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Electricity Supply Options

Deciphering the Utility Price-to-Compare (PTC)

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Introduction

There are 21 states in the US that are restructured, or deregulated, with respect to retail energy procurement. This opportunity provides residential and business consumers with the ability to choose who supplies the electricity and/ or natural gas needed to run their home or business operations, respectively. Exergy Energy's technology is designed to streamline this procurement process by providing business decision makers with the information they need to understand their options and make a good decision.

During the review of each Rate Check Report, when supplier rates and terms are presented to the business, we are sometimes asked about the utility's price-to-compare (PTC). Historically, the utility PTC served as a sound benchmark based on this simple premise: when the utility PTC is lower than the rates offered by third-party suppliers, the PTC presents a viable option for cost savings. Conversely, when the PTC is higher, decision-makers can feel confident locking into a third-party supply contract.

While a utility PTC can be a viable option, there are several factors to consider if the goal is to minimize budgetary risk and maximize savings. Before diving in, let's quickly level set on the two supply options and how each is set up to serve your business.

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Supply Providers

Option 1: The local utility

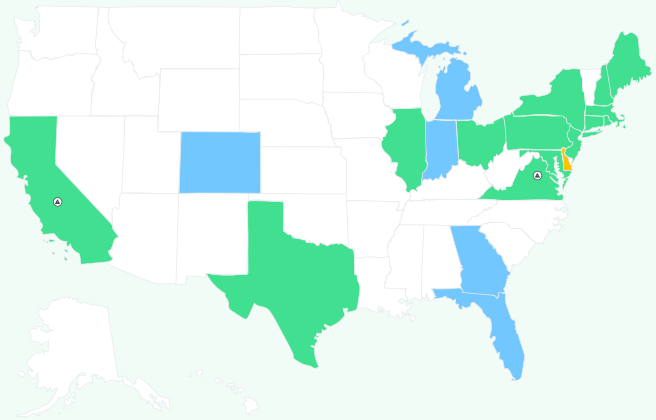
A utility's core business centers around maintaining the distribution network of those [rate payers] being served by it. The utility maintains liquidity by filing for a 'Rate of Return (RoR) ' which is approved by either the Public Service Commission or state legislature. This RoR is typically determined by several factors, including the cost of capital required to maintain the pipes and wires that distribute electricity and natural gas to end consumers.

In deregulated markets, the utility is one of two options and is often referred to as the "provider of last resort" given that they are required to serve those unable to secure third-party competitive supply or those that are unaware the option exists.

To support the estimated 20-30% of consumers that have not switched to third-party supply, utilities will procure load in the wholesale market just as a supplier would. While utility strategies vary – with some hedging 3-month strips 1 year in advance and others hedging 6-month strips 3 months in advance – resulting supply offers are not meant to be "competitive" or designed to benefit local businesses.

FACT

Texas utilities do not provide a default electricity service. All supply is provided by third-party suppliers.



*See **page 13** for a full listing of utilities, by state, that offer retail choice.

Supply Providers
Continued

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Option 2: A third-party supplier

A supplier's core business is hyper-focused on competing to serve each business's energy obligation. Competitive pricing and unique product configurations create business benefits ranging from budget certainty and cost savings to incremental opportunities for demand-side management.

Suppliers hedge generation and transmission in wholesale commodity markets, leaning on portfolio managers to execute trades and manage wholesale positions. It is this work that results in a supplier's ability to bundle competitive pricing and unique product configurations into retail energy contracts for consumers in deregulated states.

Exergy Energy's Supplier Marketplace connects businesses to **30+ suppliers** offering electricity, natural gas, renewable energy credits, and carbon offsets.

