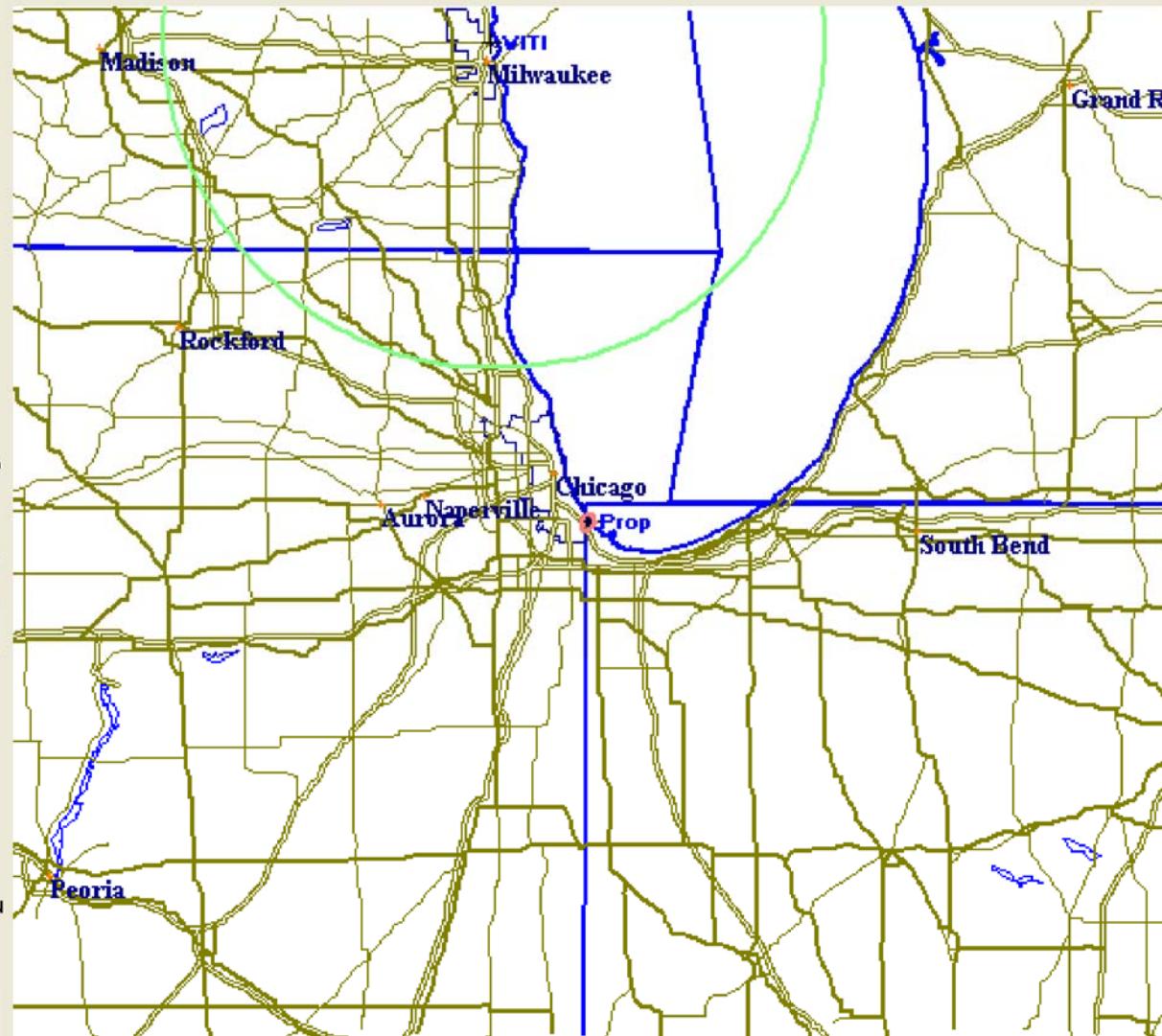


# TV6 Calculation for Irondale, IL

TV6 Call sign	<input type="text" value="WITI"/>	Fcc Search
		32.5 dBu
City	<input type="text" value="Milwaukee"/>	State
	<input type="text" value="WI"/>	
COR AMSL (m)	<input type="text" value="502"/>	HAAT(m)
	<input type="text" value="305"/>	
Latitude	<input type="text" value="430526"/>	Longitude
	<input type="text" value="875350"/>	
		TV ERP (kW)
		<input type="text" value="100.000"/>
		FM Horizontal ERP
		<input type="text" value="0.01"/>
<input checked="" type="checkbox"/> Outside City Of 50k		
47	47	1
Plot Scale		
150		<input checked="" type="checkbox"/> DLG <input type="checkbox"/> AJPI
<input checked="" type="checkbox"/> Hide Zeros <input checked="" type="checkbox"/> Plot All Centroids <input checked="" type="checkbox"/> Plot Inside Centroid Counts <input type="checkbox"/> Plot All Centroid Counts <input checked="" type="checkbox"/> Plot Contours <input type="checkbox"/> Print All Centroids to <input type="text" value="-.3"/> dBu <input type="checkbox"/> Print Centroids <input checked="" type="checkbox"/> Print TV Contour Table		
<input type="button" value="Comp"/> <input type="button" value="Copy F"/> <input type="button" value="PrintText"/> <input type="button" value="Print Form"/>		



## Channel Six TV Protection Study

WITI 06 100.000kW ERP 502.0M COR AMSL 305.0M HAAT Lat. 430526 Lon. 875350  
 Prop 205 0.167kW ERP 210.0M COR AMSL 29.6M HAAT Lat. 414229 Lon. 873116

Distance from TV to FM 156.6586km Azi 348.6degr Rev Azi 168.6 degr  
 Cutoff radius for channel 205 is 225 km

The FM horizontal polarization component is 0.010 kW,  
 and the area of just perceptible interference does not intersect a city of 50k,  
 so the effective ERP is  $(Pv/40+Ph) 0.0142kW$

The TV6 signal strength at the FM transmit site is 32.5 dBu  
 This strength is outside the 68 dBu Grade A contour,  
 allowing a 6 dB bonus to be applied to the allowable FM signal  
 to F centroids (centroids in the angles between the FM station and the TV station)

TV Contour	Undesired/Desired Ratio	Total	Directional Total
47	12.1	59.0	65.0

Population in affected area 0