

(REFERENCE COPY - Not for submission)

## FCC Form 399: Reimbursement Request

**69271** Service: **DTV** Facility Call **WEKW-TV** Channel: 18 (UHF) Sign:

ID:

File 0000027760

Number:

FRN: 0021895115 Date 10/26

> Submitted: /2017

#### **Applicant** Information

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

| Applicant  | Address  | Phone                       | Email                 | Applicant<br>Type  |
|--|--|-----------------------------|-----------------------|--------------------|
| NEW HAMPSHIRE PUBLIC BROADCASTING Doing Business As: NEW HAMPSHIRE PUBLIC BROADCASTING | Dorinda Ouellette 268 MAST ROAD DURHAM, NH 03824 United States | +1<br>(603)<br>868-<br>4304 | douellette@nhptv. org | Not-for-<br>Profit |

## Reimbursement Contact Name and Information Reimbursement Contact Information

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

#### **Preparer** Contact Information

#### **Preparer Contact Name and Information**

| Applicant   | Address   | Phone                | Email                         |
|---|---|----------------------|-------------------------------|
| Ryan Wilhour ConsultingEngineer Kessler and Gehman Associates, Inc. | 507 NW 60th<br>ST<br>STE D<br>Gainesville, FL<br>32607<br>United States | +1 (352)<br>332-3157 | ryan@kesslerandgehman.<br>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   | Replace transmitter, antenna and transmission line. Acquire interim antenna and line for continued operation during construction and duration of the assigned phase. Map and analyze tower; design and implement modifications if required. |

#### **Transmitters**

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

## Auxiliary Transmitter

#### **Add Transmitter Information**

| Section                          | Question   | Response              |
|----------------------------------|--|-----------------------|
| Existing Transmitter Description | Type of change   | Purchase<br>New       |
|                                  | Use  | Auxiliary<br>(Backup) |
|                                  | Description of Use   | Auxiliary             |
|                                  | 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  | NV7250                |
|                                  | Year   | 2002                  |
|                                  | Туре   | Solid State           |
|                                  | Solid State Cooling  | Liquid<br>Cooled      |
|                                  | Solid State Power Capacity                                 | 4 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? | No   |
|                 | Manufacturer                              |  |
|                 | Model                                     | TBD  |
|                 | Transmitter Type                          | Solid State  |
|                 | Solid State Cooling                       | Liquid Cooled  |
|                 | Solid State Power capacity                | 4 kW   |
|                 | Justification for New Transmitter         | The manufacturer of the existing transmitter advises that the transmitter cannot be retuned to the assigned channel. See attachment. |

## Auxiliary Transmitter

#### **Other Transmitter Costs**

| Section            | Question                              | Response |
|--------------------|---------------------------------------|----------|
| Electrical Service | Service Entrance (3 phases 800A 208V) | No       |
|                    | Switchgear (industrial 800 amp)       | Yes      |
|                    | Transformer (480V)                    | Yes      |
|                    | Power                                 | 150 kVA  |
|                    | Rigid Conduit and Wiring              | Yes      |
|                    |                                       |          |

|   | Size   | 2 inches   |
|---|--|------------|
|   | Length   | 100.0 feet |
|   | 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        |
|   |  |            |

Auxiliary Transmitter **Other Transmitter Cost Not Listed** 

**Transmitter** Information not provided.

## Primary Transmitter

## **Existing Transmitter Information**

| Section                          | Question   | Response          |
|----------------------------------|--|-------------------|
| Existing Transmitter Description | 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               |
| Existing Transmitter             | Manufacturer   |                   |
| Manufacturer and Type            | Model  | AT7105K0          |
|                                  | Year   | 2011              |
|                                  | Туре   | Solid State       |
|                                  | Solid State Cooling  | Air Cooled        |
|                                  | Solid State Power Capacity                                 | 5 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? | No   |
|                 | Manufacturer                              |  |
|                 | Model                                     | TBD  |
|                 | Transmitter Type                          | Solid State  |
|                 | Solid State Cooling                       | Air Cooled   |
|                 | Solid State Power capacity                | 5 kW   |
|                 | Justification for New Transmitter         | The manufacturer of the existing transmitter advises that the transmitter cannot be retuned to the assigned channel. See attachment. |

