Larry H. Will, P.E. **Broadcast Engineering**

1055 Powderhorn Drive
Glen Mills, PA 19342-9504

PH (610) 399-1826
FAX (610) 399-0995
E-Mail lwill@voicenet.com

WSKG PUBLIC TELECOMMUNICATIONS COUNCIL
BINGHAMTON, NEW YORK

PERMITTEE OF

WSKA-TV, CHANNEL 30

CORNING, NEW YORK

FACILITY ID # 78908

FCC FILE Nos. BPET-19960126KE
BMPEDT-20040413AAJ
AS MODIFIED ON JULY 28, 2005

MINOR CHANGE

2ND AMENDMENT TO A PENDING APPLICATION TO MODIFY EXISTING

C. P. APPLICATION TO SPECIFY DIGITAL OPERATION

SUPPLEMENTAL ENGINEERING EXHIBIT

Larry H. Will, P.E.
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Glen Mills, PA 19342

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WSKG PUBLIC TELECOMMUNICATIONS COUNCIL
BINGHAMTON, NEW YORK

PERMITTEE OF WSKG-TV CHANNEL 42

BINGHAMTON, NEW YORK

FCC FILE Nos. BPET-19960126KE
BMPEDT-20040413AAJ
AS AMENDED JULY 28, 2004

SUPPLEMENTAL ENGINEERING EXHIBIT

1: ADDITIONAL SHOWING WITH RESPECT TO PROTECTION OF CH 30 PARIS, ON, CA AND PETERBOROUGH, ON, CA.

WSKG PUBLIC TELECOMMUNICATIONS COUNCIL has an outstanding Construction Permit for WSKA-TV operating NTSC on Channel 30 in Corning, NY (File No. BPET-19960126KE and a pending application for modification to specify digital operation as BMPEDT-20040413AAJ) as modified on July 28, 2004. This instant minor amendment to the pending application is to provide an additional study with respect to two DTV Canadian Class VL allotments on Channel 30 in Paris and in Peterborough, ON, CA as a result of a letter (1800E3-TN) received from the Commission staff and dated April 15, 2005. This modification application was brought about by an initial rejection by Canada on the minor amendment facilities proposed for WSKA-DT, Corning, NY as proposed in BMPEDT-20040413AAJ due to mileage short spacing to these Canadian facilities.

The proposed allotment for Paris as stated in the US-Canada Letter of Understanding (LOU) is for station CIII-TV with 1000 kW ERP at 325 meters HAAT at coordinates 43-15 -39N, 080-26-39W with protected coverage to 89 km (Canadian Class VL). The Paris DTV allotment is 302.58 km at an azimuth of 295.48 degrees from WSKA-DT as proposed herein

and is 329.76 km at an azimuth of 295.77 degrees from the WSKA-TV NTSC original site. LOU requires an NTSC-DTV Class C-VL spacing of 306 km and a DTV-DTV Class C-VL spacing of 359 km.

The proposed allotment for Peterborough as stated in the US-Canada Letter of Understanding (LOU) is for station CIII-TV-27 with 1000 kW ERP at 325 meters HAAT at coordinates 44-04 -14N, 078-08-36W with protected coverage to 89 km (Canadian Class VL). The Peterborough DTV allotment is 231.19 km at an azimuth of 338.39 degrees from WSKA-DT as proposed herein and is 252.11 km at an azimuth of 334.48 degrees from the WSKA-TV NTSC original site.

We will address each of these in turn starting with Paris, ON.

2. BACKGROUND

The WSKA-TV CP facilities (Canadian LOU reference Class C), as stated in the original FCC Construction Permit BPET-19960126KE and in the US-Canada LOU provide for WSKA-TV to operate NTSC at 813 kilowatts ERP at 242 meters HAAT and at coordinates 42-01-55N, 076-47-02W. If operating DTV, the original WSKA-TV site is 29.24 km short spaced to the LOU 359 km requirement between WSKA-DT and a Canadian Class VL facility. The proposed facilities originally filed for WSKA-DT in BPEDT-20040413AAJ were located at the same site as for the analog facility. WSKA-DT had originally requested a digital ERP of 50 kilowatts non-directional at 242 meters HAAT.

On July 28, 2004, WSKA filed an application to modify the pending application of WSKA-DT to specify a new location and HAAT. This modification application retained the designation File No. BMPEDT-20040413AAJ.