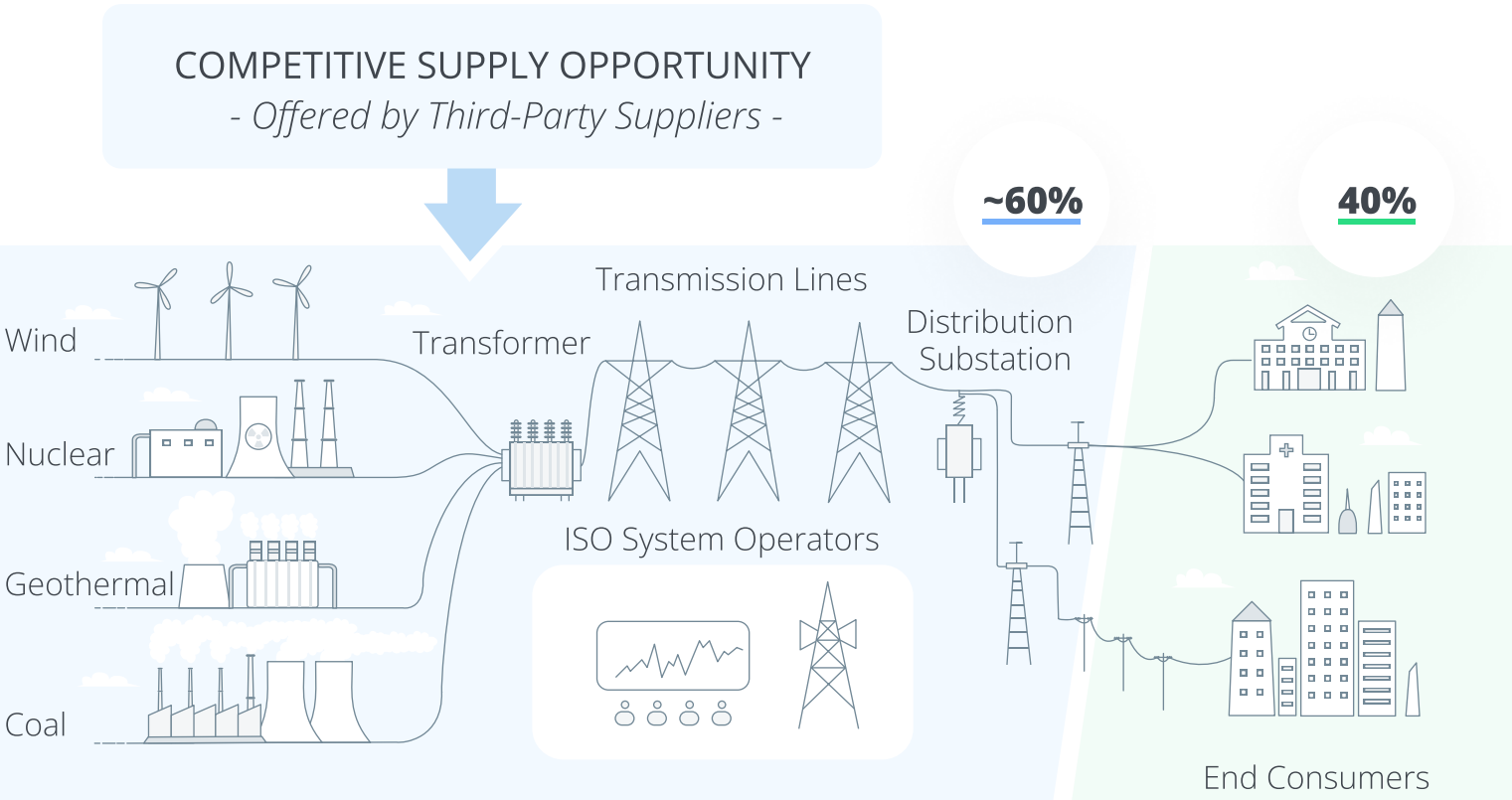
FACT

Suppliers in, deregulated states, help businesses manage up to 60% of the price they pay for electricity.

Click here to view our full list of third-party suppliers.

Electricity Supply Chain

Understanding the electricity supply chain clearly illustrates how third-party suppliers operate within deregulated markets. They, alongside the local distribution company, are set up to serve both residential and commercial customers in different ways.



There are three major players in the US electricity markets:

1. **Generators** - Entities that own, operate and maintain the generation sources that produce electricity power
2. **Transmission Operators** - entities that own, operate, and maintain high-voltage lines that transmit the power to each distribution network, operated by the local utility
3. **Distribution Companies** - Utilities that own, operate, and maintain the local network of low-voltage transmission lines that bring the power to the point of consumption. Operating as the sole supplier of the service in regulated markets and as the provider of last resort within deregulated markets.

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Unpacking the PTC

A utility PTC represents the electricity supply rate offered by a utility for a particular rate class over a defined period of time. Rate classes are assigned by the utility to characterize usage based on how and when it is consumed. This categorization makes it easier for the utility to strategically secure supply on behalf of their default customers.

