

Larry H. Will, P.E.

Broadcast Engineering

1055 Powderhorn Drive
Glen Mills, PA 19342-9504

PH (610) 399-1826
E-Mail lhwill@verizon.net

SONSHINE FAMILY TELEVISION CORPORATION

LICENSEE OF WBPH-DT

DTV CHANNEL 9

BETHLEHEM, PENNSYLVANIA

FAC ID# 60850

FCC FILE # BPCDT-20080619ALA

**APPLICATION FOR A MINOR MODIFICATION OF CP TO CHANGE
TRANSMITTER LOCATION, HAAT, AND DIRECTIONAL ANTENNA
PATTERN**

**COVERAGE, INTERFERENCE, CANADIAN PROTECTION, AND
WAIVER REQUEST - EXHIBIT 44**

January 4, 2010

SONSHINE FAMILY TELEVISION CORPORATION

LICENSEE OF WBPH-DT

DTV CHANNEL 9

BETHLEHEM, PENNSYLVANIA

FAC ID# 60850

FCC FILE # BPCDT-20080619ALA

**COVERAGE, INTERFERENCE, CANDIAN PROTECTION, AND WAIVER REQUEST
EXHIBIT 44**

FACILITIES REQUESTED

Sonshine Family Television Corporation (SFT) is filing this application to request authority for a minor modification of a CP for WBPH-DT (BPCDT-20080619ALA) to change transmitter location, change HAAT, and change directional antenna pattern. The proposed facilities continue to fully meet the Rules regarding coverage of the City of License.

This office, with assistance from MSW, Inc., has completed a Longley-Rice analysis of the proposed digital operation on TV Channel 9 with an ERP of 80.6 kW directional at the nearby location and that study shows that no prohibited interference will occur to any other authorized or pending full service and LPTV analog or digital station as required by parts 73 and 74 of the commission's rules except for co-channel station WUSA-TV Washington, DC and for adjacent channel station WNJB-DT, Channel 8, New Brunswick, NJ. The results of the Longley-Rice Study can be supplied to the staff if needed.

Since early in 2009, SFT has been in discussions and negotiations with both New Jersey Public Broadcasting Authority (NJPBA), permittee of WNJB-DT, Channel 8, New Brunswick,

NJ and with the Detroit Free Press, Inc., (DFP), Licensee of WUSA-DT, Channel 9, Washington, DC with the intent to complete interference agreements between the parties to rectify the difficulties with complete replication of analog facilities and mitigate poor indoor reception by the several stations. The parties contemplate completion of all testing and legal matters in a timely fashion, upon the completion of which would permit favorable action on this application pursuant to Section 73.623(g) of the rules. In fact, the negotiations with NJPBA, which allow for phased implementation of several modifications by the parties, are essentially completed and the necessary documents are in circulation for signature. For DFP, the commission, with concurrence by SFT, has recently authorized testing by WUSA-DT at a considerable power increase and initial testing between WUSA-DT and WBPH-DT has begun and the parties expect that this testing will confirm that actual significant interference to WBPH-DT at its currently authorized power and HAAT will not occur¹.

STI is committed to completing further negotiation terms with DFT diligently and in absolute good faith in order that this application, a future series of applications by NJPBA for WNJB-DT, and a future permanent application for elevated power for WUSA-DT by DFT may be granted expeditiously, and is optimistic that such an agreement can be reached in a short period of time. STI recognizes that such an agreement is essential to a grant of this application. In the event the parties are unable to reach an appropriate agreement in a reasonable period of time, this application will either be dismissed or amended to conform to the applicable rules concerning interference.

CANADIAN PROTECTION

WBPH-TV currently has been coordinated with Canada at 89 kW ERP (DA) with a main lobe oriented to 70 degrees True. As shown in Figure 2 attached, the facilities requested herein

¹ Multiple formal Longley-Rice analysis have predicted over 13% caused interference to the currently licensed facilities of WBPH-DT at 3.2 kW (DA) with WUSA-DT at the 52 kW STA level. While the elevated power operation by WUSA-DT has only been in effect for about two weeks, as of this writing, there have been no documented actual received interference issues within the WBPH-DT viewing area.

to not result in any increase in radiation towards the Canadian border between 300 and 30 degrees True.

In addition, Figure 2 attached hereto shows that the proposed operation of WBPH-DT at 80.6 kW results in the 13.4 dBu F(50,10) contour which is equivalent to the Canadian 19.5 Bu F(10,10) contour to be such as to not penetrate into Canadian territory at any point.

Thus the revised proposed operation of WBPH-DT at 80.6 kW (DA) fully complies with the requirements of both channel spacing and interference contour protection requirements of Appendix 2 of the US-Canada L.O.U. and the applicant believes that further coordination with Canada is not required in this instant case.

WAIVER OF 73.622(f)(7) AND REQUEST FOR PROCESSING UNDER 73.622(f)(5)

WAIVER OF 73.622(f)(7) IF REQUIRED

73.622(f)(7) limits the maximum power permitted in Zone 1 on channels 7-13 to 30 kW at 305 meters HAAT or less. However, we request processing under 73.622(f)(5) which applies in the instant case. We do not believe a waiver of 73.622(f)(7) is required in this case but if the Commission determines that a waiver is required, we hereby request said waiver and a waiver of any other rule the Commission deems necessary.