## Primary Transmitter

#### **Other Transmitter Costs**

| • | Section            | Question                              | Response |
|---|--------------------|---------------------------------------|----------|
|   | Electrical Service | Service Entrance (3 phases 800A 208V) | No       |
|   |                    | Switchgear (industrial 800 amp)       | Yes      |
|   |                    | Transformer (480V)                    | Yes      |
|   |                    | Power                                 | 150 kVA  |
|   |                    | Rigid Conduit and Wiring              | Yes      |
|   |                    |                                       |          |

|   | Size   | 3 inches   |
|---|--|------------|
|   | Length   | 100.0 feet |
|   | 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        |
|   |  |            |

## Primary Transmitter

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

| Name                          | Description  |
|-------------------------------|--|
| Additional Interior RF System | Interior RF System Existing Transmitter to Interim Transmission line |
| Standby Exciter and Switch    | Standby Exciter with Automatic Change Over Switch                    |

#### **Antennas**

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

#### **Existing Antenna Information**

| Section                      | Question   | Response            |
|------------------------------|--|---------------------|
| Existing Antenna Description | Type of change   | Purchase<br>New     |
|                              | 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? | n another No No Yes |
|                              | 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   | Top Mount           |
|                              | Antenna position in stack  | Not in Stack        |
|                              | Polarization   | Horizontal          |
|                              | Туре   | Broadband<br>Panel  |
|                              | Number of Stations Supported                                     | 1                   |
|                              | Number of Panels   | 48                  |
|                              | Design power capacity in use                                     | 35.0 %              |
|                              | Lower Limit  | 470.00 MHz          |
|                              | Upper Limit  | 860.00 MHz          |
|                              | Other Antenna Type   | N/A                 |
|                              | ERP: (Effective Radiated Power)                                  | 112.0 kW            |

| Manufacturer |                  |
|--------------|------------------|
| Model        | 9551310-<br>4660 |
| Year         | 2002             |

#### **New Antenna Costs**

| Section                 | Question   | Response                      |
|-------------------------|--|-------------------------------|
| New Antenna Description | Use  | Primary<br>(Main)             |
|                         | Description of Use   | N/A                           |
|                         | Change Type  | Purchase<br>New               |
|                         | Is this a request for upgraded equipment?                            | Primary (Main)  N/A  Purchase |
|                         | Ownership  |                               |
|                         | Owner  | N/A                           |
|                         | Is antenna shared?   | No                            |
|                         | Is antenna directional?  | No                            |
|                         | Will antenna be located on or in close proximity to an antenna farm? | No                            |
| New Antenna             | Class  | Full Power                    |
| Manufacturer and Types  | Mounting   | Top Mount                     |
|                         | Antenna position in stack  | Not in Stack                  |
|                         | Polarization   | Horizontal                    |
|                         | Туре   |                               |
|                         | 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)                                      | 66.0 kW                       |
|                         | Manufacturer   |                               |
|                         | Model  | TBD                           |

| Year                          | 2018  |
|-------------------------------|---|
| Justification for New Antenna | This is a large change in channels from 49 to 18 and the existing primary broadband antenna has not been performance tested on the assigned channel. The station will use existing if possible. ERP is from 1% expansion. |

#### **Other Antenna Costs**

| Section                        | Question  | Response          |
|--------------------------------|---|-------------------|
| Combiner for Shared<br>Antenna | Do you need a Combiner for a Shared Antenna?                          | No                |
|                                | Туре  |                   |
|                                | 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<br>Channel |
|                                |   |                   |

|                          | Feed Line Size  | 4 1/16 inches inches |
|--------------------------|---|----------------------|
| Side Mount Brackets      | Do you require the separate purchase of side mount brackets for a high power antenna?                       | No                   |
| Pattern Scatter Analysis | Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? | No                   |
| Sweep Test               | Do you require the sweep testing of transmission line and antenna?  | Yes                  |

#### **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<br>New    |
|                         | Ownership  | Owned              |
|                         | Owner  | N/A                |
|                         | Is antenna shared?   | No                 |
|                         | 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 Type   | Mounting   | Side Mount         |
|                         | Antenna position in stack  | Not in Stack       |
|                         | Polarization   | Horizontal         |
|                         | Туре   | Slotted<br>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)                                      | 112.0 kW           |
|                         | Manufacturer   |                    |
|                         | Model  | TBD                |
|                         | Year   | 2018               |
|                         |  |                    |

| Justification for New Antenna | An interim antenna is necessary to keep station on the air during primary antenna replacement and for the duration of |
|-------------------------------|---|
|                               | the assigned phase. Station will attempt to rent if renting is available at time of acquisition.                      |

