,000.00</td><td>\$120,000.00</td><td>N/A</td><td>N/A</td><td>N/A</td></th<>	Cooled Solid State Transmitter	\$126,000.00	\$120,000.00	N/A	N/A	N/A
system       UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW       \$126,000.00       \$120,000.00       N/A       \$107,831.37       N/A         Other Electrical Service: UPDATE - 1 /8/18: See Attachment 	Transmitter SFT 102 U	\$146,250.00	\$120,000.00		\$107,831.37	
Cooled Solid State Transmitter 1 - 2.5 kW\$0.00N/A\$0.00N/AOther 		\$20,250.00	\$0.00	N/A	N/A	N/A
Electrical Service: UPDATE - 1 /8/18: See Attachment re emergency generatorImage: See See See See See See See See See S	Cooled Solid State Transmitter	\$126,000.00	\$120,000.00	N/A	\$107,831.37	N/A
Total for all \$2,478,133.35 \$2,177,958.66 N/A \$836,711.51 N/A	Electrical Service: UPDATE - 1 /8/18: See Attachment re emergency	\$0.00	\$0.00	N/A	\$0.00	N/A
	Sub-total	\$998,956.77	\$776,349.13	N/A	\$384,980.51	N/A
		\$2,478,133.35	\$2,177,958.66	N/A	\$836,711.51	N/A

Actual Information Description	File Name
UHF - Air Cooled Solid State Transmitter 0.3 kW	Information not provided.
UHF - Air Cooled Solid State Transmitter 0.5 kW	Information not provided.
Electrical meter	Information not provided.

Transmitter building		
renovation	Component Description:	Building permit fees
	Amount:	\$723.40
	Component Description:	Building Permit & Plan Review fee from Hawaiian Electric Co.
	Amount:	\$854.40
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" \$9,100.00
UHF - Air Cooled Solid State Transmitter 1 - 2.5 kW	Component Description:	This reflectst the cost of the main transmitter to be installed at KKAI's principal site (Pu'u Papa'a). \$107,831.37

(Cost per foot)	Component Description:	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
Other Electrical Service: WW2-era building being repurposed for transmitter. It will require installation of a new electrical meter and related costs (including running line from the meter to the transmitter building). UPDATE: Attachments re generators	Information not provided.	
5 Ton system	Information not provided.	
Other Building Addition Size: 620.0	Information not provided.	
Proof of performance	Information not provided.	
Emergency Generator		
	Component Description: Amount:	Emergency standby generator system for new primary transmitter site. \$54,971.34

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:	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
Building installation	Information not provided.	
Proof of performance	Information not provided.	
Related electrical work	Information not provided.	
Electrical meter	Component Description: Amount:	Professional services \$5,030.79
Logo inserter	Information not provided.	
Other Building Addition Size: 640.0	Information not provided.	
	1	
UHF - Air Cooled Solid State Transmitter 4 - 6 kW	Information not provided.	
	Information not provided.	
Transmitter 4 - 6 kW 3" Rigid Conduit and Wiring		

Other Electrical Service:		
UPDATE - 1/8/18: See Attachment re emergency generator	Component Description: Amount:	30 kw Diesel Generator Set for Mauna Kapu Site \$54,971.34
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	Component Description: Amount:	This reflects the cost of the auxiliary transmitter to be used at KKAI's principal site (Pu'u Papa'). \$107,831.37
Other Electrical Service: UPDATE - 1/8/18: See Attachment re emergency generator	Component Description: Amount:	generator moved to main transmitter per Cindy Cavell. N/A

#### Antennas

#### Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Antenna JUHD 12/2 (24) NARROW CARDIOID PATTERN 20 Kw INPUT	\$178,913.55	\$183,938.55		\$0.00	
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
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

UHF - High Power, Side Mount, broadband panel, 12 bay,, 25 kW input, horizontally polarized	\$71,563.55	\$71,563.55	Chaison Technologies Invoice N0812213	\$0.00	N/A
Primary Antenna JUHD 6/1 (6) VERY NARROW CARDIOID PATTERN	\$119,340.00	\$83,581.45		\$64,549.41	
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	\$17,781.45	N/A	\$0.00	N/A