The concept originated decades ago when states began to restructure into competitive markets. Used as an informative marketing tactic to entice business owners to choose a third party supplier, the PTC created a benchmark for businesses to quantify future savings 1, 2 and even 3 years into the future.

Fast forward 15-20+ years, utilities operate very differently and many legacy attitudes and approaches need to be re-calibrated by taking the following into consideration:

1

Availability of an Actual Rate

Utilities are not required to publish a PTC though most do to show their commitment to residential and small commercial consumers. Larger commercial and industrial consumers are likely already taking 3rd party supply and are less inclined to reference a PTC given its limited applicability to their operations. These larger consumers may receive a standard offer service ("SOS") rate as a similar point of comparison.

2

Visibility into Future Pricing

A published rate will typically have an effective start and end date which can range from 1 month to 12 months into the future. To minimize market-based risk, utilities are hedging shorter terms and offering far less visibility intro published rate offers.

As of February 14, 2023, Baltimore Gas & Electric's Standard Offer Service Rates / Miscellaneous Charges shows the PTC for G (Type 1) published through September 2023 (7-months) and the SOS rate for G (Type II) through the balance of the current month with no visibility beyond that. In this example, it is impossible for a business to benchmark this rate against a guaranteed rate offered by a supplier for a term further out than what has been published.

Unpacking the PTC
Continued

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3

Using the Past to Forecast the Future

Many decision makers believe that understanding where their PTC was over a prior 12-month period can be a leading indicator of where it will be in the next 12-months. Unfortunately, utility PTCs are not a leading indicator of market pricing, but rather a lagging one. The utility price provides us with a snapshot of the market on the day the price was procured, but offers no guarantees on where it will be in the future. A great example would be the default customers in Massachusetts who are currently paying ~$0.27/kWh based on a rate procured in the past, at the height of the market. This rate is 125% higher than the prices offered today by third-party suppliers.

4

Level of Effort Required

Interval meters have a different pricing structure compared to non-interval meters. While non-interval meters have a single price for the entire month, interval meters have different prices for each interval of time during the month. These intervals are known as On Peak, Off Peak, and Intermediary. Calculating the actual rate of an interval meter requires weight averaging the rate and usage within each interval. This makes it impossible to forecast a true PTC unless there is full control over how much will be consumed and within which period of time. This complexity increases when there are multiple meters, with different price structures, at the same property.

5

Misrepresentation of the PTC

When a rate isn't published, or too hard to find buried in a rate schedule, a common practice is to calculate a pseudo-PTC by looking at a recent bill and taking the total supply charge - applicable taxes / total billed usage. This rate is not a utility PTC but simply the rate paid to the utility for a specific billing period. This variable rate will likely be different in future months and should not be used as a benchmark.

Now that we know what to be aware of, let's take a look at how to utilize the PTC when contemplating your next purchase or validating a prior one.

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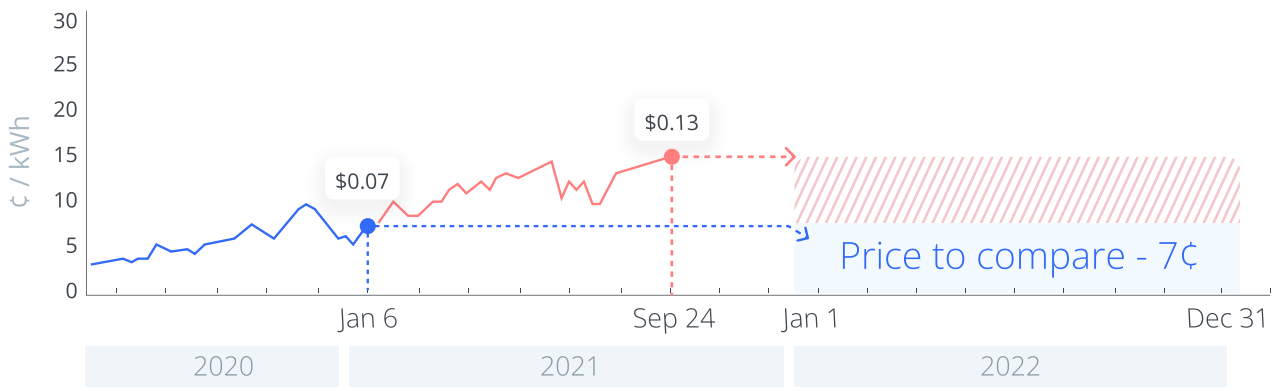
Utilizing the PTC

Benchmarking your next buy ⟶

While utilities are not incentivized to offer "competitive" rates, there are certain market conditions that result in the utility PTC being the most cost effective option. Like, for example, when market pricing trends up over a sustained period of time. It is more likely that the utility PTC will be a better option when the market is on the rise, whereas the inverse is true in a sustained falling market. Let's explore a scenario to put this in perspective.

