

Power Recommendation

Prepared for Town of Bristol

November 30, 2023

Overview & Goal:

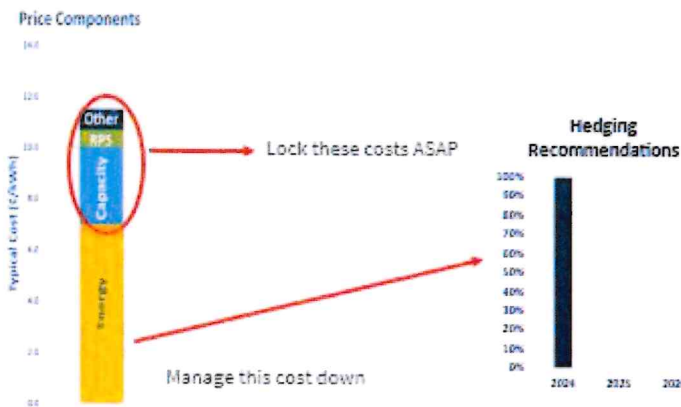
The goal was to minimize the Town of Bristol’s energy spend through strategic contracting, market timing, & product optimization. Best Practice Energy evaluated multiple purchasing options for the Town of Bristol. Our goal was to lay out the most cost-effective way for the Town of Bristol to manage their energy budgets.

Bid Summary

SUPPLIER	December 2023 Start		
	12	24	36
FPP	\$0.0350	\$0.0345	\$0.0340
CNE	\$0.0365	\$0.0370	\$0.0365
NRG	\$0.0382	\$0.0392	\$0.0384
BPE	\$0.0380	\$0.0375	\$0.0366

Transaction Summary

- December 2023 to December 2026
 - December 2026 allows the Town of Bristol energy management flexibility.
 - Prices fixes Capacity, RPS & Ancillary Services.
 - Energy Costs for 2024 will be locked at this time
 - Price: \$0.0340
 - Supplier: First Point Power



TOWN COUNCIL

DEC 06 2023

MEETING

Purchasing Recommendation

Index Contract with Capacity Included for December 2023 to December 2026:

- **Con's**
 - a. Budget is unknown at this time.
 - b. Potential high payments during some months
- **Pro's**
 - a. Lock capacity costs lower than last contract
 - b. A lot of chances to “win” out vs. current pricing
 - c. Can manage costs in outer years with defensive hedges to start setting longer term budgets.
 - d. If market drops Town of Bristol is in position to hedge lower market options
 - e. Avoid risk premiums priced into outer years.

Price Component Recommendations

Best Practice Energy evaluated the five main components of electricity pricing based on their Value (current price relative to other transactions, historic norms, etc.), Risk (potential for increasing in the future), and Reward (potential for them decreasing in the future and/or the possibility of the component decreasing materially from current levels). The table below summarizes Best Practice Energy’s assessment of each component along with a recommendation of how the Town of Bristol should handle it in its renewal transactions.

	Value	Risk	Reward	Result
Ancillaries	Good	Low	Low	Fix
Renewables	Good	Low	Low	Fix
Capacity	Good	Low	Low	Fix
Energy	Poor	High	High	Hedge

Ancillaries: Ancillary services are a small cost component that will increase over the next few years. The driver of the increase in pricing stems from upgrades that are happening to ISO NE’s power grid. As fossil fuels come offline transmission lines need to be built/upgraded to pave way for newer renewable generation. At this time **Best Practice Energy sees no reason to pass this cost through.**

Renewables: The cost of complying with state mandated renewable energy purchases has been increasing over time, driven mostly by state statues that gradually increase the use of renewable energy in Massachusetts. Massachusetts has had a slew of new renewable programs that came online since Town of Bristol last contracted. At this point these costs are well known. **Best Practice Energy sees no reason to pass this cost through.**

Capacity: Capacity is a component that the Town of Bristol has typically included in their contract price. This is a component that has been getting much cheaper in New England, and as a result the benefits of curtailing are diminishing. Best Practice Energy believes that the benefits of curtailing for a few hours during the summer do not offset the business costs associated with doing so. **Best Practice Energy sees no reason to pass this cost through.**

Energy: The Energy component is the largest and most volatile part of the entire price. Current market conditions hint at volatility to stick around throughout most of 2023. There are many factors, a lot of which are unknown, that are going to drive pricing over the next few months including summer weather, LNG exports, the economy and renewable production. **Due to the extreme volatility we are seeing, Best Practice Energy Recommends that the Town of Bristol hedge all of their energy needs for 2024 and then continues to monitor the energy market for additional hedging opportunities.**

Fixed Pricing Bid Summary

SUPPLIER	December 2023 Start		
	12 Month	24 Month	36 Month
FPP	\$0.1019	\$0.1068	\$0.1073
CNE	\$0.1035	\$0.1083	\$0.1091
NRG	\$0.1047	\$0.1105	\$0.1105
BP	\$0.1075	\$0.1134	\$0.1127

If the Town of Bristol locked into a fixed price contract at current market conditions, they are facing roughly a 150k budget increase annually, the main driver being energy.

