



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **53859** | Service: **DTS** | Call **WIPR-TV** | Channel: **26 (UHF)** |
ID: | Sign:
File **0000028582**
Number:
FRN: **0005832233** | Date **03/10**
Submitted: **/2019**

Applicant Information

Applicant Name, Type, and Contact Information

| Applicant | Address | Phone | Email | Applicant Type |
|--|---|-------------------|------------------|-------------------|
| PUERTO RICO PUBLIC BROADCASTING CORPORATION Doing Business As: PUERTO RICO PUBLIC BROADCASTING CORPORATION | Dr. Rafael Batista Cruz PO Box 190909 Urb. Baldrich SAN JUAN, PR 00918 United States | +1 (787) 766-0505 | Avazquez@wipr.pr | Government Entity |

Reimbursement Contact Information

Reimbursement Contact Name and Information

| Applicant | Address | Phone | Email |
|----------------|---------|-------|-------|
| [Confidential] | | | |

Preparer Contact Information

Preparer Contact Name and Information

| Applicant | Address | Phone | Email |
|-----------|---------|-------|-------|
|-----------|---------|-------|-------|

| | | | |
|--|--|-------------------|-----------------------|
| Alejandro Luciano <i>Consulting Engineer</i> <i>Puerto Rico Public Broadcasting Corporation</i> | Alejandro Luciano PE PO Box 194528 SAN JUAN, PR 00919 United States | +1 (787) 717-6984 | aluciano@aluciano.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. | Yes |
| Briefly describe transition plan | File for CP as needed, Perform Towers Structural Study, modify tower as needed, build Interim facilities, remove existing transmitter, install new transmitter, transmission line, combiner, splitter, new antennas. sweep antennas test and transition. |

Transmitters

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

**Primary
Transmitter**

Existing Transmitter Information

| Section | Question | Response |
|---|--|--------------------------|
| Existing Transmitter Description | Type of change | Purchase New |
| | Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | 1 |
| | Is this transmitter currently shared with another station? | No |
| | Is this transmitter currently in operating condition? | Yes |
| Existing Transmitter Manufacturer and Type | Manufacturer | |
| | Model | Power CD |
| | Year | 2009 |
| | Type | Inductive Output Tube |
| | IOT Power Type | Two |
| | Power Capacity | 60 kW |

**Primary
Transmitter**

New Transmitter Costs

| Section | Question | Response |
|-----------------|---|--|
| New Transmitter | Use | Primary (Main) |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | Yes |
| | Manufacturer | |
| | Model | Parallax |
| | Transmitter Type | Solid State |
| | Solid State Cooling | Liquid Cooled |
| | Solid State Power capacity | 50 kW |
| | Justification for New Transmitter | GatesAir, indicates the cost of the modifications of the IOT transmitters plus rental of similar power transmitter to remain on the air will exceed the cost of a new S.S. transmitter. Documents attesting the above will be submitted as soon as received |

**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 | 2 inches |
| | Length | 300.0 feet |
| | Other Electrical Service | Yes |
| | Description | Panel Main Breaker and disconnect switches for transmitter, cooling pumps and heat exchangers. |
| HVAC Service | Does the replacement transmitter require HVAC Service? | No |
| | Type | N/A |
| | Size | N/A |
| | Other Size | N/A |
| Transmitter Building Addition/Modification or Leasehold Improvement | Does the Transmitter Building require an addition, modification, other leasehold improvement? | No |
| | Size | N/A |
| Channel 14 Costs | Is an RF Consulting Engineer needed? | N/A |
| | Is a channel 14 Mask Filer needed? | N/A |
| | Is additional field engineering time needed? | N/A |
| | Number of Days | N/A |

| Primary Transmitter | Other Transmitter Cost Not Listed |
|---------------------|-----------------------------------|
| | Information not provided. |

**Interim
Transmitter**

New Transmitter Costs

| Section | Question | Response |
|-----------------|-----------------------------------|---|
| New Transmitter | Use | Interim |
| | Description of Use | N/A |
| | Change Type | Purchase |
| | Manufacturer | |
| | Model | Parallax |
| | Transmitter Type | Solid State |
| | Solid State Cooling | Liquid Cooled |
| | Solid State Power capacity | 10.0 kW |
| | Justification for New Transmitter | In order to transition to the new channel by the August 1st 2018 deadline WIPR will need an interim transmitter to remain on the air and maintain limited coverage from an interim site while WAPA decides on the hurricane toppled tower reconstruction. |

