



## Are You Energy Savvy? (A Student Activity)



We are fortunate in this country to have access to a seemingly never-ending supply of electricity, be it derived from coal, petroleum, nuclear, hydropower, or natural gas. And unless we are responsible for paying the electric bill, we don't think twice about consuming it. But energy conservation should be an important element of our everyday lives, not only because it'll help save us money, but also because it means that fewer fossil fuels will be burned, thus helping to conserve resources and improve outdoor air quality.

In this activity, students will learn how to read a residential electric bill. By the end of the exercise, they should gain a better understanding of the costs and units of measurement associated with electricity consumption, and, as a result, become more energy savvy. This exercise is adapted from an activity in the NEED Project's "Saving Energy at School—Learning and Conserving" booklet; it has been printed here with permission.

*Materials Needed (per student):* A copy of a recent utility bill, a calculator, a pencil

*Suggested Grade Level:* 7-12

*Instructions:*

Step 1: (Group activity) Identify the major components of your electric bill.



Maine residents have essentially three sections on their electric bills:

- An account summary, which outlines the total charges incurred during the billing period;
- A delivery service summary, which outlines charges affiliated with electricity delivery to your home,
- A delivery supply summary, which describes charges affiliated with the production of electricity for your home.

Your bill is separated into these three factions because on March 1, 2000 the State of Maine enacted a law that forbids electricity producers from also being electricity suppliers. As a result, customers receive billing information from both the provider and the supplier on their electric bills. Customers need only to pay one bill, however; the supplier will forward the appropriate portion of their electric bill to the electricity provider.

Take a moment to identify each of these sections on the copy of the electric bill before you. Note that in at least two sections you are given information about your prior account balance, forwarding balances, and new charges. Also note that you are given information about last month's electricity use and your electricity use 12 months prior to the billing date (CMP and MPS customers receive information for the entire previous 12 months).

Step 2: (Individual exercise) Identify the following features on you electric bill; in which of the three sections can each of these features be found?

account number	account balance	meter number	meter readings	service location
electricity provider	electricity producer	bill due date	customer name	current charges
meter read dates	balance forward	messages	prior balance	energy consumed

Step 3: (Individual exercise) Answer the following questions:

- What number should you call to report an outage?
- What is the price of electricity per kilowatt-hour?
- How much would your electric bill be if you paid after the due date?
- To whom should the payment be made out to?
- If you had an issue with your bill, what number would you call?



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