

CHARLES WILLIAMSON  
New Radio Station  
Milford, PA  
1450 kHz, 1 kW, ND-U

### ENGINEERING STATEMENT

This engineering statement, together with the attached figures, has been prepared on behalf of Charles Williamson, in response to a window filing for a new radio station at Milford, PA, file number BNP-20040130BNN (facility ID #161541).

The proposed antenna tower will be 100.8° with no top loading. Since the structure does not exceed 61m/200' overall above ground level, Notice of Proposed Construction is not required to be filed with the FAA.

### ENVIRONMENTAL CONSIDERATIONS

The Commission's Rules implementing the Environmental Policy Act does not categorize this proposal as a major action, as it does not involve any of the facilities or actions listed under §1.305 or §1.307 of the Rules.

Regarding the non-ionizing radiofrequency emission from the proposed antenna, Table I on page 49 of O.E.T. Bulletin No. 65 lists the distance in meters at which fields from AM stations are predicted to fall below the FCC and ANSI maximum. Assuming 1000 watts are fed by the station into the tower, Table I requires the fence to be at least 3 meters from the tower face. The applicant has constructed a fence at least 3.05 meters (10 feet) from the tower face. Since the applicant has fencing well within agreement with O.E.T. Bulletin No. 65, this proposal will comply with both FCC and ANSI standards regarding radiofrequency exposure.

Should any maintenance worker require access to the tower, the station will either reduce power or cease operation until workers are outside the tower fence. Appropriate RF warning signs will be placed on all sides of the fences and it may be assumed that there will be no significant effect on the human environment with regard to exposure of the general public.

The applicant reserves the right to make measurements with a power density meter of known accuracy, with the station operating, to determine the actual distance from tower face to tower fence at which the FCC and ANSI standards are not exceeded, including a reasonable safety margin.

## DAYTIME ALLOCATION CONSIDERATIONS

A study has been made of stations on 1450 kHz and on channels within 30 kHz of that frequency in determining the protection requirements of the proposed operation. Those stations which were deemed to merit particular consideration are:

NEW - Montoursville, PA (20040127ADM)	1450 kHz, 1 kW, U
NEW - Montoursville, PA (20040130BEF)	1450 kHz, 1 kW, U
WCTC- New Brunswick, NJ	1450 kHz, 1 kW, U
WKIP - Poughkeepsie, NY	1450 kHz, 1 kW, DA-D, U
WPAM - Pottsville, PA	1450 kHz, 1 kW, U
WKJN - Carbondale, PA	1440 kHz, 5 kW-D
WEMR - Tunkhannock, PA	1460 kHz, 5 kW-D, 1 kW-N, DA-2,U

Radial measurements at 224, 244 and 264°T from the WKIP antenna system were made by David Schmidt, who employed a Potomac Instruments FIM-41, ser # 653, field intensity meter calibrated June 6, 2002. The analyzed radials confirm that all three indicate soil conductivity is significantly less than M-3 toward this proposal.

Location of contours employed either standard/augmented patterns for directional operation or notified inverse fields for non-directional operation with FCC M-3 soil conductivity and measured conductivity, where applicable.

Radial measurements and analyzed conductivity data on pertinent above listed facilities are being measured and will be added to this filing as a supplement.

## NIGHTTIME ALLOCATION CONSIDERATIONS

The nighttime limit study for this proposed 1450 kHz operation, shows the 50% RSS to be 25.202 mV/m with contributions from WPAM, WCLI, WYFY and WWSC.

The 25% RSS was found to be 39.456 mV/m with contributions from WPAM, WCLI, WYFY, WWSC, WCUM, WILM, WMAJ, WTSA, WCTC. WLKW and WHDL.

## PROPOSED SERVICE CONTOURS

At the proposed tower site, this station will serve all of Milford, PA with a 5 mV/m or greater daytime signal and provide service in rural areas with the 2 and 0.5 mV/m daytime contours.

The nighttime interference-free contour of 25.202 mV/m will serve all of Milford, PA, while the nighttime 5 and 2.5 mV/m contours will provide rural service subject to received nighttime interference.

Hence this instant proposal comports with domestic rules and international treaties and is in the public interest.

October 29, 2004

A handwritten signature in dark ink, appearing to read 'Charles Williamson', written over a diagonal line that extends from the text above.

Charles Williamson  
Consulting Engineer