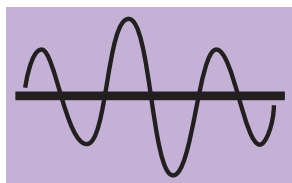


Hedging against losses in a fluctuating power market

To understand why we hedge, you must first understand what hedging is and how power markets affect hedging.

A few customers have asked why there is a Power Cost Adjustment on their bill while they are reading that costs for electric generation are at record lows in New England this winter. The short answer is power cost hedging.



What is hedging? In the most general terms, hedging is like purchasing an insurance policy. As it relates to buying power, hedging locks in the price of power at a fixed price to avoid price volatility that occurs when the weather changes.

GELD purchases power months and years in advance to help “insure” we know what our costs will be during any season of the year. However, the winter months are the most volatile—not necessarily because of the actual cost of power or the fuels that feed the various plants in and around New England, but because of the lack of delivery systems to get those fuels to the plants *when it is needed*.

There are many factors that affect winter volatility and power costs—weather, home heating, actual fuel costs, transmission costs (delivery of fuels), supply and demand. Many of these work in conjunction with or against each other. When the *weather* gets cold, natural gas to fuel *home heating* is given priority over electricity generation, so other higher-priced forms of fuel (like diesel) must be used to generate electricity. When this happens, the power markets scramble for additional generating resources and prices begin to skyrocket.

When purchasing power and deciding on the hedged amount to purchase, GELD management looks at historical power costs, the weather, as well as long and short-term power contracts already purchased. During high risk periods like the winter, GELD has generally been hedging to 80% of its needs during the peak hours. For the remainder of its needs, GELD purchases power on the open “day-ahead” market which can be good when prices are low and not-so-good when prices soar to unreasonable levels.

Due to the extremely mild weather this winter, GELD has paid a premium for this year’s hedges which is covered by the power cost adjustment on your bill. During cold winters, GELD has saved substantial amounts of money with this strategy.

By hedging to 80% during highly volatile periods, GELD is in the best financial position to offer the lowest electric rates possible. For the last 12-month period, our neighbors who have National Grid are paying 90% more than the ratepayers of Groton and our neighbors who have Unitil are paying 105.3% more. These numbers are based on an average 750 kilowatt-hour monthly electric bill.

What is the Forward Capacity Market?

The Forward Capacity Market (FCM) ensures that the New England power system will have sufficient resources to meet the future demand for electricity. Forward Capacity Auctions (FCAs) are held annually, three years in advance of the operating period.

Understanding capacity payments

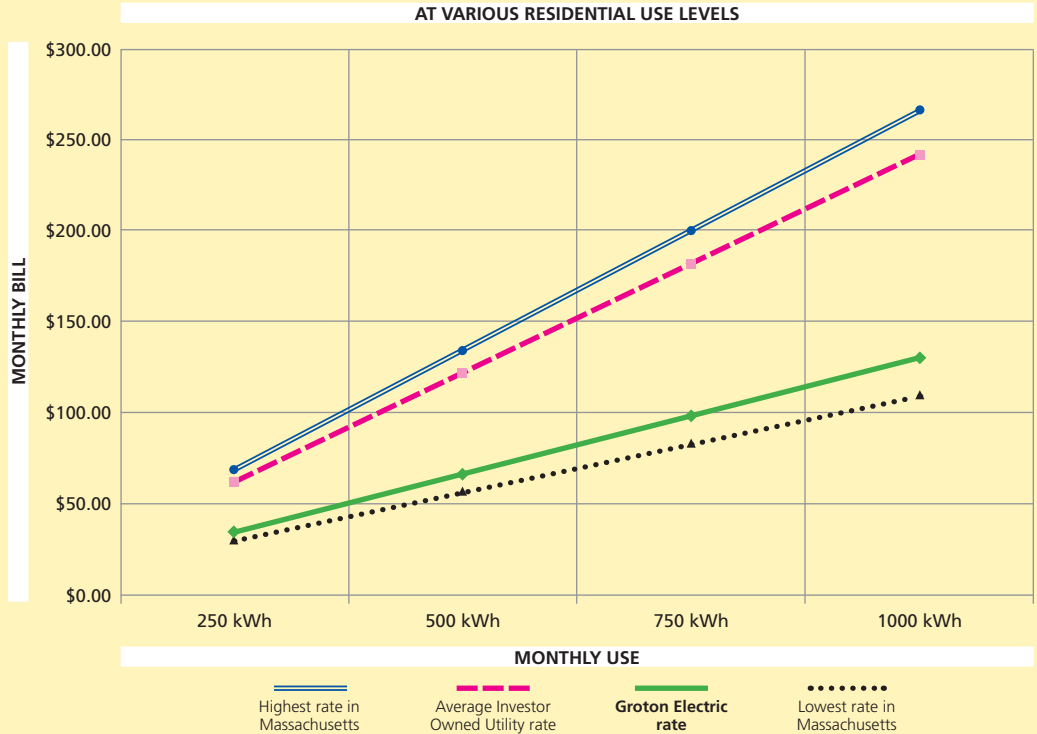
“Capacity” payments are currently based on the single peak hour—usually in the summer on the third day of a heat wave—which is determined by ISO-NE, the regional transmission organization that oversees the operation of New England’s bulk electric power system and transmission lines.

GELD is responsible for paying our portion of that peak hour multiplied by the Forward Capacity Auction (FCA) price each month for 12 months (from June to June). GELD’s portion of New England’s peak hour of July 30, 2019 from 5–6 p.m. was 17,608 kilowatt hours (kWh) which determined GELD’s capacity obligation each month for June 2020 thru May 2021. GELD’s cost for capacity year 2020/2021 will be \$1,867,106 or \$155,921 per month. \$1.8 million accounts for 20% of GELD’s overall budget. However, GELD also has ownership interests in different power supply projects where we receive capacity credits, which helps to reduce these monthly payments.

The FCA/capacity pricing is one of the reasons that GELD management must look closely at the programs we offer and the projects we decide to participate in to be sure the economics match our long-term goals.

See how Groton Electric Rates compare!

The chart to the right shows Groton Electric's rate compared to the average and highest residential rate for Massachusetts investor-owned utilities as well as the lowest rate in Massachusetts. Unitil has the highest investor-owned rate in Massachusetts and is currently 105.3% higher than Groton Electric for an average 750 kilowatt-hour bill.



Help us update our records. PLEASE complete and return to our office or call us at 978-448-1150*

We are updating our records to ensure we have the most up-to-date information on all customers. Please provide current phone and/or cell numbers so we may contact you in the event of an electrical emergency. Please also provide your email address for possible future email correspondence.

Name: _____ Home/Cell Phone: _____

Address: _____ Account #: _____

Email Address: _____ BEST number to reach you in an emergency: _____
(Please indicate if home or cell#)

*All information is strictly confidential and will only be used for Groton Electric business. GELD will NEVER sell or provide your information to a third party and none of your information is available online, so it cannot be hacked.