



(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility **71928** | Service: **DTV** | Call **WNED-TV** | Channel: **31 (UHF)** |  
ID:  
File **0000028145**  
Number:  
FRN: **0003410461** | Date **05/07**  
Submitted: **/2019**

## Applicant Information

### Applicant Name, Type, and Contact Information

| Applicant  | Address  | Phone             | Email          | Applicant Type |
|--|--|-------------------|----------------|----------------|
| <b>WESTERN NY PUBLIC BROADCASTING ASSOC.</b><br>Doing Business As: WNED-TV | JOSEPH C. PUMA<br>PO Box 1263<br>BUFFALO,<br>NY 14240<br>United States | +1 (716) 845-7000 | jpuma@wned.org | Not-for-Profit |

## Reimbursement Contact Information

### Reimbursement Contact Name and Information

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

## Preparer Contact Information

### Preparer Contact Name and Information

| Applicant  | Address | Phone | Email |
|--|---------|-------|-------|
| The Preparer is same as the reimbursement contact. |         |       |       |

## Broadcaster Information and Transition Plan

| Question | Response |
|----------|----------|
|----------|----------|

|  |  |
|--|--|
| Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information. | Yes  |
| Briefly describe transition plan   | Sweep line/antenna to asses performance on new channel, remove existing IOT main & backup transmitters & channel-specific indoor RF systems, replace w/solid-state transmitters and appropriate indoor RF systems, tune & optimize antenna/line on new channel |

## Transmitters

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

**Auxiliary  
Transmitter****Add Transmitter Information**

| Section   | Question   | Response                 |
|---|--|--------------------------|
| <b>Existing Transmitter<br/>Description</b>           | Type of change   | Purchase<br>New          |
|   | Use  | Auxiliary<br>(Backup)    |
|   | Description of Use   | backup                   |
|   | 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                      |
| <b>Existing Transmitter<br/>Manufacturer and Type</b> | Manufacturer   |                          |
|   | Model  | DCXP                     |
|   | Year   | 2002                     |
|   | Type   | Inductive<br>Output Tube |
|   | IOT Power Type   | Single                   |
|   | Power Capacity   | 25 kW                    |

**Auxiliary  
Transmitter**

**New Transmitter Costs**

| Section         | Question                                  | Response  |
|-----------------|---|---|
| New Transmitter | Use                                       | Auxiliary<br>(Backup)   |
|                 | Change Type                               | Purchase<br>New   |
|                 | Is this a request for upgraded equipment? | Yes   |
|                 | Manufacturer                              |   |
|                 | Model                                     | ULXTE-10  |
|                 | Transmitter Type                          | Solid State   |
|                 | Solid State Cooling                       | Liquid<br>Cooled  |
|                 | Solid State Power capacity                | 6.6 kW  |
|                 | Justification for New Transmitter         | Retuning<br>high-power<br>IOT<br>transmitter<br>from ch.43<br>to 31<br>requires a<br>new IOT,<br>new circuit<br>assemblies,<br>"additional<br>costs for<br>sustaining<br>engineering"<br>and<br>exceeds the<br>cost of a<br>properly<br>sized solid-<br>state<br>transmitter.<br>Please see<br>retune<br>quote and<br>letter<br>attached. |

**Auxiliary  
Transmitter****Other Transmitter Costs**

| Section  | Question  | Response  |
|--|---|-----------|
| <b>Electrical Service</b>  | 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  | 40.0 feet |
|  | Other Electrical Service  | No        |
|  | Description   | N/A       |
| <b>HVAC Service</b>  | Does the replacement transmitter require HVAC Service?  | No        |
|  | Type  | N/A       |
|  | Size  | N/A       |
|  | Other Size  | N/A       |
| <b>Transmitter Building Addition/Modification or Leasehold Improvement</b> | Does the Transmitter Building require an addition, modification, other leasehold improvement? | No        |
|  | Size  | N/A       |
| <b>Channel 14 Costs</b>  | Is an RF Consulting Engineer needed?  | N/A       |
|  | Is a channel 14 Mask Filer needed?  | N/A       |
|  | Is additional field engineering time needed?  | N/A       |
|  | Number of Days  | N/A       |

**Auxiliary  
Transmitter****Other Transmitter Cost Not Listed**

Information not provided.