Best Practice Energy strongly recommends that the Town of Bristol not lock in their Energy components at this time.

Outlook By Year

2024

- Pricing is at a 12-month low.
 - Healthy storage levels
 - Record production levels
 - Warm winter Forecast

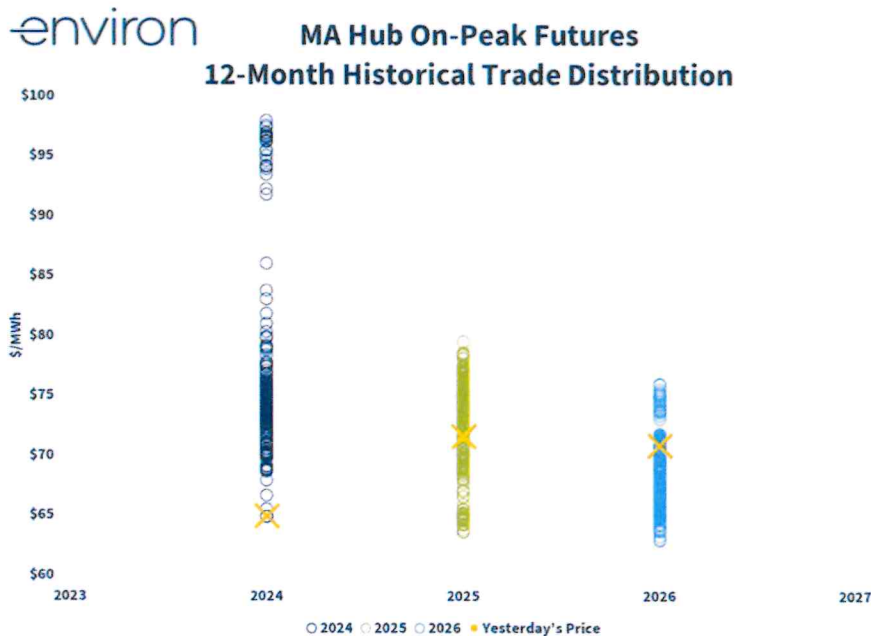
2025

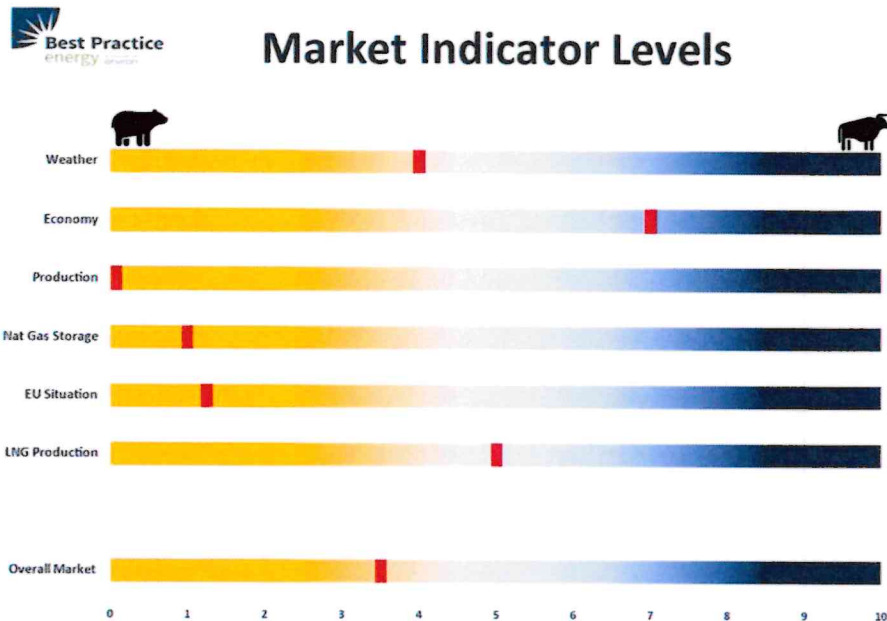
- Slight premium built in to 'twenty-five forward market.
 - 3 LNG facilities coming online in late 2024.
 - Nuclear & Coal retirements causing more dependence on Natural Gas for power generation.
 - Global LNG pricing continues to be unknown, expected uptick in demand in Japan, Indonesia, & Korea.
- Likely a buying opportunity February 2024
 - Warm winter will keep storage healthy post winter.
- Hot Summer 2024 will push pricing up.

2026

- The risk for pricing increases as we get closer.
 - A myriad of global issues could cause unease in LNG markets.
 - Wars, Hydrogen Levels in Brazil, Green Initiatives etc.

Electricity Market Outlook:





Market Outlook:

The energy market in New England is extremely volatile right now, while pricing is still a bit elevated and on the higher end it has shown some signs of weakening, there are still a plethora of risk factors that could push 2024 and 2025 prices much higher.

