



Groton Electric still has the eighth lowest rates out of 42 Utilities

You may have heard about the rate increases that hit many electric consumers across the state in March. The top residential rates in the Commonwealth are now 57.2% higher than Groton.

Despite rising costs, Groton has not raised rates in five years, and a recent survey shows that residential bills here are now among the lowest in the state. Of the few municipal utilities that have residential rates lower than ours, most of them have large commercial bases. As you can see in the graph below, in January some of our neighbors paid 41.5% more for 750 kilowatt-hours than customers in Groton. That jumped to 48.9% more in March. Savings here were even greater in December, when Groton's Light Board doubled the early pay discount.

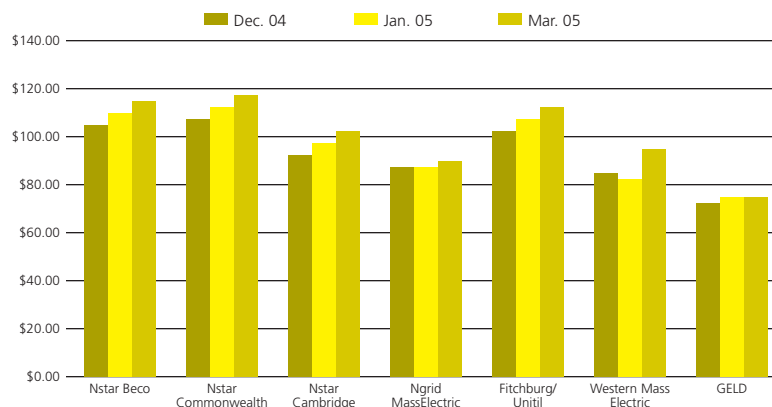
Rate study underway

Preliminary 2005 projections indicate that operating expenses will exceed revenue. We have undertaken a rate study to determine whether a rate increase is necessary. We expect to discuss the results of the study at our May Board meeting. Board meetings are typically held the second Monday of each month at 7:30 p.m. in the Lineman's facility across from our garages at 23 Station Ave. Please check with our office to confirm the schedule. The public is always welcome.



*SPRING TRAINING
Truck Foreman Jay Willets and First Class Lineman Gil Finch show rookie Dave Goodall the proper procedure for installing a new pole.*

Residential Rate Comparison for a 750kWh Customer



Spring energy tips

Doing some spring cleaning? Don't forget to vacuum and clean the coils and filters in all of your appliances that use compressors and evaporators such as refrigerators, dehumidifiers and air conditioners. They'll run more efficiently, and last longer, too.

Spring may also be the perfect time to replace that old, inefficient appliance with a new EnergyStar® model. Not sure if you have an energy hog? Borrow an outlet meter from the Light Department to measure your appliance's energy appetite. The facts may make it easier to part with that robin's egg blue or buttercup yellow refrigerator left in your basement from the 70's.



The wind is blowing towards Groton

Groton Electric has agreed to purchase a portion of the energy generated by a 10-turbine wind project under construction on Brodie Mountain in the Berkshires.

Groton Electric's wholesale energy agent signed a 22-year contract in December 2004 with the developer of the Brodie Mountain wind-power project, Berkshire Wind. Once the project is complete, Groton will receive 5.5% of the project's output. The cost of the power to us is significantly below the current and projected market prices for power. The developer is able to sell the power at such an attractive rate because they will get additional revenue by selling the project's renewable energy credits. Private utilities purchase these energy credits to meet state-mandated renewable energy portfolio standards. We are happy to have secured this low cost contract, though the amount of energy we will receive is a small percentage (3.4%) of what our energy requirements are.

What is wind energy?

Wind energy is ultimately derived from the sun, which heats the Earth's atmosphere and surface. Different air masses, land surfaces, and water bodies absorb and release this heat at varying rates. This creates circulation in the atmosphere. These natural movements of air include the jet stream at the continental scale and onshore and offshore breezes at the local scale.

Today's wind technology harnesses the kinetic energy of flowing air and then transforms the mechanical energy of a wind turbine's spinning blades into pollution-free electricity.

How a wind turbine works

Wind turbines work the opposite of a fan. Instead of using electricity to make wind, like a fan, wind turbines use wind to create electricity. The wind turns the blades, which turn a shaft connected to a generator, which makes electricity as it turns. The power is then sent to the regional power grid.

Wind power challenges

Wind power is intermittent, so it is less reliable than other generation sources. Its intermittent nature also poses seri-

ous challenges to the regional power grid in terms of grid stability and power quality.

Developing a wind farm is dependent first on finding sites with sufficient wind speed. These sites can be difficult to find, which is why Groton is pleased to support the Berkshire Wind facility. The site must also be close to transmission lines and/or load centers to be economically feasible.

Getting the requisite permits to site a wind farm can be a major challenge, as the developers of the proposed Cape Cod off-shore wind farm are learning. Despite the "clean energy" nature of wind farms, aesthetics often get sucked into the siting review. Other concerns revolve around noise pollution, disturbance of wildlife habitat and large unspoiled tracts of land, and threats to the birds and bats.

Wind power has its place

The more varied our sources of power, the better we are able to ride market fluctuations. This is becoming more difficult since the deregulation of the electric industry, because virtually all new power plants are fueled by natural gas. The addition of the Berkshire wind project furthers our goals of not being overly dependent on any one fuel source, as well as not being reliant on only a few power plants. Energy from this environmentally friendly project will join Groton's other energy sources, including two hydro projects in New England, two hydro projects in New York, various fossil fuel sources and nuclear power.