**Primary  
Transmitter**

**Existing Transmitter Information**

| Section   | Question   | Response                 |
|---|--|--------------------------|
| <b>Existing Transmitter<br/>Description</b>           | Type of change   | Purchase<br>New          |
|   | Use  | Primary<br>(Main)        |
|   | Description of Use   | N/A                      |
|   | Ownership  | Owned                    |
|   | Owner  | N/A                      |
|   | Site   | N/A                      |
|   | Is this transmitter currently shared with another station? | No                       |
|   | Is this transmitter currently in operating condition?      | Yes                      |
| <b>Existing Transmitter<br/>Manufacturer and Type</b> | Manufacturer   |                          |
|   | Model  | DCXP                     |
|   | Year   | 2002                     |
|   | Type   | Inductive<br>Output Tube |
|   | IOT Power Type   | Single                   |
|   | Power Capacity   | 25 kW                    |

**Primary  
Transmitter**

**New Transmitter Costs**

| Section         | Question                                  | Response  |
|-----------------|---|---|
| New Transmitter | Use                                       | Primary<br>(Main)   |
|                 | Change Type                               | Purchase<br>New   |
|                 | Is this a request for upgraded equipment? | Yes   |
|                 | Manufacturer                              |   |
|                 | Model                                     | ULXTE-10  |
|                 | Transmitter Type                          | Solid State   |
|                 | Solid State Cooling                       | Liquid<br>Cooled  |
|                 | Solid State Power capacity                | 6.6 kW  |
|                 | Justification for New Transmitter         | Retuning<br>high-power<br>IOT<br>transmitter<br>from ch.43<br>to 31<br>requires a<br>new IOT,<br>new circuit<br>assemblies,<br>"additional<br>costs for<br>sustaining<br>engineering"<br>and<br>exceeds the<br>cost of a<br>properly<br>sized solid-<br>state<br>transmitter.<br>Please see<br>retune<br>quote and<br>letter<br>attached. |

**Primary  
Transmitter**

**Other Transmitter Costs**

| Section  | Question  | Response  |
|--|---|-----------|
| <b>Electrical Service</b>  | Service Entrance (3 phases 800A 208V)   | No        |
|  | Switchgear (industrial 800 amp)   | No        |
|  | Transformer (480V)  | Yes       |
|  | Power   | 150 kVA   |
|  | Rigid Conduit and Wiring  | Yes       |
|  | Size  | 3 inches  |
|  | Length  | 40.0 feet |
|  | Other Electrical Service  | No        |
|  | Description   | N/A       |
| <b>HVAC Service</b>  | Does the replacement transmitter require HVAC Service?  | No        |
|  | Type  | N/A       |
|  | Size  | N/A       |
|  | Other Size  | N/A       |
| <b>Transmitter Building Addition/Modification or Leasehold Improvement</b> | Does the Transmitter Building require an addition, modification, other leasehold improvement? | No        |
|  | Size  | N/A       |
| <b>Channel 14 Costs</b>  | 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  |
|----------------------|--|
| <b>Control cable</b> | Control cable for switch to controller interconnection |



|                                  |   |
|----------------------------------|---|
| <b>Coaxial switch</b>            | Indoor 4-port 3-1/8" coax antenna line switch to switch between main & aux transmitters |
| <b>Coaxial switch controller</b> | Controller for coaxial switch   |
| <b>Dummy Load</b>                | Indoor air-cooled broadband dummy load  |

**Antennas**

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

**Primary  
Antenna****Existing Antenna Information**

| Section                                   | Question   | Response           |
|---|--|--------------------|
| Existing Antenna<br>Description           | Type of change   | Retune<br>Existing |
|   | Antenna Use  | Primary<br>(Main)  |
|   | Description of Use   | N/A                |
|   | Ownership  | Owned              |
|   | Owner  | N/A                |
|   | Site   | N/A                |
|   | Is the existing antenna shared with another station or stations? | No                 |
|   | Is the existing antenna directional?                             | No                 |
|   | Is antenna in operating condition?                               | Yes                |
|   | Is antenna located on or in close proximity to an antenna farm?  | Yes                |
| Existing Antenna<br>Manufacturer and Type | Class  | Full Power         |
|   | Mounting   | Top Mount          |
|   | Antenna position in stack  | Not in Stack       |
|   | Polarization   | Horizontal         |
|   | Type   | Broadband<br>Panel |
|   | Number of Stations Supported                                     | 1                  |
|   | Number of Panels   | 16                 |
|   | Design power capacity in use                                     | 10.0 %             |
|   | Lower Limit  | 470.00 MHz         |

|                                 |                     |
|---------------------------------|---------------------|
| Upper Limit                     | 806.00 MHz          |
| Other Antenna Type              | N/A                 |
| ERP: (Effective Radiated Power) | 123.0 kW            |
| Manufacturer                    | Dielectric          |
| Model                           | TUC-05-16<br>/80H-1 |
| Year                            | 2002                |

