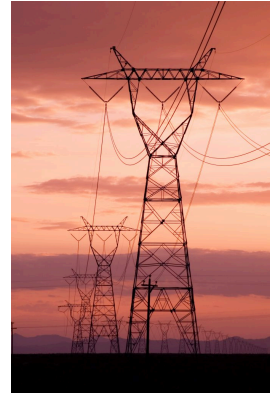


Title: Energy Grid

Phenomenon: What do you notice about the lights being out? How long would you be comfortable without electricity? Write your thoughts here:

- 1.
- 2.
- 3.



Procedures:

1. Begin the activity by reading the information at: <https://www.epa.gov/green-power-markets/us-electricity-grid-markets> What are three things you did not know?
 - A.
 - B.
 - C.
2. What is the power grid?
3. What are the trends in sources of energy in the US?
4. Coal, natural gas, wind and solar are considered “primary” sources of energy. Electricity is considered “secondary”. How is electricity different from these sources?
5. Why do interconnected power sources provide more reliable electricity delivery?
6. How is a traditionally regulated electricity market different from a competitive market?
7. What type of market is Utah in?
 - a. Do we have choices in the source of our electricity? Explain:

You will play a “Power the Grid” game to model how electrical grids work. The instructions are not very clear so do your best.. The goal is **not** to take the grid down and plunge the city into darkness. You will have a few minutes to play. Do not close your final screen. Write down your results below when the time is up..

A.

Time	Guide	Build	Production	Happiness	Money
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

♥	⚡
<input type="text"/>	<input type="text"/>

8. Describe your results, are you an expert energy manager or just average? What did you do best?
Not so well?

9. Was this a traditional market or a competitive market?

10. In Utah, the Blue Sky program allows Rocky Mountain Power customers to purchase energy from renewable sources at a fixed price. You can purchase 100 kilowatt-hour blocks of 100% western region wind (75%) and solar (25%) energy, and the proceeds help fund new, community-based renewable energy projects in Utah. The cost is \$1.95 per 100 kWh block per month.

<https://www.rockymountainpower.net/savings-energy-choices/blue-sky-renewable-energy.html>

Does your family participate?

Do you think it is a good idea to participate?