**Interim
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 | 2 inches |
| | Length | 200.0 feet |
| | Other Electrical Service | Yes |
| | Description | Main Panel Breaker and Disconnect Switch for transmitter, cooling pump and heat exchanger |
| HVAC Service | Does the replacement transmitter require HVAC Service? | No |
| | Type | N/A |
| | Size | N/A |
| | Other Size | N/A |
| Transmitter Building Addition/Modification or Leasehold Improvement | Does the Transmitter Building require an addition, modification, other leasehold 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. |

Antennas

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

**Primary
Antenna**

Existing Antenna Information

| Section | Question | Response |
|---|--|--------------------|
| Existing Antenna Description | Type of change | Purchase New |
| | Antenna Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | 1 |
| | Is the existing antenna shared with another station or stations? | No |
| | Is the existing antenna directional? | Yes |
| | Is antenna in operating condition? | Yes |
| | Is antenna located on or in close proximity to an antenna farm? | Yes |
| Existing Antenna Manufacturer and Type | Class | Full Power |
| | Mounting | Side Mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Horizontal |
| | Type | Slotted Coaxial |
| | Number of Stations Supported | N/A |
| | Number of Panels | N/A |
| | Design power capacity in use | N/A |
| | Lower Limit | N/A |
| | Upper Limit | N/A |
| | Other Antenna Type | N/A |
| | ERP: (Effective Radiated Power) | 762.0 kW |
| | | |

| | |
|--------------|--------------------|
| Manufacturer | |
| Model | 26JSC-R CT150SP |
| Year | 2008 |

**Primary
Antenna**

New Antenna Costs

| Section | Question | Response |
|---|--|--------------------|
| New Antenna Description | Use | Primary (Main) |
| | Description of Use | N/A |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | Yes |
| | Ownership | Owned |
| | Owner | N/A |
| | Is antenna shared? | No |
| | Is antenna directional? | Yes |
| | Will antenna be located on or in close proximity to an antenna farm? | No |
| New Antenna Manufacturer and Types | Class | Full Power |
| | Mounting | Side Mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Elliptical |
| | Type | Slotted Coaxial |
| | Number of Stations Supported | N/A |
| | Number of Panels/Bays | N/A |
| | Lower Limit | N/A |
| | Upper Limit | N/A |
| | Design power capacity in use | N/A |
| | Other Antenna Type | N/A |
| | ERP: (Effective Radiated Power) | 561.0 kW |
| | Manufacturer | |
| | | |

| | |
|-------------------------------|--|
| Model | TFU-26JSC /VP-R CT150 |
| Year | 2017 |
| Justification for New Antenna | The existing antenna is on channel 43, Dielectric the manufacturer indicates is not feasible to tune the channel 43 antenna to channel 26, WIPR repack assigned channel. |

**Primary
Antenna**

Other Antenna Costs

| Section | Question | Response |
|------------------------------------|---|-------------------------|
| Combiner for Shared Antenna | Do you need a Combiner for a Shared Antenna? | No |
| | Type | |
| | Number of channels supported | N/A |
| | Frequencies of channels supported | N/A |
| | Frequency | N/A |
| | Do you need a combiner output splitter /switcher for dual feed lines? | N/A |
| Elbow Complex | Do you require the separate purchase of the Elbow Complex? | Yes |
| | Broadband or Single Channel? | Single Channel |
| | Feed Line Size | 7 3/16 inches inches |

| | | |
|---------------------------------|---|-----|
| 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
Antenna**

Other Antenna Cost Not Listed

Information not provided.