Over the last 24-months market pricing rose steadily due to macro-economic factors such as the global re-balancing of supply and demand post COVID-19 and the War in Ukraine. Imagine a utility procured a wholesale block of electricity on January 6, 2021 in order to offer a published PTC rate of $0.07/kWh from January 2022 to December 2022. The PTC rate offered for that 12-month period, having been procured in the past when the market was lower, would be far less than the market price offered to a retail business who went to market on September 24, 2021 for the same 12-month term.

Chart 1: Utility price-to-compare vs. current market



*Data points are directionally accurate based on our proprietary MarketPulse tool, which tracked market movements within BGE from April 20, 2020 to February 23, 2023. However, the pricing data used in the chart is presented solely for illustrative purposes to support the scenarios being explained. It should not be relied upon as a source of actual pricing data.

Utilizing the PTC
Continued

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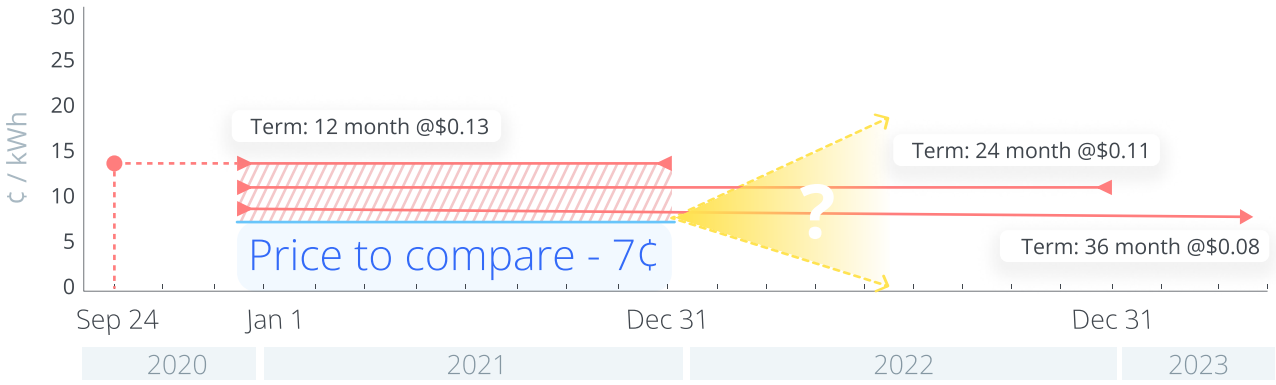
Let's play out this scenario - on September 24, a business compared the rates offered by suppliers against the PTC and came to the conclusion that the $0.07 / kWh was a better option compared to the $0.13 /kWh rate offered by a third-party supplier for the 12-month same term. Unfortunately, for the decision maker, things get complicated when they start looking at the supply offers with terms that extend past the published rate.

Chart 2 illustrates this lack of visibility which can create real challenges if locking in for a longer term is a priority. In the example below, the 36 month term is higher but provides price certainty and minimizes budgetary risk. What's more, this third-party supply rate will begin yielding savings against the utility PTC should the market inch just a few cents higher.

Chart 2: Analyzing supply options with no visibility



If the business values short term price savings over long term budget certainty than taking the utility PTC would be the way to go here so long as a more tailored procurement approach is implemented.

We sometimes see platform users roll to the utility and we always remind them to remain hyper vigilant of their position. Utilities have the right to change PTCs without warning and they know that nothing is guaranteed past expiration of the published rate.

