

**Educational Media Foundation**  
5700 West Oaks Boulevard  
Rocklin, CA 95765

*Keokuk, IA*  
*KQKL*

## **Transmitter Power Output Calculation**

The purpose of this license modification is to specify a change in the KQKL transmitter power output figure. No other changes have occurred or are proposed.

### Transmitter Power Output

AUTHORIZED ERP: 100 KILOWATTS  
ERI SHPX-10AC-SP ANTENNA GAIN: 5.68  
794 FEET ANDREW HJ11-50 4" AIR COAX EFFICIENCY: 0.819  
DIELECTRIC COMBINER EFFICIENCY: .936  
(21') 3" RIGID LINE EFFICIENCY: .996  
TPO: 23058.579 WATTS

CONFIRMATION:  $23058.579 \times 5.68 \times .819 \times .936 \times .996 = 99,999.973$  WATTS

NOTE: TPO IS SHOWN AS 23.059 KILOWATTS DUE TO ROUNDING AND RESOLUTION OF THE FORM.