

Environmental Considerations

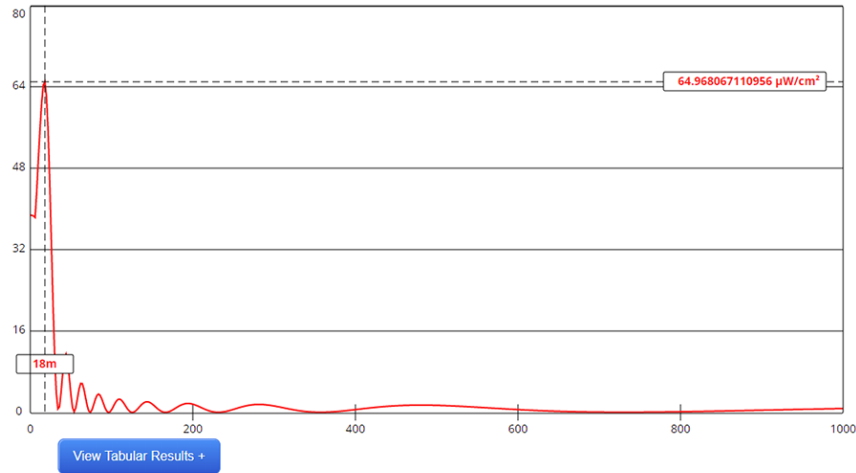
In contemporaneous applications, the applicant is proposing to relocate KSED, Sedona, AZ and KBTK, Kachina Village, AZ to an existing tower, ASR 1007647. This common exhibit is included in both technical statements.

KSED:

The proposed antenna is an ERI SHP-10AC EPA Type 3 with ten bays, spaced at 1.0 λ. The antenna will be centered 74.8 m (245.5.') above the ground.

The proposed Effective Radiated Power (ERP) is 100 kW-H + 100 kW-V.

FM Model returns a maximum exposure of 65 μW/cm², or 32.5% of the limit for casual / uncontrolled exposure. The maximum occurs at 18 m from the tower base.



Channel Selection	Channel 298 (107.5 MHz)		
Antenna Type +	EPA Type 3: Opposed U Dipole		
Height (m)	74.8	Distance (m)	1000
ERP-H (W)	100000	ERP-V (W)	100000
Num of Elements	10	Element Spacing (?)	1
Num of Points	500	Apply	

### **KBTK:**

The proposed antenna is an ERI LPX-6C-HW EPA Type 3 with six bays, spaced at  $0.5 \lambda$ . The antenna will be centered 70.1 m (230') above the ground.

The proposed ERP is 4.3 kW-H + 4.3 kW-V.

FM Model returns a maximum exposure of  $0.7 \mu\text{W}/\text{cm}^2$ , or less than 0.5% of the limit for casual / uncontrolled exposure. The maximum occurs at 408 m from the tower base.



### **Summary:**

The maxima occur far from each other, and a simple sum provides a conservative worst-case figure of 33% of the limit for casual / uncontrolled exposure.

Appropriate access controls and safety signage are provided.

No construction or excavation is proposed.

Therefore, the combined proposals do not represent a major environmental action.

-0-

---

**Skywaves LLC**  
PO Box 11382, Bainbridge Island, WA 98110  
401-354-2400

<http://www.skywaves.com>

[consultants@skywaves.com](mailto:consultants@skywaves.com)  
Copyright © 2022 Skywaves LLC.