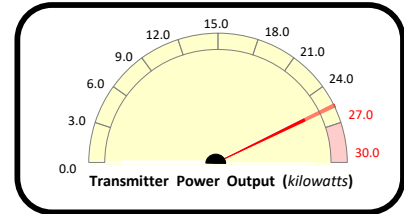


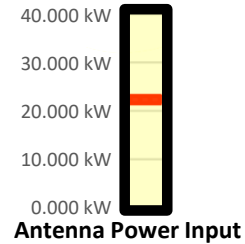
# Transmitter Power Output Worksheet

**Call letters:** WNOR(FM) (License Modification)  
**City of License:** Norfolk, VA  
**Channel:** CH254B (98.7 MHz)  
**File No:** BLH-20040517ADR  
**Facility ID:** 67080  
**Applicant:** Tidewater Communications, LLC



**Effective Radiated Power (ERP):** 46.000 kW

**Antenna Make:** Electronics Research Inc. (ERI)  
**Antenna Model:** SHPX-4AC  
**No of Elements:** Four (4)  
**Antenna COR AGL:** 155 meters AGL  
**Antenna COR AMSL:** 158 meters AGL  
**Max Input Power:** 39.000 kW  
**Power Gain:** 2.133  
**Antenna Gain:** 3.290 dBd  
**Calculated Antenna Input Power:** 21.566 kW  
**Transmitter Rated Power:** 30.000 kW  
**Transmitter Make/Model:** FAX-30K



**Power Gain to Antenna gain (dBd) Conversion:**  
 $=\text{Log}[\text{power gain}] * 10$

## Inventory of System / Insertion Losses

Explanation	Component Make/Model		Length	Loss
Main Feedline (3" Air)	Comscope HJ8-50B	(0.141 dB/100 ft)	527 ft	-0.743 dBd
Rigid Line Section (3 inch)	3 1/8" Myat Rigid	(0.093 dB/100 ft)	15 ft	-0.014 dBd

**TOTAL SYSTEM GAIN/LOSS:** 2.53 dBd  
**CALCULATED TRANSMITTER POWER OUTPUT:** 25.673 kW  
 $(1 / [10^{(2.53/10)}] \text{ ERP})$