

## (REFERENCE COPY - Not for submission)

# **DTV Engineering STA Application**

 File Number:
 0000187041
 Submit Date:
 03/22/2022
 Call Sign:
 WGN-TV
 Facility ID:
 72115
 FRN:
 0005047105
 State:

 Illinois
 City:
 CHICAGO
 Chity:
 CHICAGO
 Status:
 Granted
 Status Date:
 03/29/2022
 Expiration Date:
 09/28/2022
 Filing Status:
 InActive

| General<br>Information | Section          | Question  |          | Response |
|------------------------|------------------|---|----------|----------|
| Fees, Waivers,         | Section          | Question  |          | Response |
| and Exemptions         | 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 i |          |          |
|                        |                  |   |          |          |
|                        | Application Type | Fee Code  | Fee Amo  | punt     |
|                        | Engineering STA  | MPV   | \$270.00 |          |

Total

\$270.00

Applicant Information Applicant Name, Type, and Contact Information

| Applicant                | Address   | Phone                 | Email                 | Applicant Type               |
|--------------------------|---|-----------------------|-----------------------|------------------------------|
| Tribune Media<br>Company | Elizabeth Ryder<br>545 E. John Carpenter<br>Freeway<br>Suite 700<br>Irving, TX 75062<br>United States | +1 (972) 373-<br>8000 | eryder@nexstar.<br>tv | Limited Liability<br>Company |

### **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<br>Representatives<br>(2) | Contact Name  | Address  | Phone                 | Email                         | Contact Type                |
|-----------------------------------|---|--|-----------------------|-------------------------------|-----------------------------|
|                                   | William T. Godfrey , Jr .<br>Consulting Engineers<br>Kessler and Gehman<br>Associates, Inc. | William T. Godfrey, Jr.<br>Kessler and Gehman<br>Associates, Inc.<br>507-D NW 60th Street<br>Gainesville, FL 32607-2055<br>United States | +1 (352) 332-<br>3157 | bill@kesslerandgehman.<br>com | Technical<br>Representative |
|                                   | <b>Elizabeth Ryder</b><br><i>General Counsel</i><br>Nexstar Media Group, Inc.               | 545 E. John Carpenter<br>Freeway<br>Irving, TX 75062<br>United States  | +1 (972) 373-<br>8000 | eryder@nexstar.tv             | Legal<br>Representative     |

| Channel and<br>Facility<br>Information | Section               | Question               | Response   |
|--|-----------------------|------------------------|------------|
|  | Proposed Community of | Facility ID            | 72115      |
|  | License               | State                  | Illinois   |
|  |                       | City                   | CHICAGO    |
|  |                       | DTV Channel            | 19         |
|  |                       | Designated Market Area | Chicago    |
|  | Facility Type         | Facility Type          | Commercial |
|  |                       | Station Type           | Main       |
|  | Zone                  | Zone                   | 1          |

| Antenna Location<br>Data | Section                           | Question   | Response                                    |
|--------------------------|-----------------------------------|--|---|
|                          | Antenna Structure<br>Registration | Do you have an FCC Antenna Structure Registration (ASR)<br>Number? | Yes   |
|                          |                                   | ASR Number   | 1032959                                     |
|                          | Coordinates (NAD83)               | Latitude   | 41° 52' 44.1" N+                            |
|                          |                                   | Longitude  | 087° 38' 10.2" W-                           |
|                          |                                   | Structure Type   | BTWR-Building with TOWER<br>/ANTENNA on top |
|                          |                                   | Overall Structure Height   | 527.3 meters                                |
|                          |                                   | Support Structure Height   | 437.5 meters                                |
|                          |                                   | Ground Elevation (AMSL)  | 181.4 meters                                |
|                          | Antenna Data                      | Height of Radiation Center Above Ground Level                      | 495.9 meters                                |
|                          |                                   | Height of Radiation Center Above Average Terrain                   | 497.5 meters                                |
|                          |                                   | Height of Radiation Center Above Mean Sea Level                    | 677.3 meters                                |
|                          |                                   | Effective Radiated Power   | 645 kW                                      |