Utilizing the PTC
Continued

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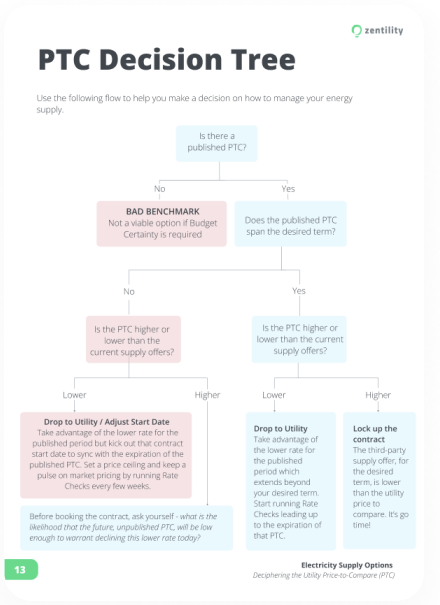
We also recommend that Rate Checks continue to ensure the business has a firm pulse on how the market is moving. Continuing with the previous example, if a business waited until April to lock in their next contract (to start Jan '23), they would have paid exponentially more than if they had locked in a forward contract back in September when the decision was made to drop to the utility.

Chart 4: Market movements and a missed opportunity

There is no crystal ball which is why we often recommend setting a price ceiling to create a boundary value for the procurement strategy.

Consider how much higher the market would have to go before the business feels uncomfortable with the budgetary impact. Continue to run Rate Checks every few weeks until that trigger hits or until you feel comfortable locking in.

*Check out the flow chart on **page 12** to help you navigate this decision-making process.



Utilizing the PTC
Continued

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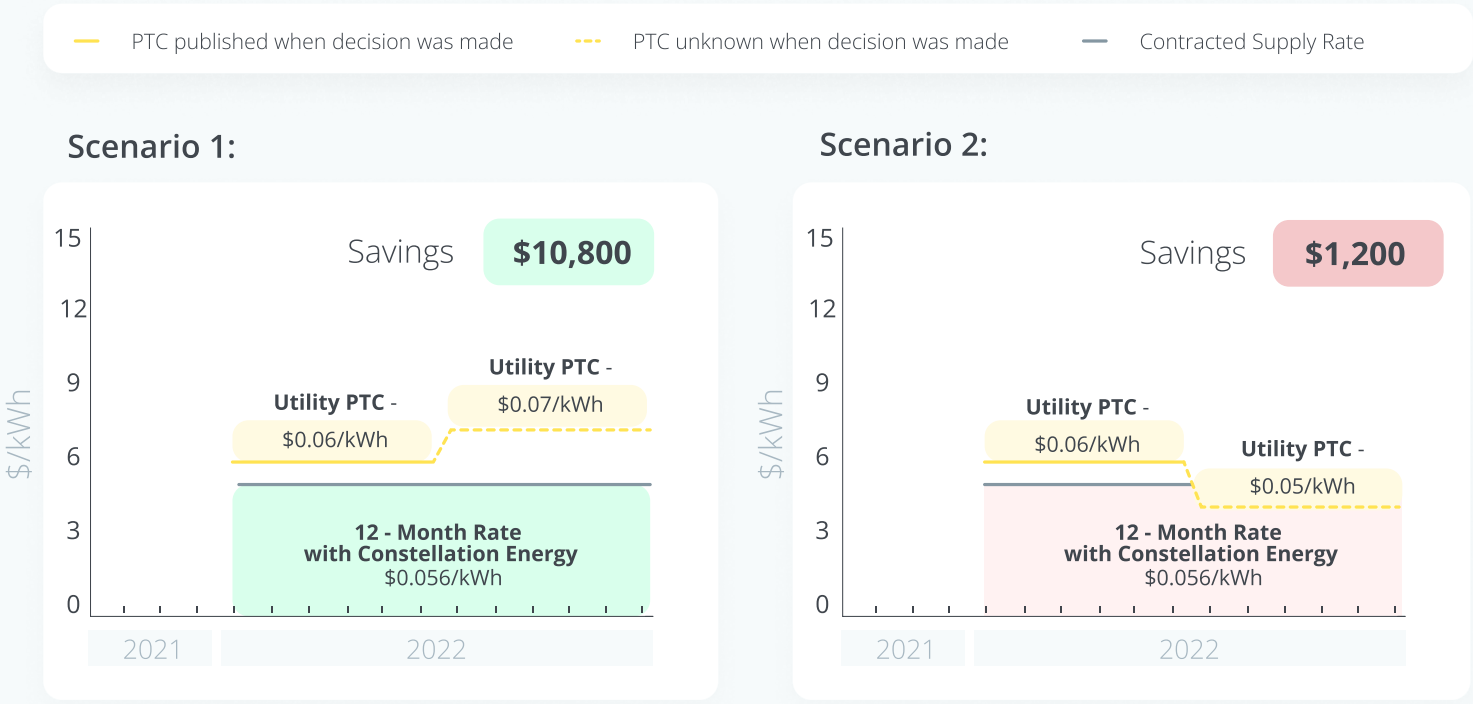
Validating a Past Decision ←

A historical look back provides decision makers with the hindsight to understand how those prior decisions panned out and can also help quantify realized savings. One data point to assess is the delta between the published utility PTC and the contracted supply rate over the term of the contract.