#### Interim Antenna

#### **Other Antenna Costs**

| Section                  | Question  | Response     |
|--------------------------|---|--------------|
| Elbow Complex            | Do you require the separate purchase of the Elbow Complex?  | Yes          |
|                          | Broadband or Single Channel?  | S            |
|                          | Feed Line Size  | 3 1/8 inches |
| 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? | Yes          |
| 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 <sup>Seffien</sup>    | Question  | Response |
|------------------------------------|---|----------|
| Transmission Line Related Expenses | Do you have transmission line related expenses? | Yes      |

# Primary Transmission Line

#### **Existing Transmission Line**

| n Line<br>Section                      | Question   | Response            |
|--|--|---------------------|
| Existing Transmission Line Description | Type of change   | Purchase<br>New     |
|  | Use  | Primary<br>(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                  | Manufacturer   |                     |
| Line Manufacturer and Type             | Туре   | Rigid               |
|  | Diameter   | 4 1/16 inches       |
|  | Other Diameter   | N/A                 |
|  | Segment Length   | 19 3/4 inches       |
|  | Other Segment Length   | N/A                 |
|  | Number of parallel runs  | 1                   |
|  | Length   | 475 feet<br>per run |

# Primary Transmission Line

#### **New Transmission Line**

| New Transmission Line |
|-----------------------|
| Costs                 |

| Question                                  | Response            |
|---|---------------------|
| Use                                       | Primary<br>(Main)   |
| Description of Use                        | N/A                 |
| Change Type                               | Purchase<br>New     |
| Is this a request for upgraded equipment? | No                  |
| Туре                                      | Rigid               |
| Diameter                                  | 4 1/16 inches       |
| Other Diameter                            | N/A                 |
| Segment Length                            | 20 inches           |
| Other Segment Length                      | N/A                 |
| Number of parallel runs                   | 1                   |
| Length                                    | 480 feet per<br>run |

| Justification for New Transmission Line | The line might be compatible with the assigned channel. A new line is included in case the performance is unacceptable on the assigned channel. The station will utilize the existing line |
|---|--|
|   | existing line if the sweep   |
|   | tests confirm acceptable   |

performance.

Other Transmission Line Expenses Not Listed Primary

Transmission loine tion not provided.

#### **New Transmission Line**

| Inte | rım |
|------|-----|
|      |     |
| 1116 |     |
|      |     |

| Transmission                   | n Line<br>Section  | Question                                | Response   |
|--------------------------------|--------------------|---|--|
| New Transmission Line<br>Costs | Use                | Interim                                 |  |
|                                | Description of Use | N/A                                     |  |
|                                | Change Type        | Purchase<br>New                         |  |
|                                |                    | Туре                                    | Flexible Air   |
|                                |                    | Diameter                                | 3 inches   |
|                                |                    | Segment Length                          | N/A  |
|                                |                    | Other Segment Length                    |  |
|                                |                    | Number of parallel runs                 | 1  |
|                                | Length             | 380 feet per<br>run                     |  |
|                                |                    | Justification for New Transmission Line | An interim transmission line is necessary to keep station on the air during primary line replacement. Station will attempt to rent if renting is available at time of acquisition. |

Interim Other Transmission Line Expenses Not Listed Transmission Line tion not provided.

#### Tower Equipment And Rigging Costs

| Section                                     | Question  | Response |
|---|---|----------|
| Tower Equipment or<br>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<br>Existing   |
|   | Tower Use   | Primary<br>(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?            | No                   |
|   | Is tower compliant with Rev G?                          | Yes                  |
| Existing Tower Structure Registration               | Do you have a tower registration number?                | No                   |
|   | ASR Number  |                      |
| Coordinates (NAD83 ( North American Datum of 1983)) | Latitude (NAD83)  | 43° 01'<br>59.9" N-  |
|   | Longitude (NAD83)                                       | 072° 22'<br>02.0" W- |
|   | Overall Structure Height                                | 499.99 feet          |
|   | Support Structure Height                                | 455.05 feet          |
|   | Ground Elevation Above Mean Sea Level (AMSL)            | 1517.04 fee          |

| Structure Type   | TOWER - Free Standing or Guyed Structure |
|------------------|--|
| Tower Owner      | New Hampshire Public Broadcasting        |
| Date Constructed | 01/01/1967                               |

