

**ENGINEERING STATEMENT
IN SUPPORT OF REQUEST FOR
APPLICATION REVIEW AND
GRANT OF APPLICATION
WXHL CHANNEL 14Z 146 kW @ RC 436.1 m AMSL
WILMINGTON, DELAWARE**

MARCH 2002

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SUMMARY

The following engineering statement has been prepared on behalf of **Priority Communications Ministries, Inc. ("PCMI")**, licensee of Class A LPTV station WXHL, Wilmington, Delaware. On February 20, 2001, **PCMI** filed a minor change upgrade application for WXHL, as specified in FCC File No. BPTTA-20010220ABB.

In discussions with the FCC staff, it was learned that earlier filed supplemental engineering has become disassociated from the WXHL file and also that a Land Mobile protection issue needs to be addressed. The purpose of this filing is to submit the engineering data necessary to assure the staff that the pending application meets all applicable protection standards and is ready for immediate grant.

It is noted that all mapped contour and interference showings are based on facility information downloaded from the CDBS online database on March 4, 2002. The OET-69 analysis comes from the V-Soft Sun DTV time share analysis run on March 6, 2002.

LAND MOBILE PROTECTION

Land Mobile operation on UHF TV Channels 14 and 15 in New York City are protected from LPTV interference as set forth in *Section 74.709* of the Rules. In a letter dated February 13, 2002, the Supervisory Engineer of the Low Power Television Branch granted the application of WELL-LP for Channel 15 operation as specified in FCC File No. BPTTL-20001012ABB. At the second to last full paragraph on page 4 of the Bureau's letter, it is stated, in part, ". . . the Commission's own evaluation has determined that the proposed Channel 15 facility complies with *Section 74.709* of the Commission's Rules."

PCMI notes that both WXHL and WELL must protect the New York Channel 14 (WXHL) and Channel 15 (WELL) protected area with the 52 dBu F(50,10) contour. Since WELL has been determined to protect the Land Mobile allocation, the simple solution for WXHL, and also the FCC staff, is to demonstrate that the WXHL 52 dBu F(50,10) contour lies inside the WELL 52 dBu F(50,10) contour. *Figure 1*, attached, depicts the WELL 52 dBu contour in red and the WXHL proposed 52 dBu contour in blue. It is noted that the WXHL contour lies within the WELL contour on any possible bearing toward the New York City protected Land Mobile area. On that basis, it is requested that the Branch concur with PCMI that the pending application complies with *Section 74.709* of the Rules.

PROTECTION TO WPHL, CHANNEL 17, PHILADELPHIA, PENNSYLVANIA

The proposed WXHL site is located less than 0.5 km from the site of WPHL. WPHL is a full service TV station with an ERP of 2,340 kW and an omnidirectional antenna pattern. WPHL is 3 channels above WXHL and the WPHL ERP of 2,340 kW (33.7 dBk) exceeds the WXHL 146 kW ERP (21.6 dBk) by 12.1 dB. OET-69, *Table 4B*, specifies that for interference to exist from WXHL to WPHL, the WXHL signal must exceed the WPHL signal by 33 dB. As the WXHL and WPHL sites are essentially collocated, it is impossible for WXHL to interfere with WPHL. The OET-69 analysis printout found in *Table 1*, attached, confirms that the proposed WXHL facility will not cause interference to WPHL.

PROTECTION TO WTMW, CHANNEL 14, ARLINGTON, VIRGINIA

An OET-69 analysis has been run to determine the potential for interference from WXHL to co-channel station WTMW. When WXHL is considered alone the predicted interference is 0.5% which is within the deminimis rounding standard established in the *Report & Order in MM Docket No. 00-10 Released on April 4, 2000*. However, the WTMW 64 dBu contour is subject to existing masking interference from W68CQ, Channel 14 and WMPB-DT, Channel 29. In *Table 1*, scenario 1, existing and proposed interference to WMPB are 0.9%. In *Table 1*, scenario 2, existing interference is 0.8% and new interference with WXHL included is 0.9%. Clearly, a maximum of 0.1% new interference is deminimis and should not be counted against WXHL as it falls within the 0.5% rounding tolerance. WTMW is station number 5 in the attached OET-69 study, *Table 1*.