**Interim
Antenna**

New Antenna Costs

| Section | Question | Response |
|--|--|----------------------|
| New Antenna Description | Use | Interim |
| | Description of Use | N/A |
| | Change Type | Purchase New |
| | Ownership | Owned |
| | Owner | N/A |
| | Is antenna shared? | No |
| | Is antenna directional? | Yes |
| | Will antenna be located on or in close proximity to an antenna farm? | Yes |
| New Antenna Manufacturer and Type | Class | Full Power |
| | Mounting | Side Mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Elliptical |
| | Type | Slotted Coaxial |
| | Number of Stations Supported | N/A |
| | Number of Panels/Bays | N/A |
| | Lower Limit | N/A |
| | Upper Limit | N/A |
| | Design power capacity in use | N/A |
| | Other Antenna Type | N/A |
| | ERP: (Effective Radiated Power) | 100.0 kW |
| | Manufacturer | |
| | Model | PSILP24AOC- 26-EP |
| | Year | 2018 |

| | |
|-------------------------------|---|
| Justification for New Antenna | In order to transition to the new channel by the august 1st 2018 deadline WIPR will need an interim antenna to remain on the air with limited coverage while WAPA-TV decides on the hurricane toppled tower reconstruction. |
|-------------------------------|---|

Interim Antenna

Other Antenna Costs

| Section | Question | Response |
|---------------------------------|---|----------|
| Elbow Complex | Do you require the separate purchase of the Elbow Complex? | No |
| | Broadband or Single Channel? | N/A |
| | Feed Line Size | N/A |
| Side Mount Brackets | Do you require the separate purchase of side mount brackets for an antenna? | 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? | Yes |

Interim Antenna

Other Antenna Cost Not Listed

Information not provided.

Transmission Line

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

**Primary
Transmission Line**

Existing Transmission Line

| Section | Question | Response |
|---|--|-------------------|
| Existing Transmission Line Description | Type of change | Purchase New |
| | Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Leased |
| | Owner | Televicentro LLC |
| | Site | 1 |
| | Is the existing transmission line shared with another station or stations? | Yes |
| | Is Transmission Line in operating condition? | Yes |
| Existing Transmission Line Manufacturer and Type | Manufacturer | |
| | Type | Rigid |
| | Diameter | 7 3/16 inches |
| | Other Diameter | N/A |
| | Segment Length | 20 inches |
| | Other Segment Length | N/A |
| | Number of parallel runs | 1 |
| | Length | 1000 feet per run |

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

| Facility ID | Call Sign |
|-------------|-----------|
| 52073 | WAPA-TV |

Primary
Transmission Line

New Transmission Line

| Section | Question | Response |
|--------------------------------|---|----------------------|
| New Transmission Line Costs | Use | Primary (Main) |
| | Description of Use | N/A |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | No |
| | Type | Rigid |
| | Diameter | 7 3/16 inches |
| | Other Diameter | N/A |
| | Segment Length | 19 1/2 inches |
| | Other Segment Length | N/A |
| | Number of parallel runs | 1 |
| | Length | 1000 feet per run |
| | | |

| | |
|---|--|
| Justification for New Transmission Line | <p>The existing shared transmission line belong to WAPA-TV, that station operates non DA, and it's line section of 20' are a prohibited length for operation in channel 26. Also it is not possible to build a splitter for adjacent channels operation.</p> |
|---|--|

Primary

Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

Interim
Transmission Line

New Transmission Line

| Section | Question | Response |
|------------------------------------|---|--|
| New Transmission Line Costs | Use | Interim |
| | Description of Use | N/A |
| | Change Type | Purchase New |
| | Type | Flexible Air |
| | Diameter | 4 inches |
| | Segment Length | N/A |
| | Other Segment Length | |
| | Number of parallel runs | 1 |
| | Length | 375 feet per run |
| | Justification for New Transmission Line | In order to transition to the new channel by the august 1st 2018 deadline WIPR will need an interim transmission line to remain with limited coverage from an interim site while WAPA decides on the hurricane toppled tower reconstruction. |

Interim
Transmission Line

Other Transmission Line Expenses Not Listed

| Name | Description |
|------|-------------|
|------|-------------|

| | |
|------------|------------------------------|
| Dehydrator | Transmission Line Dehydrator |
|------------|------------------------------|

Tower Equipment And Rigging Costs

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

Auxiliary Tower

Add Tower

| Section | Question | Response |
|--|---|--------------------|
| Existing Tower Description | Type of change | Modify Existing |
| | Tower Use | Auxiliary (Backup) |
| | Description of Use | iNTERIM TOWER |
| | Ownership | Owned |
| | 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? | No |
| Existing Tower Structure Registration | Do you have a tower registration number? | Yes |
| | ASR Number | 1011496 |
| Coordinates (NAD83 (North American Datum of 1983)) | Latitude (NAD83) | 18° 15' 54.0" N- |
| | Longitude (NAD83) | 066° 05' 06.0" W- |
| | Overall Structure Height | 285.43 feet |
| | Support Structure Height | 232.94 feet |
| | Ground Elevation Above Mean Sea Level (AMSL) | 1377.94 feet |
| | | |

| | |
|------------------|--|
| Structure Type | TOWER - Free Standing or Guyed Structure |
| Tower Owner | PUERTO RICO PUBLIC BROADCASTING CORP |
| Date Constructed | 01/01/1957 |

