



(REFERENCE COPY - Not for submission)

DTV Engineering STA Application

File Number: 0000080766 | Submit Date: 08/30/2019 | Call Sign: KWQC-TV | Facility ID: 6885 | FRN: 0018223693 | State: Iowa | City: DAVENPORT

Service: DTV | Purpose: Engineering STA | Status: Granted | Status Date: 09/04/2019 | Expiration Date:

Filing Status: InActive

General Information

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

Fees, Waivers, and Exemptions

| Section | Question   | Response |
|---------|--|----------|
| Fees    | Is the applicant exempt from FCC application Fees?             | No       |
|         | Indicate reason for fee exemption:                             |          |
| Waivers | Does this filing request a waiver of the Commission's rule(s)? | No       |
|         | Total number of rule sections involved in this waiver request: |          |

| Application Type | Fee Code | Fee Amount |
|------------------|----------|------------|
| Engineering STA  | MGT      | \$200.00   |
| Total            |          | \$200.00   |

Applicant  
Information

Applicant Name, Type, and Contact Information

| Applicant   | Address  | Phone                 | Email                       | Applicant Type |
|---|--|-----------------------|-----------------------------|----------------|
| GRAY TELEVISION LICENSEE, LLC<br>Applicant<br>Doing Business As: GRAY TELEVISION<br>LICENSEE, LLC | 4370 PEACHTREE<br>ROAD, NE<br>ATLANTA, GA 30319<br>United States | +1 (404) 504-<br>9828 | robert.<br>folliard@gray.tv | Other          |

Authorization Holder Name

Check box if the Authorization Holder name is being updated because of the sale (or transfer of control) of the Authorization(s) to another party and for which proper Commission approval has not been received or proper notification provided.

Contact  
Representatives  
(2)

| Contact Name  | Address   | Phone             | Email                           | Contact Type             |
|---|---|-------------------|---------------------------------|--------------------------|
| <b>P.E. Joseph M. Davis M. Davis , P.E. .</b><br>Chesapeake RF Consultants, LLC | 207 Old Dominion Road<br>Yorktown, VA 23692<br>United States              | +1 (703) 650-9600 | Joseph.Davis@RF-consultants.com | Technical Representative |
| <b>Joan Stewart Stewart</b><br>Wiley Rein LLP                                   | Joan Stewart<br>1776 K Street NW<br>Washington, DC 20006<br>United States | +1 (202) 719-7438 | jstewart@wileyrein.com          | Legal Representative     |

Channel and  
Facility  
Information

| Section                       | Question               | Response                  |
|-------------------------------|------------------------|---------------------------|
| Proposed Community of License | Facility ID            | 6885                      |
|                               | State                  | Iowa                      |
|                               | City                   | DAVENPORT                 |
|                               | DTV Channel            | 17                        |
|                               | Designated Market Area | Davenport-R.Island-Moline |
| Facility Type                 | Facility Type          | Commercial                |
|                               | Station Type           | Main                      |
| Zone                          | Zone                   | 1                         |

Antenna Location  
Data

| Section                           | Question  | Response   |
|-----------------------------------|---|--|
| Antenna Structure<br>Registration | Do you have an FCC Antenna Structure Registration (ASR) Number? | Yes  |
|                                   | ASR Number  | 1035417  |
| Coordinates (NAD83)               | Latitude  | 41° 32' 48.8" N+   |
|                                   | Longitude   | 090° 28' 37.8" W-  |
|                                   | Structure Type  | GTOWER-Guyed Structure<br>Used for Communication<br>Purposes |
|                                   | Overall Structure Height  | 421.0 meters   |
|                                   | Support Structure Height  | 394.0 meters   |
|                                   | Ground Elevation (AMSL)   | 203.0 meters   |
| Antenna Data                      | Height of Radiation Center Above Ground Level                   | 376.4 meters   |
|                                   | Height of Radiation Center Above Average Terrain                | 375.1 meters   |
|                                   | Height of Radiation Center Above Mean Sea Level                 | 579.4 meters   |
|                                   | Effective Radiated Power  | 160 kW   |

Antenna  
Technical Data

| Section                        | Question  | Response            |
|--------------------------------|---|---------------------|
| Antenna Type                   | Antenna Type  | Directional Custom  |
|                                | Do you have an Antenna ID?  | Yes                 |
|                                | Antenna ID  | 1002171             |
| Antenna Manufacturer and Model | Manufacturer:   | DIE                 |
|                                | Model   | TFU-27JSC/VP-R O4SP |
|                                | Rotation  | 0 degrees           |
|                                | Electrical Beam Tilt  | 0.7                 |
|                                | Mechanical Beam Tilt  | Not Applicable      |
|                                | toward azimuth  |                     |
|                                | Polarization  | Elliptical          |
| DTV and DTS: Elevation Pattern | Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt? | No                  |
|                                | Uploaded file for elevation antenna (or radiation) pattern data   |                     |

Directional Antenna Relative Field Values (Pre-rotated Pattern)

| Degree | Value | Degree | Value | Degree | Value | Degree | Value |
|--------|-------|--------|-------|--------|-------|--------|-------|
| 0      | 0.982 | 90     | 0.921 | 180    | 0.900 | 270    | 0.951 |
| 10     | 0.921 | 100    | 0.982 | 190    | 0.951 | 280    | 0.900 |
| 20     | 0.832 | 110    | 1.000 | 200    | 0.971 | 290    | 0.844 |
| 30     | 0.759 | 120    | 0.986 | 210    | 0.973 | 300    | 0.829 |
| 40     | 0.726 | 130    | 0.958 | 220    | 0.971 | 310    | 0.865 |
| 50     | 0.719 | 140    | 0.917 | 230    | 0.972 | 320    | 0.917 |
| 60     | 0.726 | 150    | 0.865 | 240    | 0.971 | 330    | 0.958 |
| 70     | 0.759 | 160    | 0.829 | 250    | 0.973 | 340    | 0.986 |
| 80     | 0.832 | 170    | 0.844 | 260    | 0.971 | 350    | 1.000 |

Additional Azimuths

| Degree | V <sub>A</sub> |
|--------|----------------|
|--------|----------------|

## Certification

| Section                          | Question   | Response  |
|----------------------------------|--|---|
| General Certification Statements | The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by authorization or otherwise, and requests an Authorization in accordance with this application (See Section 304 of the Communications Act of 1934, as amended.).  |   |
|                                  | The Applicant certifies that neither the Applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. §862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR . See §1.2002(b) of the rules, 47 CFR §1.2002(b), for the definition of "party to the application" as used in this certification §1.2002 (c). The Applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of this application, and are true, complete, correct, and made in good faith.   |   |
| Authorized Party to Sign         | <b>FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID</b><br>Upon grant of this application, the Authorization Holder may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in automatic cancellation of the Authorization. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of Authorization requested in this application.<br>WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. Code, Title 18, §1001) AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503). |   |
|                                  | I certify that this application includes all required and relevant attachments.  | Yes   |
|                                  | I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.   | <b>Robert Folliard III Folliard , III .</b><br><i>Assistant Secretary</i><br><br>08/30/2019 |

Attachments

| File Name   | Uploaded By | Attachment Type | Description                            |
|---|-------------|-----------------|--|
| <u>KWQC-TV Ch-17 STA request for interim antenna ENG 08-30-2019.pdf</u> | Applicant   | All Purpose     | KWQC-TV Ch-17 STA engineering exhibits |