(1) If energy equal to the annual U.S. electrical energy output could be used for hoisting rocks, how big a mountain could be built?

Consider a reasonably proportioned mountain, a cone or pyramid of height h, base area $9h^2$, and uniform density ρ. Its volume is $3h^3$. Its center of mass lies $h/4$ above its base. (Half an envelope allowed for that if, like me, you didn't remember it.) The work done in hoisting everything from base level is $3h^3\rho gh/4$. Electrical energy production in the U.S. is nearly 1 kW per person, about 7×10^{18} J/year. We'll assume $\rho = 3000$ kg/m^3. Then with $g = 10$ N/kg we have $h^4 = 2.3\times10^{14}$ m^4, or $h = 3900$ m. A respectable mountain. If you want to design something more spectacular, a colossal obelisk would present different, possibly more interesting, problems.