**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 |
|-------------|-----------|---------|
| 10063 | WFID | FM |
| 69090 | WRTU | FM |

Auxiliary 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: | Major Reinforcements needed |

Auxiliary Tower

Tower Rigging Costs

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

**Auxiliary
Tower**

Other Tower Expenses Not Listed
Information not provided.

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? | Terrain Constrained |
| | Is this tower currently shared with any other stations? | Yes |
| | One or more FM, AM or TV radio broadcaster(s) | Yes |
| | Others Types of Users | No |
| | Is tower documented for structural analysis? | Yes |
| | Is tower compliant with Rev G? | No |
| Existing Tower Structure Registration | Do you have a tower registration number? | Yes |
| | ASR Number | 1010730 |
| Coordinates (NAD83 (North American Datum of 1983)) | Latitude (NAD83) | 18° 06' 35.0" N- |
| | Longitude (NAD83) | 066° 03' 04.0" W- |
| | Overall Structure Height | 1090.87 feet |
| | Support Structure Height | 1006.88 feet |
| | Ground Elevation Above Mean Sea Level (AMSL) | 2955.02 feet |
| | Structure Type | TOWER - Free Standing or Guyed Structure |

| | | |
|--|------------------|--|
| | Tower Owner | Televicentro of Puerto Rico, LLC |
| | Date Constructed | 07/01/1966 |

**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 |
|-------------|-----------|---------|
| 52073 | WAPA-TV | DTV |
| 53860 | WIPR-FM | FM |

Primary Tower

Tower Modification Costs

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

Primary Tower

Tower Rigging Costs

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

Primary Tower

Other Tower Expenses Not Listed

Information not provided.

**Outside
Professional Services Costs**

| Section | Question | Response |
|---|--|---|
| Outside Project Management Services | Do you require outside project management services? | Yes |
| | Number of Hours | 1500 |
| | Explanation | Due to extreme budget constrains WIPR does not have the necessary technical staff to perform the project management for the repack. |
| Outside RF consulting Engineering Services | Perform engineering study for new channel assignment and antenna development | Yes |
| | Prepare engineering section of Form FCC Construction Permit Application | Yes |
| | For Auxiliary Facility | Yes |
| | For Main Facility | Yes |
| | Prepare engineering section of Form FCC License to Cover Application | Yes |
| | For Auxiliary Facility | Yes |
| | For Main Facility | Yes |
| | Prepare request for Special Temporary Authority | Yes |
| | Quantity | 3 |
| | Do you have Distributed Transmission 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 | 3 |
| | NEPA Section 106 environmental review | No |
| | Environmental Assessment | No |
| | ASR Modification | Yes |
| | FAA Consultation (including preparation of FAA Form 7460) | No |
| | Negotiation of Lease and other Matter for Shared Locations | No |
| | Prepare or Review FCC Form 399 for Reimbursement | Yes |
| | Address transition timing and coordination issues w/ other stations and wireless providers | Yes |
| RF Field Engineering Services | Comprehensive coverage verification via field study | No |
| | 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

| Name | Description |
|-----------------------------|--------------------------------------|
| Quarterly Progress Reports. | FCC Quarterly Repack Progress Report |

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 | Yes |
| | 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 | Yes |
| Other Miscellaneous Expenses | Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)? | Yes |
| | Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs? | Yes |
| | Does this relocation require Equipment Storage? | 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 |
|---|--|
| 8 poles Adjacent Channel Filter. Two Filters, Two Stations | WIPR-TV and WAPA-TV radiation centers are within 50ft vertically, after repack WIPR will be on Ch. 26 adjacent to WAPA Ch. 27. A filter is needed for both WAPA and WIPR to impede interactions to WAPA and WIPR transmitters from each other emissions. |
| Station Employees Time | Stations Employees time exclusively dedicated to the repack functions. See attached Excel worksheet |