**Primary  
Antenna**

**Adjustment to Existing Antenna**

| Section                        | Question                                      | Response |
|--------------------------------|---|----------|
| Sweep Test of Existing Antenna | Do you need a sweep test of existing antenna? | Yes      |

**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                                    |          |

**Primary  
Antenna**

**Other Antenna Cost Not Listed**

| Name                     | Description  |
|--------------------------|--|
| Test transition assembly | Broadband test assembly for initial transmission line & antenna sweep and post channel change sweep & tune, 6-1/8" to Type-N 50 ohm. |

**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   | Utilize Existing  |
|  | Use  | Primary (Main)    |
|  | Description of Use   | N/A               |
|  | Ownership  | Owned             |
|  | Owner  | N/A               |
|  | Site   | N/A               |
|  | Is the existing transmission line shared with another station or stations? | No                |
|  | Is Transmission Line in operating condition?                               | Yes               |
| Existing Transmission Line Manufacturer and Type | Manufacturer   | Dielectric        |
|  | Type   | Rigid             |
|  | Diameter   | 8 3/16 inches     |
|  | Other Diameter   | N/A               |
|  | Segment Length   | Broadband         |
|  | Other Segment Length   | N/A               |
|  | Number of parallel runs  | 1                 |
|  | Length   | 1100 feet per run |

Primary  
Transmission Line

Other Transmission Line Expenses Not Listed

| Name                                       | Description  |
|--|--|
| Un-Flanged indoor transmission line        | 3-1/8" un-flanged indoor transmission line                           |
| Un-Flanged indoor transmission line elbows | 3-1/8" un-flanged indoor transmission line elbows                    |
| Adapter-transformer                        | 6-1/8" 75 Ohm to 3-1/8" 50 Ohm transmission line adapter/transformer |
| Field Flanges                              | 3-1/8" indoor field flanges  |
| Flanged indoor transmission line           | 3-1/8" flanged indoor transmission line                              |
| Flanged indoor transmission line elbows    | 3-1/8" flanged indoor transmission line elbows                       |
| Hangers                                    | 3-1/8" line ceiling hangers  |
| Reducer assembly                           | 8-3/16" to 6-1/8" indoor transmission line reducer assembly          |

**Tower  
Equipment  
And  
Rigging  
Costs**

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

**Primary  
Tower**

**Existing Tower**

| Section   | Question  | Response          |
|---|---|-------------------|
| Existing Tower Description                          | Type of change  | Modify Existing   |
|   | Tower Use   | Primary (Main)    |
|   | Description of Use                                      | N/A               |
|   | Ownership   | Owned             |
|   | Is this tower consider Complex?                         | 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                                   | Yes               |
|   | Is tower documented for structural analysis?            | Yes               |
|   | Is tower compliant with Rev G?                          | Unknown           |
| Existing Tower Structure Registration               | Do you have a tower registration number?                | Yes               |
|   | ASR Number  | 1033433           |
| Coordinates (NAD83 ( North American Datum of 1983)) | Latitude (NAD83)  | 43° 01' 48.2" N-  |
|   | Longitude (NAD83)                                       | 078° 55' 14.1" W- |
|   | Overall Structure Height                                | 1133.84 feet      |
|   | Support Structure Height                                | 1067.90 feet      |
|   | Ground Elevation Above Mean Sea Level (AMSL)            | 577.09 feet       |

|  |                  |  |
|--|------------------|--|
|  | Structure Type   | TOWER - Free Standing or Guyed Structure         |
|  | Tower Owner      | Western New York Public Broadcasting Association |
|  | Date Constructed | 01/01/1986                                       |

**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 |
|-------------|-----------|---------|
| 71905       | WNLO      | DTV     |

#### Other Types of Users

| Users           |
|-----------------|
| LPFM            |
| Microwave relay |

#### Primary Tower

#### Tower Modification Costs

| Section              | Question   | Response                 |
|----------------------|--|--------------------------|
| Engineering Study    | Please what type of engineering study is required, if any: | No study needed          |
| Tower Reinforcements | Please select whether tower reinforcements are needed:     | No reinforcements needed |