Chart 5 presents two scenarios: The image on the left validates a prior decision while the image on the right highlights a missed opportunity. It is important to remember that PTC information may be limited at the moment a decision is made. In the image above, the PTC for the second half of 2022 was unknown making it impossible to determine if the decision would be a good one without the benefit of hindsight. This reiterates the importance of having open conversations about price certainty vs. budgetary risk.

Chart 5: Contracted Term Savings/Cost vs. the Utility



*Savings analysis calculated based on a load of 1,200,000 kWh annually divided equally by 12 (months)

Conclusion

We firmly believe that data is power. Our technology synthesizes supply options and eliminates the guesswork in comparing custom third-party supply offers by validating terms and product configuration.

We hope this whitepaper has provided ample insight into the considerations and concessions that must be made when weighing the utility PTC as a viable option. While it may offer short-term relief in a rising market, it's important to consider all options carefully.

If you have any questions or would like to discuss a specific scenario or strategy, please reach out to us. We're always here to help.

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Appendix

Utility PTC Decision Tree pg.13

State-by-State Utility Breakdown pg.14

Competitive Electricity & Natural Gas Map pg.15

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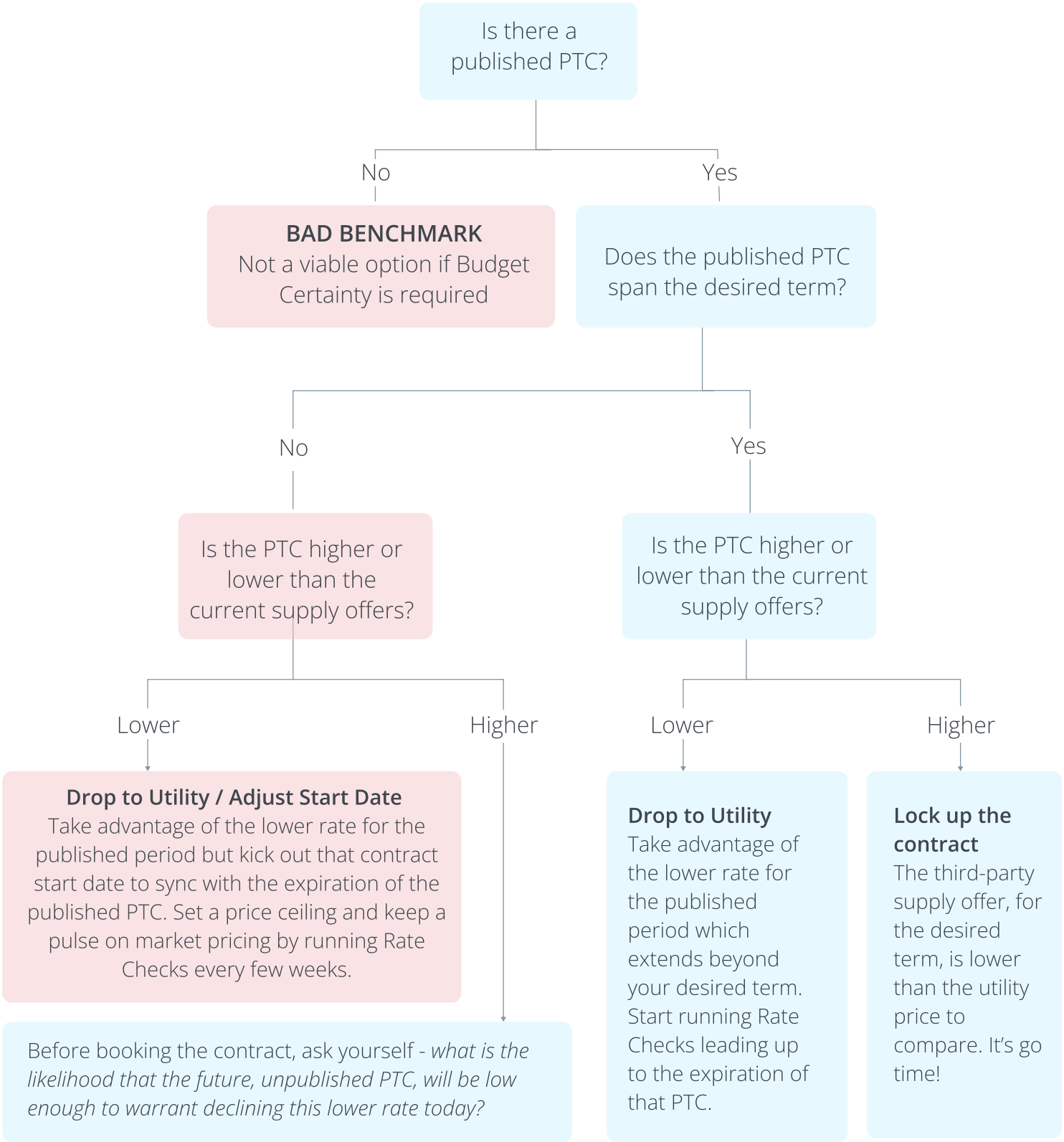
PTC Decision Tree