Cost Information

Transmitters

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|---|-----------------------------|---------------------|---|---------------------|---------------------------|
| Interim Transmitter Parallax | \$517,700.00 | \$393,135.00 | | \$370,135.00 | |
| Other Electrical Service: Main Panel Breaker and Disconnect Switch for transmitter, cooling pump and heat exchanger | <i>\$18,000.00</i> | \$18,000.00 | As per previous experience during the analog to digital transitions and site remote location. | N/A | N/A |
| 2" Rigid Conduit and Wiring (Cost per foot) | \$5,200.00 | \$5,000.00 | N/A | N/A | N/A |
| UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW | \$494,500.00 | \$370,135.00 | See WIPR Aux Transmitter Invoice Explanation Cover Letter, Invoice and Proposal. | \$370,135.00 | N/A |
| Primary Transmitter Parallax | \$1,489,800.00 | \$906,635.00 | | \$534,081.00 | |

| | | | | | |
|---|-------------------|----------------|---|--------------|-----|
| UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW | \$1,473,000.00 | \$890,135.00 | See WIPR Main Transmitter Proposal, Hitachi Kokusai Electric Comark P#3182PRLXU18- 091317-R1. ITEM 2.2 PART NO. S16, Transmitter System Transportation to Port of PR and Crating cost, excluded from above estimated cost. | \$534,081.00 | N/A |
| 2" Rigid Conduit and Wiring (Cost per foot) | \$7,800.00 | \$7,500.00 | N/A | N/A | N/A |
| Other Electrical Service: Panel Main Breaker and disconnect switches fro transmitter, cooling pumps and heat exchangers. | \$9,000.00 | \$9,000.00 | As per previous experience during the analog to digital transitions and site remote location. | N/A | N/A |
| Sub-total | \$2,007,500.00 | \$1,299,770.00 | N/A | \$904,216.00 | N/A |
| Total for all systems | \$5,391,715.77 | \$4,449,263.77 | N/A | \$990,413.51 | N/A |

Components

Actual Information
Description

File Name

| | |
|--|--|
| Other Electrical Service: Main Panel Breaker and Disconnect Switch for transmitter, cooling pump and heat exchanger | Information not provided. |
| 2" Rigid Conduit and Wiring (Cost per foot) | Information not provided. |
| UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW | <p>Component Description: Hitachi Kokusai Electric Comark LLC Invoice 11554. WIPR Aux Transmitter Excluding Transportation.</p> <p>Amount: \$370,135.00</p> |
| UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW | <p>Component Description: 60% deposit on WIPR Main Transmitter, Hitachi Kokusai Electric Comark LLC Proposal P#3182PRLXU18- 091317-R1. Invoice 11492. 60% of ITEM 2.2 PART NO. S16, \$13,600.00 cost is excluded from above dollar amount request.</p> <p>Amount: \$534,081.00</p> |
| 2" Rigid Conduit and Wiring (Cost per foot) | Information not provided. |
| Other Electrical Service: Panel Main Breaker and disconnect switches fro transmitter, cooling pumps and heat exchangers. | Information not provided. |

**Cost
Information**

Antennas

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|---|--------------------------------|--------------------|---|--------------------|------------------------------|
| Interim Antenna PSILP24AOC- 26-EP | \$132,980.00 | \$56,428.00 | | \$50,028.00 | |
| UHF - Lower Power Side Mount, One Station antenna . medium power (50- 200 kW), elliptically or circularly polarized | \$103,100.00 | \$48,678.00 | See attached WIPR AUX Antenna_P040418- PK1 proposal from Propagation Systems, Excluding the "Set of Custom Mounting Brackets for an Angled Leg Tower" Item. In attached WIPR AUX Antenna_P040418- PK1-3 document. | \$48,678.00 | N/A |
| Sweep test of existing antenna | \$6,730.00 | \$6,400.00 | N/A | N/A | N/A |
| Side mount brackets for high power antennas (if not included in antenna base cost) | \$23,150.00 | \$1,350.00 | See attached WIPR AUX Antenna_P040418- PK1 from Propagation Systems, Inc. Item "Set of Custom Mounting Brackets for an Angled Leg Tower". In attached WIPR AUX Antenna_P040418- PK1-3 document. | \$1,350.00 | N/A |