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 |
|-------------|-----------|---------|
| 48440       | WEVN      | FM      |
| 48413       | WVMA-CD   | DTV     |
| 46334       | WKKN      | FM      |
| 36834       | WKNE      | FM      |

#### Other Types of Users

| Users           |  |
|-----------------|--|
| 12 mwave dishes |  |

#### Primary Tower

## **Tower Modification Costs**

| Section           | Question   | Response  |
|-------------------|--|---|
| Engineering Study | Please what type of engineering study is required, if any: | Study needed<br>for<br>undocumented<br>/poorly<br>documented<br>tower |

| are needed: Reinforcements needed | Tower Reinforcements | Please select whether tower reinforcements are needed: | Major<br>Reinforcements<br>needed |
|-----------------------------------|----------------------|--|-----------------------------------|
|-----------------------------------|----------------------|--|-----------------------------------|

## Primary Tower

## **Tower Rigging Costs**

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

## Primary Tower

## Other Tower Expenses Not Listed

Information not provided.

#### Outside Professional

| Section  | Question   | Response  |
|--|--|---|
| Services Costs Outside Project Management Services | Do you require outside project management services?                          | Yes   |
|  | Number of Hours  | 195   |
|  | Explanation  | It will be necessary to schedule and coordinate multiple vendors, complete progress reports, and update Schedule 399. Station does not have available personnel or personnel trained in project management for such complex projects. |
| Outside RF consulting<br>Engineering Services      | Perform engineering study for new channel assignment and antenna development | Yes   |
|  | Prepare engineering section of Form FCC Construction Permit Application      | Yes   |
|  | For Auxiliary Facility   | No  |
|  | For Main Facility  | Yes   |
|  | Prepare engineering section of Form FCC License to Cover Application         | Yes   |
|  | For Auxiliary Facility   | No  |
|  | For Main Facility  | Yes   |
|  | Prepare request for Special Temporary Authority                              | Yes   |

|                                       | Quantity   | 1   |
|---------------------------------------|--|-----|
|                                       | Do you have Distributed Transmission System engineering services?                          | N/A |
|                                       | Critical Facility  | N/A |
|                                       | Terrain-Shielded Facility  | N/A |
| Attorney and Other Outside Consulting | Prepare and file Form FCC Construction Permit Application                                  | Yes |
| Services                              | For Auxiliary Facility   | No  |
|                                       | For Main Facility  | Yes |
|                                       | Prepare and file Form FCC License to Cover Application                                     | Yes |
|                                       | For Auxiliary Facility   | No  |
|                                       | For Main Facility  | Yes |
|                                       | Prepare request for Special Temporary Authority  | 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                                 | 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<br>Services      | Comprehensive coverage verification via field study  | Yes |
|                                       | RF exposure measurements   | No  |
|                                       | Additional Field Engineering Service   | Yes |
|                                       |  |     |

| Number of Days | 12  |
|----------------|---|
| Justification  | It will be necessary to survey the site, plan the equipment, develop specifications for purchasing, and oversee multiple vendor RF projects. Station does not have available personnel or personnel trained in such services. |

Outside
Professional Services Expenses Not Listed
Professional Services ©qstsided.

# 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<br>Expenses Not listed   | N/A      |
|                                 | Name   | N/A      |
|                                 | Is Notification of a Medical Facility required as a result of DTV broadcasting?                                      | Yes      |
| Permit and Filing Costs         | Local Zoning   | No       |
|                                 | Non-zoning permits   | No       |
|                                 | BLM or NFS Coordination  | No       |
|                                 | FCC Construction Permit Minor Change   | No       |
|                                 | FCC License to Cover Application   | No       |
|                                 | FCC Special Temporary Authority Application  | No       |
| Other Miscellaneous<br>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?  | 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      |