**Primary  
Tower**

**Tower Rigging Costs**

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

**Primary  
Tower**

**Other Tower Expenses Not Listed**

| Name    | Description   |
|---------|---|
| Rigging | Crew mobilization, winch, rig & unrig tower to facilitate transmission line and elbow complex retuning (Item #2 on Warmus & Associates quote attached). |



**Outside  
Professional Services Costs**

| Section   | Question   | Response |
|---|--|----------|
| <b>Outside Project Management Services</b>            | Do you require outside project management services?                          | No       |
|   | Number of Hours  | N/A      |
|   | Explanation  | N/A      |
| <b>Outside RF consulting Engineering Services</b>     | Perform engineering study for new channel assignment and antenna development | Yes      |
|   | Prepare engineering section of Form FCC Construction Permit Application      | Yes      |
|   | For Auxiliary Facility   | No       |
|   | For Main Facility  | Yes      |
|   | Prepare engineering section of Form FCC License to Cover Application         | Yes      |
|   | For Auxiliary Facility   | No       |
|   | For Main Facility  | Yes      |
|   | Prepare request for Special Temporary Authority                              | No       |
|   | Quantity   | N/A      |
|   | Do you have Distributed Transmission System engineering services?            | N/A      |
|   | Critical Facility  | N/A      |
|   | Terrain-Shielded Facility  | N/A      |
|   |  |          |
| <b>Attorney and Other Outside Consulting Services</b> | Prepare and file Form FCC Construction Permit Application                    | Yes      |
|   | For Auxiliary Facility   | No       |
|   | For Main Facility  | Yes      |
|   | Prepare and file Form FCC License to Cover Application                       | Yes      |
|   | For Auxiliary Facility   | No       |
|   | For Main Facility  | Yes      |
|   |  |          |

|                                      |  |     |
|--------------------------------------|--|-----|
|                                      | Prepare request for Special Temporary Authority  | No  |
|                                      | Quantity   | N/A |
|                                      | NEPA Section 106 environmental review  | No  |
|                                      | Environmental Assessment   | No  |
|                                      | ASR Modification   | No  |
|                                      | 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 | No  |
| <b>RF Field Engineering Services</b> | Comprehensive coverage verification via field study  | No  |
|                                      | RF exposure measurements   | No  |
|                                      | Additional Field Engineering Service   | Yes |
|                                      | Number of Days   | 7   |
|                                      |  |     |

|               |   |
|---------------|---|
| Justification | Disassemble & deconstruct old high-power, channel-specific RF systems & plumbing. Tune and optimize antenna, elbow complex & line sections. Post-transition sweep test of entire system following retuning. Issue report. See vendor quote items 3 & 4 attached |
|---------------|---|

**Outside Professional Services Costs**      **Other Professional Services Expenses Not Listed**  
If not provided.

## Other Expenses

| Section                             | Question   | Response |
|-------------------------------------|--|----------|
| <b>AM Pattern Disturbance</b>       | Is an Impact Study needed?   | No       |
|                                     | Is Remediation needed?   | No       |
| <b>Facility Expenses</b>            | Name   | N/A      |
|                                     | Other Distributed Transmission System Expenses Not listed  | N/A      |
|                                     | Name   | N/A      |
|                                     | Is Notification of a Medical Facility required as a result of DTV broadcasting?                                      | Yes      |
| <b>Permit and Filing Costs</b>      | Local Zoning   | No       |
|                                     | Non-zoning permits   | No       |
|                                     | BLM or NFS Coordination  | No       |
|                                     | FCC Construction Permit Minor Change   | No       |
|                                     | FCC License to Cover Application   | No       |
|                                     | FCC Special Temporary Authority Application  | No       |
| <b>Other Miscellaneous Expenses</b> | 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? | No       |
|                                     | Does this relocation require Equipment Storage?  | No       |
|                                     | 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      |

|                           |   |
|---------------------------|---|
| <b>Other<br/>Expenses</b> | <b>Other Expenses Not Listed</b><br>Information not provided. |
|---------------------------|---|