| | | | | | |
|--|---------------------|---------------------|--|--------------------|-----|
| Primary Antenna TFU-26JSC /VP-R CT150 | \$246,336.00 | \$243,904.00 | | \$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 | \$22,000.00 | N/A | N/A | N/A |
| Elbow complex, single channel, at antenna input, per 7 3 /16. feedline (if needed) | \$13,900.00 | \$13,208.00 | Based on Dielectric Elbow Complex Quote | N/A | N/A |
| UHF - High Power, Side Mount, basic slot antenna, 561 kW input, directional,, elliptically or circularly polarized | \$197,296.00 | \$197,296.00 | Based on attached Dielectric Order Number 45360 Lines 1, 3 | N/A | N/A |
| Sweep test of existing antenna | \$6,730.00 | \$6,400.00 | N/A | N/A | N/A |
| Sub-total | \$379,316.00 | \$300,332.00 | N/A | \$50,028.00 | N/A |

| | | | | | |
|------------------------------|----------------|----------------|-----|--------------|-----|
| Total for all systems | \$5,391,715.77 | \$4,449,263.77 | N/A | \$990,413.51 | N/A |
|------------------------------|----------------|----------------|-----|--------------|-----|

Components

| Actual Information | |
|--|---|
| Description | File Name |
| UHF - Lower Power Side Mount, One Station antenna . medium power (50-200 kW), elliptically or circularly polarized | <p>Component Description: Auxiliary Antenna Cost Excluding Mounting Brackets</p> <p>Amount: \$48,678.00</p> |
| Sweep test of existing antenna | Information not provided. |
| Side mount brackets for high power antennas (if not included in antenna base cost) | <p>Component Description: WIPR Auxiliary Antenna Mounting Brackets.</p> <p>Amount: \$1,350.00</p> |
| 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) | Information not provided. |
| Elbow complex, single channel, at antenna input, per 7 3/16. feedline (if needed) | Information not provided. |
| UHF - High Power, Side Mount, basic slot antenna, 561 kW input, directional,, elliptically or circularly polarized | Information not provided. |

| | |
|--------------------------------|---------------------------|
| Sweep test of existing antenna | Information not provided. |
|--------------------------------|---------------------------|

Cost
Information

Transmission Line

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|---|-----------------------------|----------------|--|-------------|---------------------------|
| Interim Transmission Line | \$29,659.11 | \$13,534.11 | | \$13,174.31 | |
| Flexible Air Transmission Line - dielectric, 4" | \$27,750.00 | \$11,625.00 | See Explanation Cover Letter, WIPR Auxiliary Transmission Line Invoice and Proposal. | \$11,265.20 | N/A |
| Dehydrator | <i>\$1,909.11</i> | \$1,909.11 | See Explanation Cover Letter, WIPR Auxiliary Transmission Line Invoice and Proposal. | \$1,909.11 | N/A |
| Primary Transmission Line | \$290,000.00 | \$276,000.00 | | \$0.00 | |

| | | | | | |
|---|----------------|----------------|---|--------------|-----|
| Rigid Transmission Line - copper, 7 3/16" | \$290,000.00 | \$276,000.00 | The existing shared transmission line is owned by WAPA, the sections length of 20 ft. are prohibited for channel 26, it is not possible to separate adjacent channels at tower to maintain current setting. See attached RF System diagram. | N/A | N/A |
| Sub-total | \$319,659.11 | \$289,534.11 | N/A | \$13,174.31 | N/A |
| Total for all systems | \$5,391,715.77 | \$4,449,263.77 | N/A | \$990,413.51 | N/A |

Components

| Actual Information | |
|---|---|
| Description | File Name |
| Flexible Air Transmission Line - dielectric, 4" | <p>Component Description: WIPR Auxiliary Transmission Line Invoice Excluding Dehydrator.</p> <p>Amount: \$11,265.20</p> |
| Dehydrator | <p>Component Description: WIPR Auxiliary Transmission Line Dehydrator price.</p> <p>Amount: \$1,909.11</p> |

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|--|---------------------------|
| Rigid Transmission Line - copper, 7 3/16" | Information not provided. |
|--|---------------------------|