Other Expenses Not Listed

**Expenses** 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<br>Cost | Estimated<br>Cost<br>Justification | Actual<br>Cost | Actual Cost<br>Justification |
|---|-----------------------------|-------------------|------------------------------------|----------------|------------------------------|
| Primary<br>Transmitter<br>TBD                                 | \$470,450.00                | \$455,500.00      |                                    | \$0.00         |                              |
| UHF - Air<br>Cooled<br>Solid State<br>Transmitter<br>4 - 6 kW | \$236,500.00                | \$225,000.00      | N/A                                | N/A            | N/A                          |
| Switchgear<br>- industrial<br>800 amp                         | \$38,200.00                 | \$36,300.00       | N/A                                | N/A            | N/A                          |
| Transformer<br>3 phase<br>/480v - 150<br>KVA                  | \$25,550.00                 | \$24,300.00       | N/A                                | N/A            | N/A                          |
| Standby<br>Exciter and<br>Switch                              | \$25,000.00                 | \$25,000.00       | N/A                                | N/A            | N/A                          |
| Additional<br>Interior RF<br>System                           | \$140,000.00                | \$140,000.00      | N/A                                | N/A            | N/A                          |
| 3" Rigid<br>Conduit and<br>Wiring<br>(Cost per<br>foot)       | \$5,200.00                  | \$4,900.00        | N/A                                | N/A            | N/A                          |
| Auxiliary<br>Transmitter<br>TBD                               | \$291,350.00                | \$288,100.00      |                                    | \$0.00         |                              |
| 2" Rigid<br>Conduit and<br>Wiring<br>(Cost per<br>foot)       | \$2,600.00                  | \$2,500.00        | N/A                                | N/A            | N/A                          |

| Total for all   | \$2,032,590.00                      | \$1,955,980.00               | N/A        | \$10,627.40   | N/A<br>N/A |
|---|-------------------------------------|------------------------------|------------|---------------|------------|
| UHF -<br>Liquid<br>Cooled<br>Solid State<br>Transmitter<br>4 kW | <b>\$225,000.00</b><br>\$761,800.00 | \$225,000.00<br>\$743,600.00 | N/A<br>N/A | N/A<br>\$0.00 | N/A        |
| Switchgear<br>- industrial<br>800 amp                           | \$38,200.00                         | \$36,300.00                  | N/A        | N/A           | N/A        |
| Transformer<br>3 phase<br>/480v - 150<br>KVA                    | \$25,550.00                         | \$24,300.00                  | N/A        | N/A           | 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<br>Cost Estimate | Estimated<br>Cost | Estimated<br>Cost<br>Justification | Actual<br>Cost | Actual Cost<br>Justification |
|--|--------------------------------|-------------------|------------------------------------|----------------|------------------------------|
| Interim<br>Antenna<br>TBD  | \$132,140.00                   | \$125,800.00      |                                    | \$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<br>brackets for<br>high power<br>antennas (if<br>not included<br>in antenna<br>base cost)     | \$23,150.00                    | \$22,000.00       | N/A                                | N/A            | N/A                          |
| Elbow<br>complex,<br>single<br>channel, at<br>antenna<br>input, per 3<br>1/8.<br>feedline (if<br>needed) | \$7,600.00                     | \$7,400.00        | N/A                                | N/A            | N/A                          |

| UHF - Lower Power Side Mount, One station antenna - medium power (50- 200 kW), horizontally polarized       | \$89,400.00    | \$85,000.00    | N/A | \$0.00      | N/A |
|---|----------------|----------------|-----|-------------|-----|
| Sweep test of existing antenna  | \$6,730.00     | \$6,400.00     | N/A | N/A         | N/A |
| Primary<br>Antenna<br>TBD   | \$263,300.00   | \$250,500.00   |     | \$0.00      |     |
| Sweep test of existing antenna  | \$6,730.00     | \$6,400.00     | N/A | N/A         | N/A |
| UHF - High<br>Power Top<br>Mount (200-<br>1000 kW),<br>One station<br>antenna,<br>horizontally<br>polarized | \$247,000.00   | \$235,000.00   | N/A | N/A         | N/A |
| Elbow<br>complex,<br>single<br>channel, at<br>antenna<br>input, per 4<br>1/16.<br>feedline (if<br>needed)   | \$9,570.00     | \$9,100.00     | N/A | N/A         | N/A |
| Sub-total   | \$395,440.00   | \$376,300.00   | N/A | \$0.00      | N/A |
| Total for all systems   | \$2,032,590.00 | \$1,955,980.00 | N/A | \$10,627.40 | N/A |
|   |                |                |     |             |     |