## 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 |
|--|-----------------------------|---------------------|------------------------------|---------------|---------------------------|
| <b>Primary Transmitter ULXTE-10</b>                | <b>\$259,096.98</b>         | <b>\$257,726.98</b> |                              | <b>\$0.00</b> |                           |
| Dummy Load   | <i>\$12,322.77</i>          | \$12,322.77         | N/A                          | N/A           | N/A                       |
| Coaxial switch                                     | <i>\$4,900.95</i>           | \$4,900.95          | N/A                          | N/A           | N/A                       |
| Coaxial switch controller                          | <i>\$3,033.73</i>           | \$3,033.73          | N/A                          | N/A           | N/A                       |
| Control cable                                      | <i>\$253.44</i>             | \$253.44            | N/A                          | N/A           | N/A                       |
| 3" Rigid Conduit and Wiring (Cost per foot)        | \$2,080.00                  | \$1,960.00          | N/A                          | N/A           | N/A                       |
| Transformer 3 phase/480v - 150 KVA                 | \$25,550.00                 | \$24,300.00         | N/A                          | N/A           | N/A                       |
| UHF - Liquid Cooled Solid State Transmitter 6.6 kW | <i>\$210,956.09</i>         | \$210,956.09        | N/A                          | N/A           | N/A                       |
| <b>Auxiliary Transmitter ULXTE-10</b>              | <b>\$213,036.09</b>         | <b>\$212,916.09</b> |                              | <b>\$0.00</b> |                           |
| 3" Rigid Conduit and Wiring (Cost per foot)        | \$2,080.00                  | \$1,960.00          | N/A                          | N/A           | N/A                       |

|  |                     |              |     |             |     |
|--|---------------------|--------------|-----|-------------|-----|
| UHF - Liquid Cooled Solid State Transmitter 6.6 kW | <b>\$210,956.09</b> | \$210,956.09 | N/A | N/A         | N/A |
| <b>Sub-total</b>                                   | \$472,133.07        | \$470,643.07 | N/A | \$0.00      | N/A |
| <b>Total for all systems</b>                       | \$1,062,560.68      | \$601,590.68 | N/A | \$36,335.76 | N/A |

## Components

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 |
|---|-----------------------------|---------------------|------------------------------|--------------------|---------------------------|
| <b>Primary Antenna TUC-05-16/80H-1</b>  | <b>\$257,457.92</b>         | <b>\$10,127.92</b>  |                              | <b>\$6,071.07</b>  |                           |
| UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized | \$247,000.00                | \$0.00              | N/A                          | N/A                | N/A                       |
| Sweep test of existing antenna  | \$6,730.00                  | \$6,400.00          | N/A                          | \$2,343.15         | N/A                       |
| Test transition assembly  | <b>\$3,727.92</b>           | \$3,727.92          | N/A                          | \$3,727.92         | N/A                       |
| <b>Sub-total</b>  | <b>\$257,457.92</b>         | <b>\$10,127.92</b>  | N/A                          | <b>\$6,071.07</b>  | N/A                       |
| <b>Total for all systems</b>  | <b>\$1,062,560.68</b>       | <b>\$601,590.68</b> | N/A                          | <b>\$36,335.76</b> | N/A                       |

### Components

| Actual Information Description  | File Name                 |
|---|---------------------------|
| UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized | Information not provided. |



|                                |  |
|--------------------------------|--|
| Sweep test of existing antenna | <div> <div>Component Description:</div> <div>Sweep test of existing antenna &amp; line</div> <div>Amount:</div> <div>\$2,343.15</div> </div>   |
| Test transition assembly       | <div> <div>Component Description:</div> <div>Test transition assembly, item #2 on invoice, includes 1/2 of total shipping cost</div> <div>Amount:</div> <div>\$3,727.92</div> </div> |

## Cost Information

### Transmission Line

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

| Description                                | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification   |
|--|-----------------------------|----------------|------------------------------|-------------|---|
| Primary Transmission Line                  | \$21,544.69                 | \$21,544.69    |                              | \$5,609.76  |   |
| Adapter-transformer                        | <i>\$2,607.31</i>           | \$2,607.31     | N/A                          | \$2,676.24  | Vendor price increase, partially offset by shipping & handling costs that were less than estimated. |
| Reducer assembly                           | <i>\$2,933.52</i>           | \$2,933.52     | N/A                          | \$2,933.52  | N/A   |
| Hangers                                    | <i>\$1,245.71</i>           | \$1,245.71     | N/A                          | N/A         | N/A   |
| Flanged indoor transmission line elbows    | <i>\$4,253.71</i>           | \$4,253.71     | N/A                          | N/A         | N/A   |
| Flanged indoor transmission line           | <i>\$3,162.51</i>           | \$3,162.51     | N/A                          | N/A         | N/A   |
| Field Flanges                              | <i>\$933.71</i>             | \$933.71       | N/A                          | N/A         | N/A   |
| Un-Flanged indoor transmission line elbows | <i>\$2,970.51</i>           | \$2,970.51     | N/A                          | N/A         | N/A   |
| Un-Flanged indoor transmission line        | <i>\$3,437.71</i>           | \$3,437.71     | N/A                          | N/A         | N/A   |