Cost
Information

Tower Equipment and Rigging Costs

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|---|--------------------------------|-------------------|------------------------------------|-------------|------------------------------|
| Primary Tower TOWER | \$1,485,600.00 | \$1,412,000.00 | | \$0.00 | |
| Complex Tower (includes, for example, those with candelabras and/or stacked antennas) | \$421,000.00 | \$400,000.00 | N/A | N/A | N/A |
| Serious tower reinforcement /modifications | \$1,052,000.00 | \$1,000,000.00 | N/A | N/A | N/A |
| Structural engineering tower load study for well documented tower | \$12,600.00 | \$12,000.00 | N/A | N/A | N/A |
| Auxiliary Tower TOWER | \$531,500.00 | \$505,000.00 | | \$0.00 | |
| 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 |

| | | | | | |
|--|----------------|----------------|-----|--------------|-----|
| Major tower reinforcement /modifications | \$421,000.00 | \$400,000.00 | N/A | N/A | N/A |
| Short Tower (less than 500') | \$84,200.00 | \$80,000.00 | N/A | N/A | N/A |
| Sub-total | \$2,017,100.00 | \$1,917,000.00 | N/A | \$0.00 | N/A |
| Total for all systems | \$5,391,715.77 | \$4,449,263.77 | N/A | \$990,413.51 | N/A |

Components

Information not provided.

Cost Information

Outside Professional Services

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|---|-----------------------------|---------------------|---|---------------|---------------------------|
| Outside Professional Services | \$312,370.00 | \$295,400.00 | | \$0.00 | |
| Quarterly Progress Reports. | <i>\$2,150.00</i> | \$2,150.00 | Estimated Fee for Quarterly Repack Progress Report Documents preparation and filling. | N/A | N/A |
| ASR modification (prepare FCC Form 854) | \$2,105.00 | \$2,000.00 | N/A | N/A | N/A |
| Attorney Fees - Prepare and File request for Special Temporary Authorization | \$11,040.00 | \$10,500.00 | N/A | N/A | N/A |
| Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application | \$2,365.00 | \$2,250.00 | N/A | N/A | N/A |

| | | | | | |
|--|------------|------------|-----|-----|-----|
| Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application | \$4,210.00 | \$4,000.00 | N/A | N/A | N/A |
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application | \$5,260.00 | \$5,000.00 | N/A | N/A | N/A |
| Prepare request for Special Temporary Authorization | \$6,150.00 | \$4,500.00 | N/A | N/A | N/A |
| RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application | \$1,580.00 | \$1,500.00 | N/A | N/A | N/A |
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application | \$1,580.00 | \$1,500.00 | N/A | N/A | N/A |

| | | | | | |
|---|--------------|--------------|-----|--------|-----|
| RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application | \$2,105.00 | \$2,000.00 | N/A | N/A | N/A |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | \$3,155.00 | \$3,000.00 | N/A | N/A | N/A |
| Perform engineering study for new channel assignment and antenna development | \$7,360.00 | \$7,000.00 | N/A | N/A | N/A |
| Address transition timing and coordination issues w/ other stations and wireless | \$2,630.00 | \$2,500.00 | N/A | N/A | N/A |
| Prepare and or review reimbursement form | \$2,630.00 | \$2,500.00 | N/A | N/A | N/A |
| Project management of the transition | \$237,000.00 | \$225,000.00 | N/A | N/A | N/A |
| RF Exposure Measurements | \$21,050.00 | \$20,000.00 | N/A | N/A | N/A |
| Sub-total | \$312,370.00 | \$295,400.00 | N/A | \$0.00 | N/A |

| | | | | | |
|------------------------------|----------------|----------------|-----|--------------|-----|
| Total for all systems | \$5,391,715.77 | \$4,449,263.77 | N/A | \$990,413.51 | N/A |
|------------------------------|----------------|----------------|-----|--------------|-----|

Components

Information not provided.