#### Components

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<br>Cost Estimate | Estimated<br>Cost | Estimated<br>Cost<br>Justification | Actual<br>Cost | Actual Cost<br>Justification |
|--|--------------------------------|-------------------|------------------------------------|----------------|------------------------------|
| Interim<br>Transmission<br>Line                          | \$22,420.00                    | \$21,280.00       |                                    | \$0.00         |                              |
| Flexible Air<br>Transmission<br>Line -<br>dielectric, 3" | \$22,420.00                    | \$21,280.00       | N/A                                | N/A            | N/A                          |
| Primary<br>Transmission<br>Line                          | \$68,160.00                    | \$64,800.00       |                                    | \$0.00         |                              |
| Rigid<br>Transmission<br>Line -<br>copper, 4 1<br>/16"   | \$68,160.00                    | \$64,800.00       | N/A                                | N/A            | N/A                          |
| Sub-total  | \$90,580.00                    | \$86,080.00       | N/A                                | \$0.00         | N/A                          |
| Total for all systems                                    | \$2,032,590.00                 | \$1,955,980.00    | N/A                                | \$10,627.40    | N/A                          |

#### Components

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 Tower TOWER  | \$531,500.00                   | \$505,000.00      |                                    | \$1,991.40     |                                 |
| 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                                | \$1,991.40     | Tower<br>Structural<br>Analysis |
| Short Tower (less than 500')   | \$84,200.00                    | \$80,000.00       | N/A                                | N/A            | N/A                             |
| Major tower reinforcement /modifications   | \$421,000.00                   | \$400,000.00      | N/A                                | N/A            | N/A                             |
| Sub-total  | \$531,500.00                   | \$505,000.00      | N/A                                | \$1,991.40     | N/A                             |
| Total for all systems  | \$2,032,590.00                 | \$1,955,980.00    | N/A                                | \$10,627.40    | N/A                             |

#### Components

| <b>Actual Information</b> |           |  |
|---------------------------|-----------|--|
| Description               | File Name |  |

| Tower mapping for an undocumented/poorly documented tower and preparation of documentation | Component Description:    | Legal services related to Towe |
|--|---------------------------|--------------------------------|
| necessary for tower load   |                           | Structural                     |
| study  | Amount:                   | Analysis<br>\$354.90           |
|  |                           |                                |
|  | Component Description:    | Legal services                 |
|  |                           | related to Towe                |
|  |                           | Structural<br>Analysis         |
|  | Amount:                   | \$136.50                       |
|  |                           |                                |
|  | Component Description:    | Structural                     |
|  |                           | Analysis for proposed          |
|  |                           | antenna loading                |
|  | Amount:                   | \$1,500.00                     |
| Short Tower (less than 500')   | Information not provided. |                                |
| Major tower reinforcement  | 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<br>Cost Estimate | Estimated<br>Cost | Estimated<br>Cost<br>Justification | Actual<br>Cost | Actual Cost<br>Justification   |
|--|--------------------------------|-------------------|------------------------------------|----------------|--|
| Outside<br>Professional<br>Services  | \$169,720.00                   | \$162,000.00      |                                    | \$8,636.00     |  |
| Project<br>management of<br>the transition   | \$30,810.00                    | \$29,250.00       | N/A                                | \$25.00        | N/A  |
| Prepare and or review reimbursement form   | \$2,630.00                     | \$2,500.00        | N/A                                | N/A            | N/A  |
| Address<br>transition<br>timing and<br>coordination<br>issues w/ other<br>stations and<br>wireless | \$2,630.00                     | \$2,500.00        | N/A                                | \$3,361.00     | Prep Original Form 399. Includes additional consultation regarding reimbursable items. |
| Perform engineering study for new channel assignment and antenna development                       | \$7,360.00                     | \$7,000.00        | N/A                                | \$3,250.00     | N/A  |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application               | \$3,155.00                     | \$3,000.00        | N/A                                | \$2,000.00     | FCC CP<br>application  |

| Prepare engineering section of FCC Form 2100 (main), License to Cover Application      | \$1,580.00  | \$1,500.00  | N/A | N/A | N/A |
|--|-------------|-------------|-----|-----|-----|
| Prepare request for Special Temporary Authorization                                    | \$2,050.00  | \$1,500.00  | 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 |
| Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application    | \$2,365.00  | \$2,250.00  | N/A | N/A | N/A |
| Attorney Fees - Prepare and File request for Special Temporary Authorization           | \$3,680.00  | \$3,500.00  | 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 |
| Additional Field<br>Engineering<br>Service, 12<br>Days                                 | \$24,000.00 | \$24,000.00 | N/A | N/A | N/A |
|  |             |             |     |     |     |

| Total for all | \$2,032,590.00 | \$1,955,980.00 | N/A | \$10,627.40 | N/A |
|---------------|----------------|----------------|-----|-------------|-----|
| systems       |                |                |     |             |     |