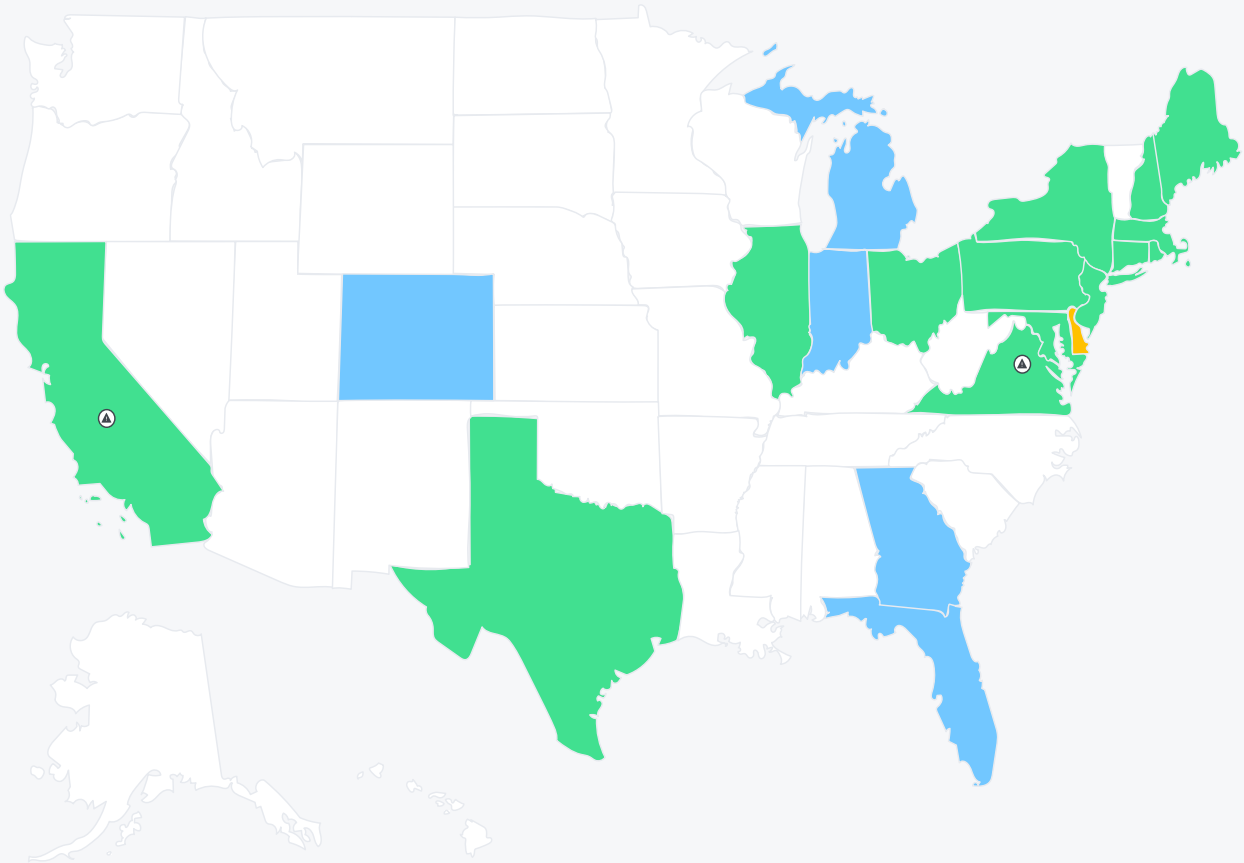
Use the following flow to help you make a decision on how to manage your energy supply.



