

4. Correct. The answer is true. Net electricity consumption is the amount of energy delivered. Net energy is 3412 BTU per kilowatt hour. Gross electricity consumption is the amount of energy used to generate the electricity. For example, if the efficiency rate for a combined cycle gas turbine is 42%, the gross amount of energy to produce a kilowatt hour is $3412/0.42 = 8123.8$ BTU. An electricity generator's heat rate is the amount of energy needed to generate 1 kWh of electricity. For this combined cycle turbine then the heat rate would be 8123.8 BTUs.