### Components

| File Name                       |   |
|---------------------------------|---|
| Component Description:  Amount: | One half the cost of checks for the reimbursement bank account, shared between repack stations WEKW and WLED \$25.00                        |
| Information not provided.       |   |
| Component Description:  Amount: | Prep of original<br>Form 399 for<br>reimbursement<br>\$2,500.00   |
| Component Description:  Amount: | Additional consultation regarding reimbursable items. \$861.00  |
| Component Description:  Amount: | Engineering study for new channel assignment and antenna development \$3,250.00   |
|                                 | Component Description:  Information not provided.  Component Description:  Amount:  Component Description:  Amount:  Component Description: |

| Prepare engineering<br>section of FCC Form 2100<br>(main), Construction Permit<br>Application   | Component Description: Amount: | FCC CP<br>application for main<br>facility<br>\$2,000.00 |
|---|--------------------------------|--|
| Prepare engineering<br>section of FCC Form 2100<br>(main), License to Cover<br>Application      | Information not provided.      |  |
| Prepare request for Special<br>Temporary Authorization  | Information not provided.      |  |
| Attorney Fees - Prepare<br>and File FCC Form 2100<br>(main), Construction Permit<br>Application | Information not provided.      |  |
| Attorney Fees -Prepare<br>and File FCC Form 2100<br>(main), License to Cover<br>Application     | Information not provided.      |  |
| Attorney Fees - Prepare<br>and File request for Special<br>Temporary Authorization              | Information not provided.      |  |
| Comprehensive coverage verification via field study, if needed                                  | Information not provided.      |  |
| Additional Field Engineering Service, 12 Days   | 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<br>Cost Estimate | Estimated<br>Cost | Estimated<br>Cost<br>Justification | Actual<br>Cost | Actual Cost<br>Justification |
|--|--------------------------------|-------------------|------------------------------------|----------------|------------------------------|
| Other<br>Expenses  | \$83,550.00                    | \$83,000.00       |                                    | \$0.00         |                              |
| DTV Medical<br>Facility<br>Notification                                  | \$11,550.00                    | \$11,000.00       | N/A                                | N/A            | N/A                          |
| Develop and air announcement of upcoming channel change                  | \$0.00                         | \$0.00            | N/A                                | N/A            | N/A                          |
| Equipment Delivery and Handling Charges                                  | \$60,000.00                    | \$60,000.00       | N/A                                | N/A            | N/A                          |
| Disposal Costs (for equipment and other waste, net of any salvage value) | \$10,000.00                    | \$10,000.00       | N/A                                | N/A            | N/A                          |
| MVPD Notification of Channel Change                                      | \$2,000.00                     | \$2,000.00        | N/A                                | N/A            | N/A                          |
| Sub-total  | \$83,550.00                    | \$83,000.00       | N/A                                | \$0.00         | N/A                          |
| Total for all systems  | \$2,032,590.00                 | \$1,955,980.00    | N/A                                | \$10,627.40    | N/A                          |

### Components

Information not provided.

# Cost Information

### **Grand Total**

|                       | Predetermined<br>Cost Estimate | Estimated Cost | Actual Cost |
|-----------------------|--------------------------------|----------------|-------------|
| Total for all systems | \$2,032,590.00                 | \$1,955,980.00 | \$10,627.40 |

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

Section Question Response

## Submission of Estimated Expenses Statements

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

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

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

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

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Robert Gehman Consulting Engineer

10/26/2017

Section Question Response

# Submission of Actual Cost Documentation Statements

WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).

- 1. The Authorized
  Person signing
  below certifies and
  represents that he
  /she is authorized to
  submit this TV
  Broadcaster
  Relocation Fund
  Reimbursement
  Form on behalf of
  the above-named
  entity.
- The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.
- The above-named entity acknowledges that all certifications and attached documentation are considered material representations.

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

- 8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
- 9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.

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

С

10/26/2017

#### **Attachments**