

TECHNICAL SUMMARY
APPLICATION FOR AUXILIARY OPERATION
FM STATION WSFR
CORYDON, INDIANA
CH 299B1 (107.7 MHZ) 6 KW (ND) 163 M

1. Proposed Auxiliary Operation: The proposed WSFR auxiliary operation will be from an existing 60.4 meter (198 foot) unregistered tower located immediately adjacent (same coordinates) to the WSFR main tower. It is noted that WSFR's main tower recently collapsed and is in the process of being rebuilt. Operation is proposed with a nondirectional ERP of 6 kW, an RCAGL of 41 meters, an RCMSL of 347 meters and an HAAT of 163 meters.

2. Compliance with Section 73.1675(a): Figure 1 demonstrates that the 1 mV/m contour of the WSFR auxiliary facility is located entirely within the 1 mV/m contour of the currently licensed (BLH-19940610KB) WSFR main facility in accordance with Section 73.1675(a).

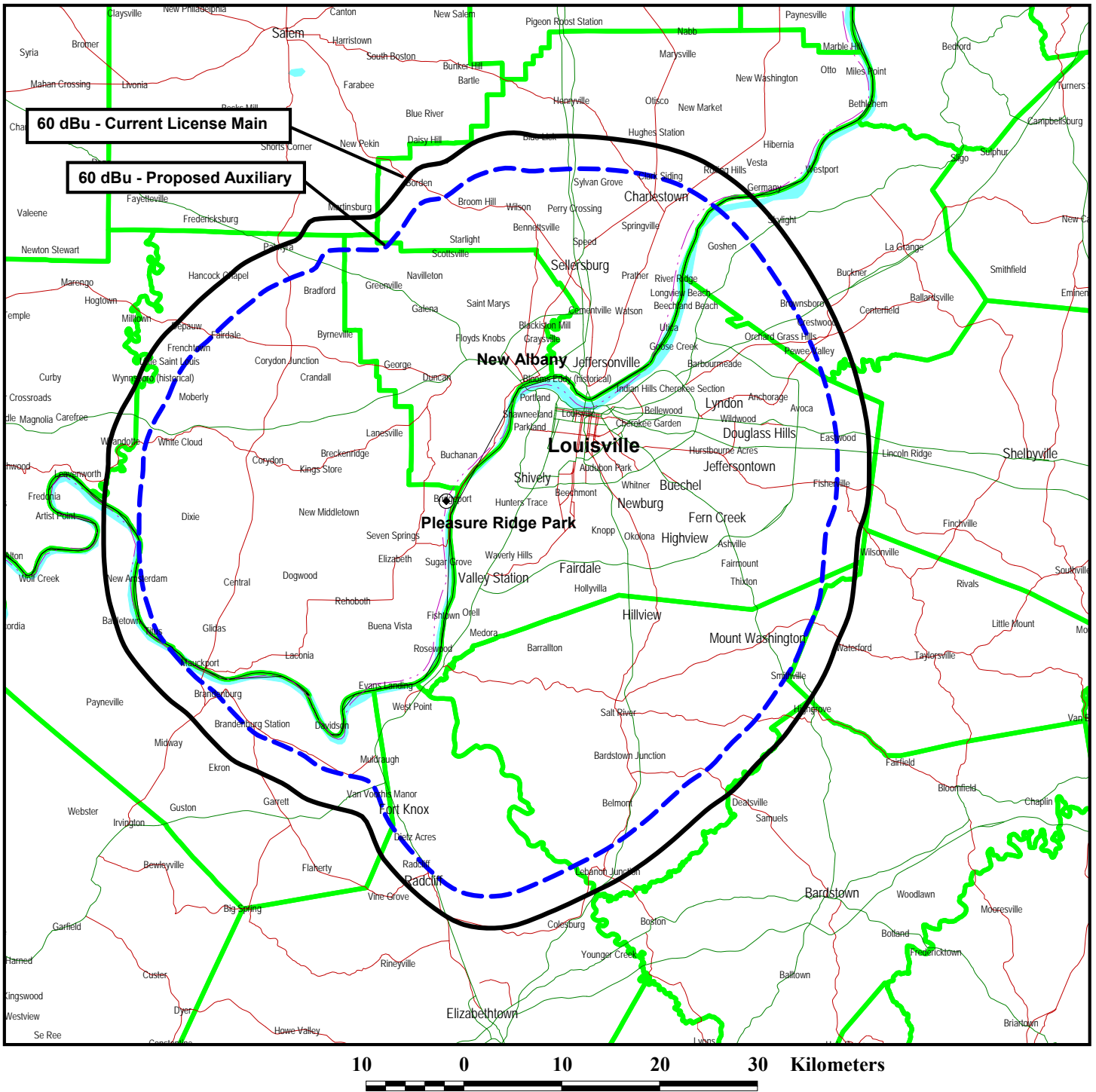
3. RFR Compliance: The proposed WSFR auxiliary facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public based on the FCC's FM Model software. It is proposed to side-mount an ERI model LP-2E-HW, 2-bay, 0.5 wavelength spaced antenna at the 51 meter level on the existing tower. The total ERP is 12 kW (horizontal and vertical polarization). Figure 2 depicts the output of the FCC's FM Model program. As indicated, a maximum power density of 14.85 uW/cm² will occur at a point located 100 meters from the tower. This is only 7.4% of the FCC's recommended limit of 200 uW/cm² for FM stations for an uncontrolled environment. However, as FM stations WAYK (Ch. 290A/105.9 MHz, Valley Station, KY) and WGZB-FM (Ch. 243A/96.5 MHz, Lanesville, IN) also operate pursuant to STA's from the same location, they must be considered in the RFR evaluation. The calculations are summarized below:

WAYK STA, total ERP 1.04 kW, worst case vprf 1.0, dist. 38 m, 26.8 uW/cm², 13.4% of limit

WGZB-FM STA, total ERP 3.0 kW, worst case vprf 1.0, dist. 57.9 m, 32.1 uW/cm², 16.0% of limit

The summation of the above fractions of the ANSI limit for each of the above stations is 0.368. Since this is less than unity, the combined power density at 2 meters above ground level will be less than the ANSI recommended limit applicable to general population/uncontrolled exposure areas. Thus, it is believed that the WSFR STA facility is in full compliance with the FCC's requirements with regard to radio frequency radiation exposure. Access to the transmitting site is restricted and appropriately marked with RFR warning signs. Furthermore, a protocol shall be in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measures will be taken to assure worker safety with respect to RF energy exposure.

Figure 1



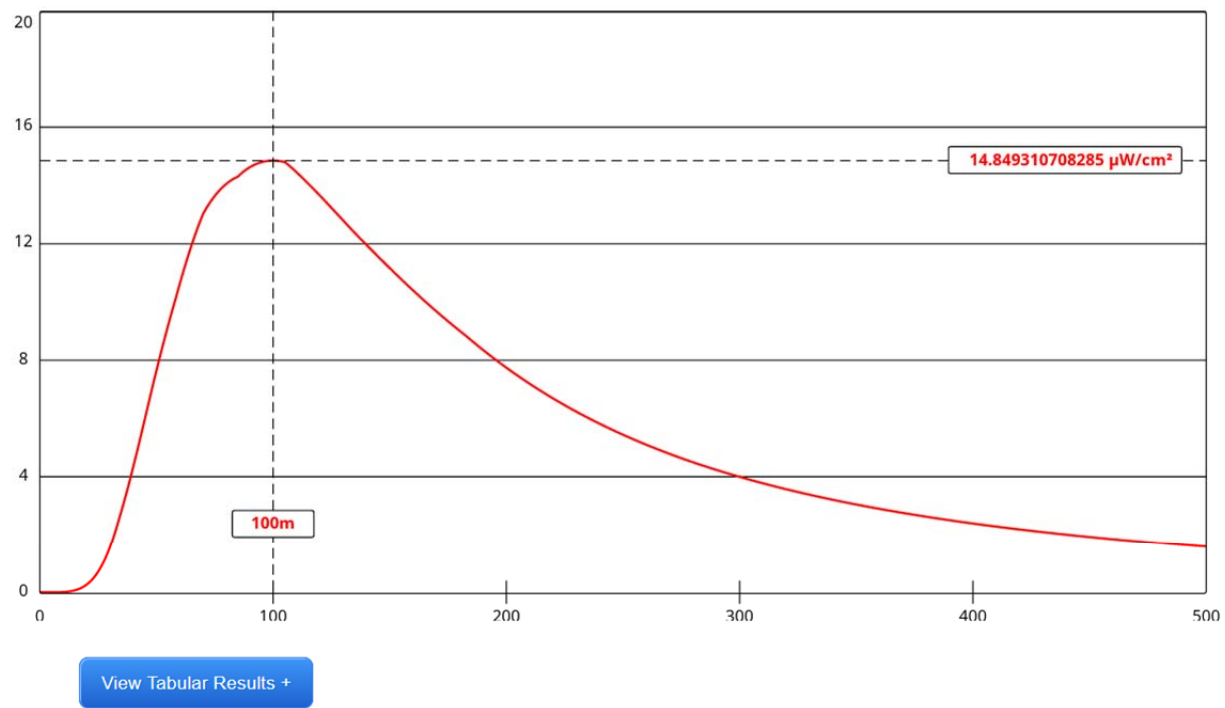
**COMPLIANCE WITH SECTION 73.1675(A)
PROPOSED AUXILIARY OPERATION**

STATION WSRF
CORYDON, INDIANA
CH 299B1 6 KW 163 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2

FM Model Output:



Channel Selection	Channel 299 (107.7 MHz) ▾		
Antenna Type +	EPA Type 3: Opposed U Dipole ▾		
Height (m)	<input type="text" value="51"/>	Distance (m)	<input type="text" value="500"/>
ERP-H (W)	<input type="text" value="6000"/>	ERP-V (W)	<input type="text" value="6000"/>
Num of Elements	<input type="text" value="2"/>	Element Spacing (λ)	<input type="text" value="0.5"/>
Num of Points	<input type="text" value="500"/>	<input type="button" value="Apply"/>	