| Antenna        | Section                           | Question  | Response           |  |
|----------------|-----------------------------------|---|--------------------|--|
| Technical Data | Antenna Type                      | Antenna Type  | Directional Custom |  |
|                |                                   | Do you have an Antenna ID?  | No                 |  |
|                |                                   | Antenna Type       Directional Custom         Do you have an Antenna ID?       No         Antenna ID       1009398         Manufacturer:       RFS         Model       PEPL24C         Rotation       0 degrees         Electrical Beam Tilt       0.75         Mochanical Beam Tilt       Not Applicable         Polarization       Elliptical |                    |  |
|                | Antenna Manufacturer and          | Manufacturer:   | RFS                |  |
|                | Model                             | Model   | PEPL24C            |  |
|                |                                   | Rotation  | 0 degrees          |  |
|                |                                   | Electrical Beam Tilt  | 0.75               |  |
|                |                                   | Mechanical Beam Tilt  | Not Applicable     |  |
|                |                                   | toward azimuth  |                    |  |
|                |                                   | Polarization  | Elliptical         |  |
|                | DTV and DTS: Elevation<br>Pattern | patterns that vary with azimuth for reasons other than the  | No                 |  |
|                |                                   |   |                    |  |

## Directional Antenna Relative Field Values (Pre-rotated Pattern)

| Degree | Value | Degree | Value | Degree | Value | Degree | Value |
|--------|-------|--------|-------|--------|-------|--------|-------|
| 0      | 0.566 | 90     | 0.293 | 180    | 0.799 | 270    | 0.815 |
| 10     | 0.415 | 100    | 0.428 | 190    | 0.849 | 280    | 0.847 |
| 20     | 0.299 | 110    | 0.608 | 200    | 0.760 | 290    | 0.746 |
| 30     | 0.178 | 120    | 0.792 | 210    | 0.680 | 300    | 0.661 |
| 40     | 0.093 | 130    | 0.942 | 220    | 0.824 | 310    | 0.790 |
| 50     | 0.117 | 140    | 1.000 | 230    | 0.976 | 320    | 0.942 |
| 60     | 0.093 | 150    | 0.928 | 240    | 0.949 | 330    | 0.989 |
| 70     | 0.093 | 160    | 0.785 | 250    | 0.802 | 340    | 0.911 |
| 80     | 0.193 | 170    | 0.716 | 260    | 0.731 | 350    | 0.749 |

## **Additional Azimuths**

| Degree | V <sub>A</sub> |
|--------|----------------|
| 66     | 0.074          |
| 328    | 0.992          |