|                              |                |              |     |             |     |
|------------------------------|----------------|--------------|-----|-------------|-----|
| <b>Sub-total</b>             | \$21,544.69    | \$21,544.69  | N/A | \$5,609.76  | N/A |
| <b>Total for all systems</b> | \$1,062,560.68 | \$601,590.68 | N/A | \$36,335.76 | N/A |

## Components

| Actual Information                      |   |
|---|---|
| Description                             | File Name   |
| Adapter-transformer                     | <p><b>Component Description:</b> Qty.(1) Adaptor Transformer, item #1 on Dielectric quote #45508 WNED Indoor transmission line, dated 23-Jun-2017</p> <p><b>Amount:</b> \$2,629.80</p> <p><b>Component Description:</b> Shipping &amp; handling, Dielectric Adaptor Transformer</p> <p><b>Amount:</b> \$46.44</p> |
| Reducer assembly                        | <p><b>Component Description:</b> Reducer assembly, item #1 on invoice, includes 1/2 of total shipping cost</p> <p><b>Amount:</b> \$2,933.52</p>   |
| Hangers                                 | Information not provided.   |
| Flanged indoor transmission line elbows | Information not provided.   |
| Flanged indoor transmission line        | Information not provided.   |
| Field Flanges                           | Information not provided.   |

|   |                           |
|---|---------------------------|
| Un-Flanged indoor<br>transmission line elbows | Information not provided. |
| Un-Flanged indoor<br>transmission line        | Information not provided. |

Cost  
Information

Tower Equipment and Rigging Costs

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

| Description                          | Predetermined<br>Cost Estimate | Estimated<br>Cost | Estimated<br>Cost<br>Justification | Actual<br>Cost | Actual Cost<br>Justification |
|--------------------------------------|--------------------------------|-------------------|------------------------------------|----------------|------------------------------|
| Primary<br>Tower<br>TOWER            | \$231,600.00                   | \$21,100.00       |                                    | \$0.00         |                              |
| Rigging                              | <i>\$21,100.00</i>             | \$21,100.00       | N/A                                | N/A            | N/A                          |
| Tall Tower<br>(greater than<br>500') | \$210,500.00                   | \$0.00            | N/A                                | N/A            | N/A                          |
| Sub-total                            | \$231,600.00                   | \$21,100.00       | N/A                                | \$0.00         | N/A                          |
| Total for all<br>systems             | \$1,062,560.68                 | \$601,590.68      | N/A                                | \$36,335.76    | 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 |
|---|-----------------------------|--------------------|---|--------------------|---------------------------|
| <b>Outside Professional Services</b>  | <b>\$59,275.00</b>          | <b>\$58,175.00</b> |   | <b>\$24,654.93</b> |                           |
| Additional Field Engineering Service, 7 Days  | <i>\$36,925.00</i>          | \$36,925.00        | 5 days, \$5275 /day f/5-man crew for disassembly & deconstruction of old high-power channel-specific RF systems & plumbing. 2 days, \$5275 /day f/5-man crew to tune & optimize antenna/line & conduct post-transition sweep. See vendor quote items 3 & 4 attached | \$20,321.93        | 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<br>- Prepare and<br>File FCC Form<br>2100 (main),<br>Construction<br>Permit<br>Application  | \$5,260.00     | \$5,000.00   | N/A | \$735.00    | N/A   |
| Prepare<br>engineering<br>section of FCC<br>Form 2100<br>(main),<br>License to<br>Cover<br>Application    | \$1,580.00     | \$1,500.00   | N/A | N/A         | N/A   |
| Prepare<br>engineering<br>section of FCC<br>Form 2100<br>(main),<br>Construction<br>Permit<br>Application | \$3,155.00     | \$3,000.00   | N/A | \$3,175.00  | Included<br>engineering<br>study and<br>calculation<br>of<br>transmission<br>system<br>losses on<br>post repack<br>channel in<br>order to<br>insure<br>accuracy |
| Prepare and<br>or review<br>reimbursement<br>form   | \$2,630.00     | \$2,500.00   | N/A | \$423.00    | N/A   |
| Perform<br>engineering<br>study for new<br>channel<br>assignment<br>and antenna<br>development            | \$7,360.00     | \$7,000.00   | N/A | N/A         | N/A   |
| <b>Sub-total</b>  | \$59,275.00    | \$58,175.00  | N/A | \$24,654.93 | N/A   |
| <b>Total for all<br/>systems</b>  | \$1,062,560.68 | \$601,590.68 | N/A | \$36,335.76 | N/A   |