73.622(f)(5) states:

(5) Licensees and permittees assigned a DTV channel in the initial DTV Table of Allotments may request an increase in either ERP in some azimuthal direction or antenna HAAT, or both, that exceed the initial technical facilities specified for the allotment in Appendix B of the Memorandum Opinion and Order (referenced in paragraph (c) of this section), up to the maximum permissible limits on DTV power and antenna height set forth in paragraph (f)(6), (f)(7), or (f)(8) of this section, as appropriate, or up to that needed to provide the same geographic coverage area as the largest station within their market, whichever would allow the largest service area. Such requests must be accompanied by a

technical showing that the increase complies with the technical criteria in Sec. 73.623(c), and thereby will not result in new interference exceeding the de-minimis standard set forth in that section, or statements agreeing to the change from any co-channel or adjacent channel stations that might be affected by potential new interference, in accordance with Sec. 73.623(f). In the case where a DTV station has been granted authority to construct pursuant to Sec. 73.623(c), and its authorized coverage area extends in any azimuthal direction beyond the DTV coverage area determined for the DTV allotment reference facilities, then the authorized DTV facilities are to be used in addition to the assumed facilities of the initial DTV allotment to determine protection from new DTV allotments pursuant to Sec. 73.623(d) and from subsequent DTV applications filed pursuant to Sec. 73.623(c). The provisions of this paragraph regarding increases in the ERP or antenna height of DTV stations on channels in the initial DTV Table of Allotments shall also apply in cases where the licensee or permittee seeks to change the station's channel as well as alter its ERP and antenna HAAT. Licensees and permittees are advised that where a channel change is requested, it may, in fact, be necessary in specific cases for the station to operate with reduced power, a lower antenna, or a directional antenna to avoid causing new interference to another station. (Emphasis added).

WBPH-DT is located in the Philadelphia, PA ADI. WBPH-DT was assigned a digital channel (Channel 59) in the initial Table of Allotments and thus is qualified under the provisions of 73.622(f)(5)². WBPH-DT is already approved for 89.0 kW at 284 meters HAAT. An engineering study is included in Exhibit 44 herewith showing that the proposed modified operation of WBPH-DT from 89.0 to at 80.6 kW at 304 meters HAAT will not cause impermissible interference to any other facility as required by 73.623(c) that isn't agreed to by an Interference Agreement. A review of existing DTV licensees and granted Construction Permits has shown that WPVI-DT, FCC ID# 8606, is the largest station in the Philadelphia television

² The undersigned is aware of at least two precedents for this request, and there may be others. See grant of application of WHRE-DT, Facility ID# 82574, Virginia Beach, VA, Zone 1, BMPCDT-20080821ADP, granted on June 25, 2008, and for WGAL-TV, Facility ID# 53930, Lancaster, PA, Zone 1, BMPCDT-20090720AKB, granted on July 31, 2009.

market³. WPVI, Channel 6 DTV, upon returning to its analog channel on June 16, 2009, was, after a modification, authorized an ERP of 7.56 kW at 332 meters HAAT (File No. BPCDT-20080208ADW). The current WPVI-DT Construction Permit has a 28 dBu F(50,90) service area of 35,290.7 square kilometers. As is well known by the commission staff, immediately upon commencing DTV operation at 7.56 kW, the Licensee of WPVI-DT was flooded with calls and emails complaining that the signal was no longer receivable in many areas throughout their DMA⁴. WPVI-DT applied for and quickly received an STA to increase power to 30.2 kW and continues to operate at that power level pending approval of CP BPCDT-20090617ADQ.

Under the terms of BPCDT-20090619ALA, WBPH-DT, Channel 9, 36 dBu F(50,90) approved service area is 33,478.8 square km, still not up to that of WPVI-DT.

STI is now requesting to operate with a modified directional pattern, with 80.6 kW ERP, and an HAAT of 304 meters. This combination results in a total FCC F(50,90) 36 dBu service area of 36,609.4 square km.

PUBLIC INTEREST SHOWING

The request by DFP to increase the facilities of WUSA-DT from 12.6 to 52 kW is actually better served for both parties with WBPH-DT changing its operation as requested herein particularly with respect to signal penetration within each station's DMA. Repeated Longley-Rice studies by WUSA-DT, WBPH-DT, and WNJB-DT are showing that it is possible for mutual power increases to actually improve service to a greater extent than to that lost by a fixed percentage of new interference. For example, as will be provided with the interference agreement upon completion of the WBPH-WNJB Interference Agreement, interference percentages actually will DECREASE when both parties make their respective changes. Data for WBPH-DT and WUSA-DT is not yet complete but it also appears that the numbers of persons that would now

³ The original WPVI-TV analog facility covered 33,267.4 sq km, the first WPVI-DT CP at 5.4 kW covered 33,181.9 sq km, the present CP coverage at 7.56 kW covers 35,304.9 sq km and the WPVI-DT granted STA and pending CP request for 30.2 kW covers 45,570.1 sq km.

⁴ See pleadings in association with the WPVI-DT STA request for 30.2 kW, FCC File No. BLDSTA-20090619ABQ, granted on June 19, 2009, and the WPVI-DT application for CP, BPCDT-20090617ADQ.

receive service from one or the other station, after the respective power increases outweighs the numbers lost to new interference. The reasons include the fact that interference is counted as a percentage of adjusted population, population is counted as a total number, and in some cases, areas (and population) that did not receive acceptable interference with a station at low power, now are able to receive a viewable signal. This is especially true with indoor reception.

In short, SFT believes that the instant request, included a grant of a waiver of 73.622(f)(7) if needed, serves the public interest in improving the reliability and reception of its own station, WBPH-DT, and also to the reception quality and reliability of nearby stations WUSA-DT and WNJB-DT, and that, upon completion of the agreements, this instant application should be granted. Consistent with the provisions stated in the second paragraph of Page 3, STI is committed to constructing facilities as requested herein promptly upon receipt of commission authority.

