SCIENCE NORTH SCIENCE NORD
SUDBURY, ONTARIO, CANADA

Could you run your household on a Tesla Powerwall? (Student)

Home Energy Use

Appliance	Number of appliances	Number of hours per day	Number of Minutes Per Day	Number of days per month	Number of kWh
Totals					

Could you run your household on a Tesla Powerwall?

1. Complete an average Home Energy Use Calculation for your home for one month (30 days) using the website: http://www.hydroone.com/MyHome/SaveEnergy/Tools/calc_main.htm

2. How much would your family pay in electricity bills ("hydro") just for electricity (not including distribution charges or debt retirement) for one month based on a price of $0.128/kWh for mid-peak energy use?

3. How many of these Powerwall batteries would your family require (fully charged) at 92% efficiency, to operate your household for one day? Should these batteries be connected in series or in parallel?

4. If each 7 kWh Powerwall battery costs $3000 (USD), how long before your Powerwall units would pay for themselves?

5. List two drawbacks of using this new technology. Is it worth it?