## Components

| Actual Information   |   |   |
|--|---|---|
| Description  | File Name   |   |
| Additional Field Engineering Service, 7 Days   | <b>Component Description:</b><br><br><b>Amount:</b> | Additional field engineering services, Warmus & Associates original quote #TS17-039 Item #3 (partial).<br>\$20,321.93 |
| Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application     | Information not provided.                           |   |
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application | <b>Component Description:</b><br><br><b>Amount:</b> | Review, preparation and filing of Construction Permit application. Reflects items 1-3 on invoice.<br>\$735.00         |
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application      | Information not provided.                           |   |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application   | <b>Component Description:</b><br><br><b>Amount:</b> | Engineering study /evaluation and preparation of Construction Permit Application - engineering section<br>\$3,175.00  |



|  |  |
|--|--|
| Prepare and or review reimbursement form                                     | <div> <div> <b>Component Description:</b> </div> <div> Review and file FCC form 399. Reflects items 4 &amp; 5 on invoice </div> </div> <div> <b>Amount:</b> </div> <div> \$423.00 </div> |
| Perform engineering study for new channel assignment and antenna development | 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 |
|--|-----------------------------|---------------------|------------------------------|--------------------|---------------------------|
| <b>Other Expenses</b>  | <b>\$20,550.00</b>          | <b>\$20,000.00</b>  |                              | <b>\$0.00</b>      |                           |
| DTV Medical Facility Notification  | \$11,550.00                 | \$11,000.00         | N/A                          | N/A                | N/A                       |
| Disposal Costs (for equipment and other waste, net of any salvage value) | <i>\$5,000.00</i>           | \$5,000.00          | N/A                          | N/A                | N/A                       |
| Develop and air announcement of upcoming channel change                  | <i>\$2,500.00</i>           | \$2,500.00          | N/A                          | N/A                | N/A                       |
| MVPD Notification of Channel Change                                      | <i>\$1,500.00</i>           | \$1,500.00          | N/A                          | N/A                | N/A                       |
| <b>Sub-total</b>   | <b>\$20,550.00</b>          | <b>\$20,000.00</b>  | <b>N/A</b>                   | <b>\$0.00</b>      | <b>N/A</b>                |
| <b>Total for all systems</b>   | <b>\$1,062,560.68</b>       | <b>\$601,590.68</b> | <b>N/A</b>                   | <b>\$36,335.76</b> | <b>N/A</b>                |

### Components

Information not provided.

|                             |                              |  |                       |
|-----------------------------|------------------------------|--|-----------------------|
| <b>Cost<br/>Information</b> | <b>Grand Total</b>           |  |                       |
|                             |                              | <b>Predetermined<br/>Cost Estimate</b> | <b>Estimated Cost</b> |
|                             |                              |  | <b>Actual Cost</b>    |
|                             | <b>Total for all systems</b> | \$1,062,560.68                         | \$601,590.68          |
|                             |                              |  | \$36,335.76           |

|                             |  |                 |
|-----------------------------|--|-----------------|
| <b>Reimbursement Status</b> | <b>Question</b>  | <b>Response</b> |
|                             | 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"> <li>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.</li> <li>2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> <li>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.</li> </ol> |          |

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><b>Joseph Charles Puma</b><br/> <i>Vice President Engineering and Technology</i></p> <p>05/07/2019</p> |

| 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 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 AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).  |          |
|               |  | <ol style="list-style-type: none"> <li>1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity.</li> <li>2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.</li> <li>3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.</li> </ol> |          |

4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD) .
6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.



|  |   |
|--|---|
| <p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.</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><b>Joseph Charles Puma</b><br/> <i>Vice President - Engineering and Technology</i></p> <p>05/07/2019</p> |

## Attachments