29. (a) Let q be the charge on the positive plate. Since the capacitance of a parallel-plate capacitor is given by $\varepsilon_0 A/d$, the charge is $q = CV = \varepsilon_0 AV/d$. After the plates are pulled apart, their separation is $2d$ and the potential difference is V'. Then $q = \varepsilon_0 AV'/2d$ and

$$V' = \frac{2d}{\varepsilon_0 A}\, q = \frac{2d}{\varepsilon_0 A}\, \frac{\varepsilon_0 A}{d}\, V = 2V \ .$$

(b) The initial energy stored in the capacitor is

$$U_i = \frac{1}{2} CV^2 = \frac{\varepsilon_0 AV^2}{2d}$$

and the final energy stored is

$$U_f = \frac{1}{2}\, \frac{\varepsilon_0 A}{2d}\, (V')^2 = \frac{1}{2}\, \frac{\varepsilon_0 A}{2d}\, 4V^2 = \frac{\varepsilon_0 AV^2}{d} \ .$$

This is twice the initial energy.

(c) The work done to pull the plates apart is the difference in the energy: $W = U_f - U_i = \varepsilon_0 AV^2/2d$.