For short spaced facilities, the LOU requires that the US station provide a Longley-Rice Study regarding the interference potential to the Canadian facility whenever the site to site spacing is less than that specified in the appropriate table of the LOU, in this case, 359 km.

MODIFICATION OF HAAT AND C/R AGL

Since the receipt of the letter from the commission staff, we have learned that the FAA will not approve the proposed tower (owned by others) at the requested 800 feet AGL. Rather the FAA has indicated that they will approve a tower height of 620 feet AGL and with this amendment, we are reducing the C/R of the proposed WSKA-DT by 43 meters from 220 meters AGL to 177 meters AGL (319 meters to 276 meters HAAT). Figure 1 shows the proposed 48 and 41 dBu (F50,90) service contours as outlined in BMPEDT-20040413AAJ and the same service contours as proposed herein. This application qualifies as acceptable for filing under the DTV freeze since there is no increase in the distance to the 41 dBu contour in any direction.

3. INTERFERENCE SHOWINGS

3a. WSKA-DT to PARIS, ON

The US Longley-Rice analysis method is slightly different with respect to certain parameters than the Canadian method and further the Canadian method calls for different time and location variables than does the US method AFTER the completion of the DTV transition.

We have included several study plots to show negligible change in the predicted interference during the transition to the Paris allotment from Corning from the proposed facilities as compared to the WSKA-TV NTSC allotted facilities using Longley Rice Version 1.2.2 and, further, a series of profile plots showing 100% terrain blockage between the WSKA-DT transmitter in Corning and several points along the periphery of the Paris DTV Channel 30 89 km protected service contour.

Figure 3 shows the present NTSC C(I+N) D/U ratios in 1 to 1.5 dB increments between 3.2 and 7.2 dB and in 1 km squares throughout the Paris 89 km protected contour. Figure 3 is shown with the desired signal as F(50,50) and the undesired signal as F(50,10) for NTSC. Figure 3A shows the proposed DTV C(I+N) D/U ratios in 1 to 1.5 dB increments between 15.0 and 19.5 dB and in 1 km squares throughout the Paris 89 km protected contour.

Figure 3A is shown with the desired signal as F(50,90) and the undesired signal as F(50,10) during the transition per the LOU. The received interference difference between the LOU approved facilities and the proposed facilities is minimal involving less than a few square kilometers.

Figure 3B again shows the proposed C(I+N) ratios in 1 to 1.5 dB increments between 15.0 and 19.5 dB and in 1 km squares throughout the Paris 89 km protected contour. In this case, Figure 3B is plotted with the desired signal as F(90,90) and the undesired signal as F(10,10) per the LOU post transition. Here the Longley-Rice predicted received interference is greater as would be expected for F(10,10) however a good portion of the interference area is over water between the United States and Canada. The shadowing study below shows that the actual predicted interfering signal level is below receiver threshold over the entire Paris DTV service area due to multiple obstacle terrain blockage.

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3b: WSKA-DT PARIS SHADOWING STUDY

Figures 5A through 5E show earth radius path profile plots between the proposed (as modified herein) WSKA-DT transmitting antenna and a standard DTV receiver with a DTV reference antenna 30 feet above ground and always pointed to the Paris, ON transmitter and located within the 89 km protected service area as follows:

Figure 5A is a left edge radial plot through the edge of the 89 km protected service area. As shown in Figure 5A, there are 9 obstacles in the path, the fade margin is -99.90 dB and the outage time as referenced to a 19.5 dB C/N is 100 percent[1], thus no interfering signal is received.

Figure 5B is a radial plot to a point to the left of boresite of the 89 km protected service area southwest of the Paris reference coordinates. As shown in Figure 5B there are also 9 obstacles in this path, the fade margin is -99.90 dB and the outage time as referenced to a 19.5 dB C/N is 100 percent, thus no interfering signal is received.

Figure 5C is a radial plot to a point boresite into the 89 km protected service area of the Paris reference coordinates. As shown in Figure 5C, again there are 9 obstacles in this

path, the fade margin is -99.90 dB and the outage time as referenced to a 19.5 dB C/N is 100 percent, thus no interfering signal is received.

Figure 5D is a radial plot to a point to the right of boresite of the 89 km protected service area northeast of the Paris reference coordinates. As shown in Figure 5D there are 7 obstacles in this path, the fade margin is -99.90 dB and the outage time as referenced to a 19.5 dB C/N is 100 percent, thus no interfering signal is received.