New	\$84,200.00	\$54,400.00	N/A	\$64,549.41	The
combiner,	+ - ·, <b></b> •••••	÷= ·, · · · · · · · ·		+, <b>-</b>	difference
cost per					between
channel					the actual
(without					cost and
antenna)					the
					estimated
					cost is
					attributable
					to the
					licensee's
					inadvertent
					failure to
					include in
					its original
					estimate
					the costs
					of: (a)
					mounting
					hardware
					for the
					combiner
					and (b)
					taxes.
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
UHF - High	\$0.00	\$0.00	N/A	N/A	N/A
Power,					
Side					
Mount,					
broadband					
panel, 6					
bay,, 3 kW					
input,					
horizontally					
polarized					
Sub-total	\$298,253.55	\$267,520.00	N/A	\$64,549.41	N/A
Total for all systems	\$2,478,133.35	\$2,177,958.66	N/A	\$836,711.51	N/A

Actual Information	
Description	

New combiner, cost per channel (without antenna)	Information not provided.	
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.	
UHF - High Power, Side Mount, broadband panel, 12 bay,, 25 kW input, horizontally polarized	Component Description:	8-Bay (8) (16) UHF Broadband Panel Antenna System Horizontally Polarized; Peanut Pattern Configuration Maximum Input Power: 20 kW \$71,563.55
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.	
Side mount brackets for high power antennas (if not included in antenna base cost)	Component Description:	This is the cost of the mounting brackets for the antenna to be installed at KKAI's principal site (Pu'n Papa'a).

channel (without antenna)	Component Description:	This reflects the cost of the combiner (including mounting brackets) to be installed at KKAI's principal site (Pu'u Papa'a). \$64,549.41
Sweep test of existing antenna	Information not provided.	
UHF - High Power, Side Mount, broadband panel, 6 bay,, 3 kW input, horizontally polarized	Information not provided.	

## **Transmission Line**

#### Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cos Justificatio
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.	\$0.00	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	\$2,478,133.35	\$2,177,958.66	N/A	\$836,711.51	N/A

Information not provided.

## **Tower Equipment and Rigging Costs**

#### Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower POLE	\$0.00	\$0.00		\$0.00	
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
Primary Tower TOWER	\$268,500.00	\$55,800.00		\$35,256.08	

Minor tower reinforcement /modifications	\$158,000.00	\$30,800.00	See attachment	\$32,659.02	The actual cost of this work came in slightly higher than the original estimate. However, the related site mapping cost was considerably lower than the estimate, resulting in actual costs for the two line items well below the estimate.
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	\$2,597.06	N/A
Short Tower (less than 500')	\$84,200.00	\$0.00	N/A	N/A	N/A
Sub-total	\$525,950.00	\$229,050.00	N/A	\$64,795.58	N/A
Total for all systems	\$2,478,133.35	\$2,177,958.66	N/A	\$836,711.51	N/A

Actual Information Description	File Name
Tower Helicopter Lift	Information not provided.

Short Tower (less than 500')	Information not provided.	
New tower	Information not provided.	
Tower installation expenses	Component Description: Amount:	Preparatory work re tower installation at Mauna Kapu site \$29,539.50
Minor tower reinforcement /modifications	Component Description:	This reflects the cost of repairs and restructuring of the tower at KKAI's principal site (Pu'u Papa'a) \$32,659.02
Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study	Component Description:	This reflects the cost of site mapping, analysis and assessment of the existing tower and equipment at KKAI's principal site (Pu'u Papa'a) \$2,597.06
Short Tower (less than 500')	Information not provided.	

# **Outside Professional Services**

#### Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cos Justificatio
Outside Professional Services	\$375,635.00	\$618,981.50		\$316,483.62	
Other legal work - local	\$95,000.00	\$95,000.00	See Quote from local attorney, Thomas R. Sylvester	\$66,741.75	Local land use and state permitting issues for Mauna Kap tower site have been more difficu and time consuming than originally estimated
RF Exposure Measurements	\$21,050.00	\$20,000.00	Station is a DTS facility, which entails two separate transmission systems.	N/A	N/A
Other engineering work - local	\$68,900.00	\$68,900.00	N/A	\$0.00	See Attachmen "Supplemen to Respons to 12/31/17 Inquiries"
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,560.00	N/A	N/A	N/A