Cost Information

Other Expenses

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

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|-----------------------------|---------------------|--|--------------------|---------------------------|
| Other Expenses | \$355,770.66 | \$347,227.66 | | \$22,995.20 | |
| Station Employees Time | <i>\$90,764.46</i> | \$90,764.46 | Estimated amount for station personnel repack dedicated time. See Attached WIPR Personnel Repack Hours Estimate Worksheet. | N/A | N/A |
| 8 poles Adjacent Channel Filter. Two Filters, Two Stations | <i>\$160,000.00</i> | \$160,000.00 | Estimated price for two hi power filters (WAPA Ch. 27 and WIPR Ch. 26) based on manufacturer consultation. Final quote price to be provided as soon as received. | N/A | N/A |
| MVPD Notification of Channel Change | <i>\$316.20</i> | \$316.20 | See WIPR MVPD Explanation Cover Letter Invoice and Proposal Document. | \$316.20 | N/A |

| | | | | | |
|--|--------------------|-------------|---|-------------|-----|
| Develop and air announcement of upcoming channel change | \$20,000.00 | \$20,000.00 | Based on previous experience during the analog to digital transition | N/A | N/A |
| Equipment Storage | \$7,000.00 | \$7,000.00 | Based on previous experience during the analog to digital transition | N/A | N/A |
| Equipment Delivery and Handling Charges | \$50,000.00 | \$50,000.00 | See Attached transportation Cost estimates and WIPR Employees Time and Freight Charges Estimate Document. | \$19,617.00 | N/A |
| Disposal Costs (for equipment and other waste, net of any salvage value) | \$4,500.00 | \$4,500.00 | Based on previous experience during the analog to digital transition. | N/A | N/A |
| Local Zoning | \$10,000.00 | \$10,000.00 | Based on previous experience. Local authority estimated fees for tower work permits. | N/A | N/A |
| FCC Filing Fees - Special Temporary Authorization request | \$195.00 | \$190.00 | 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 | N/A | N/A |
| DTV Medical Facility Notification | \$11,550.00 | \$3,062.00 | See Explanation Cover Letter, WIPR Medical Notification Invoice and Proposal. | \$3,062.00 | N/A |
| Sub-total | \$355,770.66 | \$347,227.66 | N/A | \$22,995.20 | N/A |
| Total for all systems | \$5,391,715.77 | \$4,449,263.77 | N/A | \$990,413.51 | N/A |

Components

| Actual Information | |
|--|--|
| Description | File Name |
| Station Employees Time | Information not provided. |
| 8 poles Adjacent Channel Filter. Two Filters, Two Stations | Information not provided. |
| MVPD Notification of Channel Change | <p>Component Description: WIPR MVPD Notifications. DTVNotification Invoice: INV-001805</p> <p>Amount: \$316.20</p> |
| Develop and air announcement of upcoming channel change | Information not provided. |
| Equipment Storage | Information not provided. |

| | |
|--|--|
| Equipment Delivery and Handling Charges | <div> Component Description: <p>WIPR Main Transmitter 60% reimbursement request on Hitachi Kokusai Electric Comark LLC PROPOSAL P#3182PRLXU18-091317-R1 ITEM 2.2 PART NO. S16.</p> </div> <div> Amount: <p>\$8,160.00</p> </div> |
| | <div> Component Description: <p>Hitachi Kokusai Electric Comark LLC Invoice 11554 Item 4 SHP/CRT-PARLX-UL SHIPPING PORT OF PUERTO RICO & CRATING</p> </div> <div> Amount: <p>\$11,457.00</p> </div> |
| Disposal Costs (for equipment and other waste, net of any salvage value) | Information not provided. |
| Local Zoning | Information not provided. |
| FCC Filing Fees - Special Temporary Authorization request | Information not provided. |
| FCC Filing Fees - Form 2100 license to cover application | Information not provided. |
| FCC Filing Fees - Form 2100 minor change CP application | Information not provided. |

| | |
|--------------------------------------|---|
| DTV Medical Facility Notification | <div><div>Component Description:</div><div>WIPR medical Notifications. DTVNotification Invoice: INV-001806</div></div> <div><div>Amount:</div><div>\$3,062.00</div></div> |
|--------------------------------------|---|

**Cost
Information**

Grand Total

| | Predetermined Cost Estimate | Estimated Cost | Actual Cost |
|------------------------------|--|-----------------------|--------------------|
| Total for all systems | \$5,391,715.77 | \$4,449,263.77 | \$990,413.51 |

Reimbursement Status

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

| Certification | Section | Question | Response |
|---------------|---|---|----------|
| | Submission of Estimated Expenses Statements | <p>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.</p> | |
| | | <ol style="list-style-type: none"> 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.

| | |
|---|--|
| <p>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.</p> | |
| <p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p> | <p>Alejandro Luciano , PE . <i>Repack Project Manager</i></p> <p>03/10/2019</p> |

Attachments