Competitive Electricity & Natural Gas Markets

A listing of states where Exergy Energy is licensed to broker 3rd party electricity and natural gas supply contracts:

Electric & Natural Gas Elecric Natural Gas State Specific Rule



California - Electric choice is predicated on a business' status and/or eligibility for the Direct Access lottery-based program.

Virginia - Electric choice within Dominion Energy's territory requires a usage threshold of 5 MW Peak Demand (KW).

Utilities where third-party energy supply is available (Part 1)

Electric & Natural Gas · Elecric · Natural Gas · State Specific Rule

CA
- Southern California Edison
- Pacific Gas & Electric Company
- Southern California Gas
- Sandiego Gas & Electric
- Southwest Gas Corporation

CO
- Black Hills Energy
- Colorado Natural Gas
- Atmos Energy
- Yankee Gas

CT
- The United Illuminating Company
- Connecticut Natural Gas
- CorporationSouthern Connecticut
- Gas CompanyEversource

DC
- Pepco
- Washington Gas

DE
- Delmarva Power

FL
- Central Florida Gas
- Florida City Gas
- Florida Natural Gas
- Florida Public Utilities
- Peoples Gas
- Sebring Gas System
- St. Joe Natural Gas Company, Inc.

GA
- Atlanta Gas & Light

IL
- ComEd
- Amaren
- Peoples Gas
- North Shore Gas Company
- Nicor Gas Company
- Light and Coke Company

IN
- Northern Indiana Public Service Company

MA
- National Grid
- Unitil
- Eversource
- Berkshire Gas Company
- Liberty Utilities

MD
- Baltimore Gas & Electric
- Pepco
- Delmarva Power
- Potomac Edison (Allegheny Power)
- Southern Maryland Electric Cooperative
- Chesapeake Utilities
- Columbia Gas of Maryland
- Eastern Shore Gas
- Elkton Gas Company
- Washington Gas

ME
- Cental Maine Power
- Emera
- Bangor Gas Company
- Maine Natural Gas Corporation
- Summit Natural Gas of Maine
- Unitil

Utilities where third-party energy supply is available (Part 2)

Electric & Natural Gas · Elecric · Natural Gas · State Specific Rule

MI
- Michigan Gas Utilities
- SEMCO Energy

NH
- Unitil
- Eversource (Public Service of New Hampshire)
- Liberty Utilities
- New Hampshire Electric Cooperative(NHEC)

NJ
- Atlantic City Electric
- Jersey Central Power & Light (FirstEnergy)
- PSE&G
- Rockland Electric
- Elizabethtown Gas
- New Jersey Natural Gas
- South Jersey Gas

NY
- ConEdison
- National Grid
- Orange & Rockland
- Central Hudson Gas & Electric Corporation
- NYSEG
- Rochester Gas & Electric
- National Fuel

OH
- Toledo Edison (FirstEnergy)
- Ohio Edison (FirstEnergy)
- AES Ohio
- Cleveland Illuminating Co (FirstEnergy)
- Duke Energy
- Columbia Gas of Ohio
- Dominion East Ohio
- CenterPoint
- AEP

PA
- Duquesne Light Company
- Metropolitan Edison (FirstEnergy)
- PECO
- Penelec (FirstEnergy)
- Penn Power
- PPL Electric Utilities
- West Penn Power (FirstEnergy)
- UGI
- Columbia Gas of Pennsylvania
- National Fuel
- Peoples Gas
- Philadelphia Gas Works
- Valley Energy (PA)

RI
- National Grid

TX
- Oncor Electric Delivery
- CenterPoint
- AEP
- Texas-New Mexico Power
- Nueces Electric Coop
- Atmos Energy
- One Gas
- Texas Gas Service
- Sharyland

VA
- Dominion Energy
- Columbia Gas of Virginia
- Washington Gas

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Contact us to find out more.