Prepare request for Special Temporary Authorization	\$4,100.00	\$1,535.00	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
Project management of the transition	\$63,200.00	\$221,775.00	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.	\$162,376.87	See attached exhibit, which includes a revised and updated invoice reflecing work not previously identified and providing further deta concerning the nature of the work involved.
Prepare and or review reimbursement form	\$2,630.00	\$36,977.50	See attached invoice for actual legal fees related to preparation and review of the reimbursement form.	\$31,727.50	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 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.	\$0.00	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	\$2,105.00	\$2,050.00	N/A	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
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.	\$4,425.00	See attachmen Actual Cos Justificatio Attorney's Fees
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	\$4,210.00	\$4,100.00	N/A	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 - Negotiation of lease and other matters for shared locations	\$4,210.00	\$45,000.00	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.	\$44,312.50	See Attachmen Actual Cos Justification for Attorney's Fees
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,584.00	N/A	N/A	N/A
Sub-total	\$375,635.00	\$618,981.50	N/A	\$316,483.62	N/A
Total for all systems	\$2,478,133.35	\$2,177,958.66	N/A	\$836,711.51	N/A

# Components

Component Description:	Local legal
	services rendered
	from January
	through May 2018
	in connection with
	Department of
	Plans and Permits
	requirements,
	permitting by
	Hawaii Department
	of Land and
	Natural Resources,
	and Hawaiian Elec.
	Co service for the
	Mauna Kapu tower
	site.
Amount:	\$26,575.90
Component Description:	Local legal
Component Description:	Local legal services rendered
Component Description:	-
Component Description:	services rendered
Component Description:	services rendered from February
Component Description:	services rendered from February through May 2018
Component Description:	services rendered from February through May 2018 for land use
Component Description:	services rendered from February through May 2018 for land use classifications
Component Description:	services rendered from February through May 2018 for land use classifications review and
Component Description:	services rendered from February through May 2018 for land use classifications review and analysis and
Component Description:	services rendered from February through May 2018 for land use classifications review and analysis and zoning limitations,
Component Description:	services rendered from February through May 2018 for land use classifications review and analysis and zoning limitations, Hawaii PUC and
Component Description:	services rendered from February through May 2018 for land use classifications review and analysis and zoning limitations, Hawaii PUC and compliance with
Component Description:	services rendered from February through May 2018 for land use classifications review and analysis and zoning limitations, Hawaii PUC and compliance with Hawaii Department
Component Description:	services rendered from February through May 2018 for land use classifications review and analysis and zoning limitations, Hawaii PUC and compliance with Hawaii Department of Land and
Component Description:	services rendered from February through May 2018 for land use classifications review and analysis and zoning limitations, Hawaii PUC and compliance with Hawaii Department of Land and Natural Resources
Component Description:	services rendered from February through May 2018 for land use classifications review and analysis and zoning limitations, Hawaii PUC and compliance with Hawaii Department of Land and Natural Resources regulations and
	services rendered from February through May 2018 for land use classifications review and analysis and zoning limitations, Hawaii PUC and compliance with Hawaii Department of Land and Natural Resources regulations and applications.

	Component Description:	Local legal services rendered in September 2017 in connection with State of Hawaii Department of Land and Natural Resources issues for the Mauna
	Amount:	Kapu tower site. \$16,129.57
	Component Description:	Continue to work on issues relating to construction, transfer of physical plant with Department of Plans and Permits.
	Amount:	\$12,091.93
RF Exposure Measurements	Information not provided.	

Other engineering work -		
local	Component Description:	Application preparation and FCC filing fee for upper 6 GHz microwave link between studio and Mauna Kapu tower site.
	Amount:	\$980.00
	Component Description:	Prior coordination for 6.7 GHz link from studio to Mauna Kapu site.
	Amount:	\$300.00
	Component Description: Amount:	Removed N/A
	Component Description: Amount:	Removed N/A
	Component Description:	Analysis of 7 GHz Channel Availability from studio to Mauna
	Amount:	Kapu site. \$350.00
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	
Prepare request for Special Temporary Authorization	Information not provided.	
Comprehensive coverage verification via field study, if needed	Information not provided.	
Project management of the transition		

Component Description:	Project Manager services for KKAI- TV repack at Pu'u Papa'a tower site (DTS 1) and Mauna Kapu tower site (DTS 2). \$21,685.32
Component Description: Amount:	Project Management \$3,985.70
Component Description:	Project Management fees for the period from November 18, 2017 through May 31, 2018. \$52,170.48
Component Description: Amount:	Project Management \$9,094.55
Component Description: Amount:	Project Management \$6,216.80
Component Description: Amount:	Project management, processing of invoices by law firm. \$6,200.00
Component Description: Amount:	Project Management \$3,507.90

