

SELLMEYER ENGINEERING

BROADCAST & COMMUNICATION CONSULTING ENGINEERS
P. O. Box 356 McKinney, Texas 75070
MEMBER AFCCE

EXHIBIT E1-1
CALCULATION OF REQUIRED TRANSMITTER POWER OUTPUT
RADIO STATION KERA-FM
CHANNEL 211C, 100 KW ERP
DALLAS, TEXAS

EFFECTIVE RADIATED POWER:	100.000 KW
ANTENNA GAIN:	4.4872
ANTENNA POWER INPUT:	22.286 KW
1100 FT – 6-1/8 INCH RIGID TRANSMISSION LINE (LOSS = 0.0484 dB/100 FT)	-0.532 dB
2 each 50 – 75 Ohm Transformers	-0.100 dB
90 FT – 3-1/8 INCH RIGID TRANSMISSION LINE: (LOSS = 0.103 dB/100 FT)	-0.093 dB
TOTAL LOSSES:	-0.725 dB
EFFICIENCY:	84.6%
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REQUIRED TRANSMITTER POWER OUTPUT:	26.34 KW