Market Risk:

- **Generation Retirements**
 - The US's shift from nuclear, and coal has put a bigger emphasis on Natural Gas and Renewables to pick up the slack.
- **Liquefied Natural Gas**
 - Due to the globality of the LNG market US LNG production will continue to climb into 2024 and 2025.
 - US largest LNG facility has resumed operation after being offline since June of 2022
 - The US is expected to send an additional 3bcf/day of LNG in 2024 with three new facilities coming online.
 - End to Russia and Ukraine war, does not necessarily mean we will see the global LNG market come off.
- **Summer 2024 Weather**

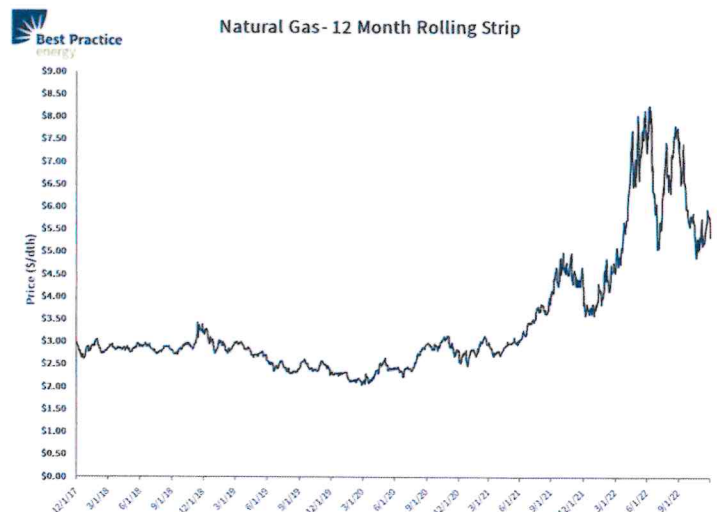
- Initial forecasts are calling for a warmer than normal summer.
- Hot summer could eat into US natural gas supply heading into next winter.
- **Banking Crisis**
 - Slowed investments in energy overall (Oil and Gas), could lead to less investments into renewables and efficiencies (large scale Fuel Cells, additional wind generation)

Bearish Factors:

- **Mild Winter**
 - NOAA is currently predicting a warmer than normal winter again, due to strong El Nino weather patterns forming.
- **Europe**
 - Currently Europe is driving the global LNG market, right now their storage levels are at all-time highs, as they appear to be in a good position heading into this summer where there is typically not as sharp of an increase in demand as we see in the US.
- **Economic Slowdown**
 - While we expect the economy to see growth in Q2, and Q3 of 2023 we could start to see a slowdown in 2024, this could curb demand helping lower prices.
- **Increased Production**
 - As US LNG output grows, there is a need for more gas if we see producers drill more that could offset some of the LNG that we are shipping overseas.
- **Reliable renewable generation**
 - Right now, renewable energy costs less than fossil fuel, with a lot of renewable generation online or coming online we could see this help lower pricing.

Layered Hedging

The general market conditions for energy are not favorable. The chart to the right depicts a 12-month rolling strip of wholesale gas prices – one of the many measures BEST PRACTICE ENERGY uses to assess if there is an energy buying opportunity. Energy prices began a rapid ascent from the pandemic lows with the economic rebound in the U.S. and global economies following the widespread availability of Covid-19 vaccines. That was followed by an unusually warm summer (higher demand, higher prices) and then a rapid increase in energy prices due to an energy crisis in Europe.



Under normal circumstances, futures prices are a function of the expected supply and demand conditions over time. In times of panic, they can be driven by non-fundamental factors such as fear: fear of a major pipeline being damaged, fear of a ban of exports, etc. These fears are reflected in the market price by assuming some (and

in our opinion a rather high) probability of a negative event occurring. If these fears are not realized, panic level prices can fizzle rather quickly. (The aftermath of hurricane Katrina is a great example, natural gas prices skyrocketed over several months in late 2005 only to return to much lower levels by early 2007.) Fundamentally, there are reasons to be optimistic that prices will decrease over time. For example, since the invasion, gas deliveries from Russia have significantly *decreased*. At some point, the market prices tend to reflect reality, not fear.

It is BEST PRACTICE ENERGY's expectation that market prices will be extremely volatile for some months to come (or longer). An analysis of past price spikes and recent market activity, prices dips (or increases) could be extreme and very short-lived – some lasting only a day or two. Having an underlying supply agreement in place will allow Town of Bristol to quickly transact on these opportunities when they materialize will be critical Town of Bristol success in navigating through the current energy crisis. BEST PRACTICE ENERGY will be monitoring the energy markets and providing regular updates to the Town of Bristol and alerting them when these opportunities to lock in. The ultimate goal is to establish a fixed price but do it using a series of well-time transactions to reduce price variations and provide lower overall costs.