Figure 5E is a right edge radial plot through the edge of the 89 km protected service area. As shown in Figure 5E, there are 4 obstacles in the path, the fade margin is -98.14 dB and the outage time as referenced to a 19.5 dB C/N is 100 percent, thus no interfering signal is received.

3c. WSKA-DT to PETERBOROUGH, ON

We have again included several study plots to show negligible change in the predicted interference during the transition to the Peterborough DTV allotment from Corning from the proposed facilities as compared to the WSKA-TV NTSC allotted facilities using Longley Rice Version 1.2.2 and, further, a series of profile plots showing 100% terrain blockage between the WSKA-DT transmitter in Corning and several points along the periphery of the Peterborough DTV Channel 30 89 km protected service contour.

Figure 4 shows the present NTSC C(I+N) D/U ratios in 1 to 1.5 dB increments between 3.2 and 7.2 dB and in 1 km squares throughout the Peterborough 89 km protected contour. Figure 4 is shown with the desired signal as F(50,50) and the undesired signal as F(50,10) for NTSC. Figure 4A shows the proposed DTV C(I+N) D/U ratios in 1 to 1.5 dB increments between 15.0 and 19.5 dB and in 1 km squares throughout the Paris 89 km protected contour. Figure 4A is shown with the desired signal as F(50,90) and the undesired signal as F(50,10) during the transition per the LOU. The received interference difference

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[1] **3942000 seconds equates to 100% per year.**

between the LOU approved facilities and the proposed facilities is minimal involving less than 5 or 6 km^2.

Figure 4B again shows the proposed C(I+N) ratios in 1 to 1.5 dB increments between 15.0 and 19.5 dB and in 1 km squares throughout the Paris 89 km protected contour. In this case, Figure 4B is plotted with the desired signal as F(90,90) and the undesired signal as F(10,10) per the LOU. Here again the Longley-Rice predicted received interference is greater as would be expected for F(10,10) however a good portion of the interference area is over water between the United States and Canada. The shadowing study below shows that the actual predicted interfering signal level is below receiver threshold over the entire Peterborough DTV service area due to multiple obstacle terrain blockage.

3d: WSKA-DT PETERBOROUGH SHADOWING STUDY

Figures 6A through 6E show earth radius path profile plots between the proposed (as modified herein) WSKA-DT transmitting antenna and a standard DTV receiver with a DTV reference antenna 30 feet above ground and always pointed to the Peterborough, ON transmitter and located within the 89 km protected service area as follows:

Figure 6A is a left edge radial plot through the edge of the 89 km protected service area. As shown in Figure 6A, there are 9 obstacles in the path, the fade margin is -99.90 dB and the outage time as referenced to a 19.5 dB C/N is 100 percent, thus no interfering signal is received.

Figure 6B is a radial plot to a point to the left of boresite of the 89 km protected service area southwest of the Paris reference coordinates. As shown in Figure 6B there are also 9 obstacles in this path, the fade margin is -99.90 dB and the outage time as referenced to a 19.5 dB C/N is 100 percent, thus no interfering signal is received.

Figure 6C is a radial plot to a point boresite into the 89 km protected service area of the Paris reference coordinates. As shown in Figure 6C, again there are 9 obstacles in this path, the fade margin is -99.90 dB and the outage time as referenced to a 19.5 dB C/N is 100 percent, thus no interfering signal is received.

Figure 6D is a radial plot to a point to the right of boresite of the 89 km protected service area northeast of the Paris reference coordinates. As shown in Figure 6D there are 9 obstacles in this path, the fade margin is -99.90 dB and the outage time as referenced to a 19.5 dB C/N is 100 percent, thus no interfering signal is received.

Figure 6E is a right edge radial plot through the edge of the 89 km protected service area. As shown in Figure 6E, there are 9 obstacles in the path, the fade margin is -99.90 dB and the outage time as referenced to a 19.5 dB C/N is 100 percent, thus no interfering signal is received.

4. CONCLUSIONS

These engineering exhibits and plots show that the proposed (as amended herein) WSKA-DT facilities at the new location will not result in measurable interference to the allotted Paris and Peterborough DTV facilities over that predicted by the facilities specified for both stations from WSKA-TV operating NTSC as shown in the LOU. Thus we believe that we have demonstrated compliance with the intent of the US-Canada LOU as it relates to the minor change in the proposed facilities of WSKA-DT over those previously approved in the US-Canada DTV LOU and that the requested facilities should be approved and GRANTED.