| Certification | Section                             | Question  | Response  |  |
|---------------|-------------------------------------|---|---|--|
|               | General Certification<br>Statements | The Applicant waives any claim to the use of any particular<br>frequency or of the electromagnetic spectrum as against the<br>regulatory power of the United States because of the<br>previous use of the same, whether by authorization or<br>otherwise, and requests an Authorization in accordance with<br>this application (See Section 304 of the Communications Act<br>of 1934, as amended.).   |   |  |
|               |                                     | The Applicant certifies that neither the Applicant nor any<br>other party to the application is subject to a denial of Federal<br>benefits pursuant to §5301 of the Anti-Drug Abuse Act of<br>1988, 21 U.S.C. §862, because of a conviction for<br>possession or distribution of a controlled substance. This<br>certification does not apply to applications filed in services<br>exempted under §1.2002(c) of the rules, 47 CFR . See §1.<br>2002(b) of the rules, 47 CFR §1.2002(b), for the definition of<br>"party to the application" as used in this certification §1.2002<br>(c). The Applicant certifies that all statements made in this<br>application and in the exhibits, attachments, or documents<br>incorporated by reference are material, are part of this<br>application, and are true, complete, correct, and made in<br>good faith.  | r or of the electromagnetic spectrum as against the<br>y power of the United States because of the<br>use of the same, whether by authorization or<br>, and requests an Authorization in accordance with<br>ation (See Section 304 of the Communications Act<br>as amended.).<br>cant certifies that neither the Applicant nor any<br>y to the application is subject to a denial of Federal<br>ursuant to §5301 of the Anti-Drug Abuse Act of<br>U.S.C. §862, because of a conviction for<br>nor of distibution of a controlled substance. This<br>on does not apply to applications filed in services<br>under §1.2002(c) of the rules, 47 CFR. See §1.<br>If the rules, 47 CFR §1.2002(b), for the definition of<br>he application" as used in this certification §1.2002<br>upplicant certifies that all statements made in this<br>n and in the exhibits, attachments, or documents<br>ted by reference are material, are part of this<br>n, and are true, complete, correct, and made in<br><b>TO SIGN THIS APPLICATION MAY RESULT IN</b><br><b>AL OF THE APPLICATION MAY RESULT N</b><br><b>AL OF THE APPLICATION AND FORFEITURE</b><br><b>FEES PAID</b><br>nt of this application, the Authorization Holder may<br>to certain construction or coverage requirements.<br>meet the construction or coverage requirements<br>in automatic cancellation of the Authorization.<br>Propriate FCC regulations to determine the<br>on or coverage requirements that apply to the type<br>zation requested in this application.<br>FALSE STATEMENTS MADE ON THIS FORM<br>ATTACHMENTS ARE PUNISHABLE BY FINE AND<br>RISONMENT (U.S. Code, Title 18, §1001) AND/OR<br>TION OF ANY STATION AUTHORIZATION (U.S.<br>e 47, §312(a)(1)), AND/OR FORFEITURE (U.S.<br>e 47, §312(a)(1)), AND/OR FORFEITURE (U.S.<br>e 47, §312(a)(1)), AND/OR FORFEITURE (U.S.<br>e 47, §312(a)(1)), AND/OR FORFEITURE<br>under penalty of perjury, that I am an authorized<br>at this application includes all required and<br>titachments.<br>under penalty of perjury, that I am an authoriz |  |
|               | Authorized Party to Sign            | <ul> <li>FAILURE TO SIGN THIS APPLICATION MAY RESULT IN<br/>DISMISSAL OF THE APPLICATION AND FORFEITURE<br/>OF ANY FEES PAID</li> <li>Upon grant of this application, the Authorization Holder may<br/>be subject to certain construction or coverage requirements.</li> <li>Failure to meet the construction or coverage requirements<br/>will result in automatic cancellation of the Authorization.</li> <li>Consult appropriate FCC regulations to determine the<br/>construction or coverage requirements that apply to the type<br/>of Authorization requested in this application.</li> <li>WILLFUL FALSE STATEMENTS MADE ON THIS FORM<br/>OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND<br/>/OR IMPRISONMENT (U.S. Code, Title 18, §1001) AND/OR<br/>REVOCATION OF ANY STATION AUTHORIZATION (U.S.<br/>Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S.<br/>Code, Title 47, §503).</li> </ul> |   |  |
|               |                                     | I certify that this application includes all required and relevant attachments.   |   |  |
|               |                                     | representative of the above-named applicant for the Authorization(s) specified above.   | General Counsel   |  |

### Attachments

| File Name                                | Uploaded By | Attachment Type     | Description                     |
|--|-------------|---------------------|---------------------------------|
| EXHIBIT 1.pdf                            | Applicant   | General Information | EXHIBIT 1                       |
| Purpose of WGN-TV STA.pdf                | Applicant   | General Information | Engineering Technical Statement |
| RFS Model PEPL24C (WGN-TV CH19).pdf      | Applicant   | General Information | Antenna Electrical Data         |
| WGN-TV CH19 CP (File No. 0000127570).pdf | Applicant   | General Information | Construction Permit             |