	Component Description: Amount:	Licensee's employee engineer's time spent on project management of KKAI repack from July 2017 through May 2018. \$19,860.00
	Component Description:	Project management re preparation of Mauna Kapu transmitter site - REVISED
	Amount:	\$48,537.72
	Component Description:	Project Management
	Amount:	\$4,197.80
	Component Description:	Project Management
	Amount:	\$3,067.85
	Component Description:	Project Management
	Amount:	\$3,712.75
Prepare and or review reimbursement form	Component Description:	Attorney fees for preparation and review of reimbursement form
	Amount:	\$31,727.50
	Component Description: Amount:	Legal Services \$5,250.00

Perform engineering study for new channel assignment and antenna development	Component Description:	Consulting services concerning interference
	Amount:	analysis \$650.00
	Component Description:	Consulting engineering services concerning preparation of spectrum repack engineering
	Amount:	\$6,250.00
	Component Description: Amount:	Consulting engineering services relative to maximization of KKAI facilities \$3,500.00
	Amount.	ψ3,000.00
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Component Description:	Preparation of repack engineering plans for Station KKAI and other stations to be co- located with KKAI
	Amount:	\$3,050.00
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Information not provided.	
Prepare engineering section of 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:	Attorneys' fees re preparation of construction perm applications \$4,425.00
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.	
Attorney Fees - Negotiation of lease and other matters for shared locations	Component Description:	Current charges for legal work in connection with KKAI repack for January through June 2018.
	Amount: Component Description:	\$24,562.50 Attorneys' fees - negotiation of leas and other matters
	Amount:	for shared locatior \$19,750.00
Attorney Fees - Prepare and File request for Special Temporary Authorization	Information not provided.	

#### **Other Expenses**

#### Cost Information

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	\$258,098.03	\$248,698.03		\$5,902.39	
Equipment Storage	\$2,500.00	\$2,500.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$2,200.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
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.
Local Zoning	\$27,600.00	\$27,600.00	N/A	N/A	N/A

Local Zoning	\$27,600.00	\$27,600.00	N/A	N/A	N/A
Non-zoning permits	\$18,000.00	\$18,000.00	N/A	N/A	N/A

Equipment Delivery and Handling Charges	\$14,000.00	\$14,000.00	Estimated cost of delivery of transmitters, antennas to Hawaii	\$750.80	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.	\$366.59	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
Fiber Optic drop	\$177,603.03	\$177,603.03	See attachment.	N/A	N/A
Sub-total	\$258,098.03	\$248,698.03	N/A	\$5,902.39	N/A
Total for all systems	\$2,478,133.35	\$2,177,958.66	N/A	\$836,711.51	N/A

## Components

Actual Information Description	File Name
Equipment Storage	Information not provided.
DTV Medical Facility Notification	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:	Application fee fo major change application. See attachment.
	Amount:	\$4,785.00
Local Zoning	Information not provided.	
Non-zoning permits	Information not provided.	
Equipment Delivery and Handling Charges	Component Description:	Transportation of shipping contained from Kawaihae to Hololulu.
	Amount:	\$750.80
Disposal Costs (for equipment and other waste, net of any salvage value)	Component Description:	Truck rental for hauling debris to the dump from clearing tower location at Mauna Kapu site. \$366.59
Develop and air announcement of upcoming channel change	Information not provided.	
MVPD Notification of Channel Change	Information not provided.	

Cost Information	Grand Total				
		Predetermined Cost Estimate	Estimated Cost	Actual Cost	
	Total for all systems	\$2,478,133.35	\$2,177,958.66	\$836,711.51	

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

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.	
		<ol> <li>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.</li> <li>The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> <li>The above-named entity acknowledges that all certifications</li> </ol>	
		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).
- 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.	christopher racine president 04/08/2019

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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).	
		<ol> <li>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.</li> </ol>	
		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).
- 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.

	The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission. 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.	
an au name	are, under penalty of perjury, that I am thorized representative of the above- d applicant for the Authorization(s) ried above.	<b>christopher</b> <b>racine</b> <i>president</i> 04/08/2019

### Attachments