PROTECTION TO W68CQ, CHANNEL 14 DOVER, DELAWARE

W68CQ, Channel 14, is licensed for an ERP of 3.5 kW at Dover, Delaware, BLTT-20010803AAR. The proposed WXHL 46 dBu F(50,10) contour overlaps a portion of the W68CQ 74 dBu F(50,50) as seen on Figure 2, attached. However, the area of overlap is north of the W68CQ transmitter site. In this case all receive antennas in the overlap area are predicted to be looking at the W68CQ site making the use of 6 dB receive antenna directivity factor appropriate. The 52 dBu F(50,10) contour does not overlap the W68CQ 74 dBu contour and thus there will be no interference to W68CQ as seen on Figure 2.

As further confirmation that the WXHL proposed facility will not cause interference to W68CQ, the 46 dBu F(50,10) contour from WTMW, Channel 14, Arlington, Virginia is also included on Figure 2. Based on OET-69 analysis, the WTMW facility causes 0.2% interference to W68CQ. The WXHL proposed facility cause 0.1% new interference to W68CQ and 0.1% interference inside the masked interference area from WTMW. A 0.1% OET-69 interference to W68CQ is considered deminimis and should not be counted against WXHL due to the 0.5% rounding policy.

PROTECTION TO WELL-LP, CHANNEL 15, PHILADELPHIA, PENNSYLVANIA

The WELL-LP facilities are specified in FCC file number BPTTL-20001012ABB. WELL-LP is station number 9 in the OET-69 analysis found in Table 1. A review of the analysis shows that there are 881,539 persons in the WELL-LP 74 dBu contour with 525,758 persons lost to NTSC interference predominantly from WTXF, Channel 29. WELL-LP interference from WTXF (CH 29) and from WPHL (CH 17) accounts for 59.6% of the WELL-LP population. Any interference from the WXHL-LP, Channel 14 proposal is totally masked by the high levels of interference from WTXF and WPHL and thus is believed not to be counted as interference caused by WXHL. (See *paragraph 74, Report & Order, MM Docket No. 00-10.*)

PROTECTION TO WLYH, CHANNEL 15, LANCASTER, PENNSYLVANIA

WLYH is station number 8 in the OET-69 analysis, Table 1, attached. Seven different scenarios were run to determine any impact to WLYH. Unmasked interference to WLYH, from the WXHL proposal, ranges from 0% to 0.2% which is considered deminimis and, should not be counted against WXHL under the 0.5% rounding policy.

TOWER REGISTRATION - WNWR AM

The tower proposed by WXHL has been registered with the Commission and holds registration number 1231524. The tower is currently under construction, and is registered to American Tower LP. American Tower has contractual arrangements with WNWR concerning before and after partial proof-of-performance measurements. No condition on the WXHL CP concerning WNWR is believed appropriate as it is the tower, not the proposed WXHL side mounted antenna and line, which would be expected to impact the WNWR antenna pattern.

CONCLUSION

It has been determined herein that the proposed WXHL facilities meet all of the requirements found in part 74 of the Commission's Rules and Regulations concerning protection to land mobile and other television facilities and/or meets the de minimis interference rounding tolerance as set forth in the *Report & Order in MM Docket No. 00-10, Released April 4, 2000*.

The foregoing was prepared on behalf of **Priority Communications Ministries, Inc.** by Clarence M. Beverage of *Communications Technologies, Inc.*, Marlton, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The statements herein are true and correct of his own knowledge, except such statements made on information and belief, and as to these statements he believes them to be true and correct.

By Clarence M. Beverage

Clarence M. Beverage

for Communications Technologies, Inc.

Marlton, New Jersey