

MCE Questions & Answers Regarding Power Supply April 2026

1. What is MCE doing to support renewable energy development?

MCE's mission is to confront the climate crisis by eliminating fossil fuel greenhouse gas emissions, producing renewable energy, and creating equitable community benefits. To serve this mission, MCE takes many steps to support renewable energy development. MCE maintains clean energy targets that exceed state requirements, which drives demand for additional new clean resources. This is the case whether these targets are met with short- or long-term contracts with new and/or existing resources.

To meet its goals, MCE uses a measured and incremental procurement strategy, executing contracts over time with different resource types and contract lengths, to balance reliability, cost and ratepayer affordability, resource types, and compliance and clean energy goals.

MCE has a preference for long-term, new-build renewable contracts when available and cost-effective; however, supply is limited due to demand and market constraints. MCE's [Feed-in Tariff program](#) provides incentives for new clean energy resources located in our service area.

MCE is also focused on finding new clean sources for Resource Adequacy, which increases market demand for clean capacity.

2. How much renewable energy has MCE supported through long-term contracts?

MCE's board has set strong policies to prioritize new renewable energy development under long-term contracts. As of 2026, 77.5% of MCE's renewable energy is sourced from long-term contracts.

- More than 46 MW of new renewables built in MCE's service area.
- Over 1,100 MW of new renewables built statewide to serve MCE customers.
- Since 2021, MCE has signed 13 long term agreements for 638 MW of renewable energy, including 500 MW of new-build projects.
- MCE has also secured 7 long term contracts for 774 MW of energy storage that will help shift renewable energy to hours of peak demand and add reliability to the grid.

3. Why does MCE use short-term renewable and GHG-free contracts in addition to long-term contracts?

As a prudent load serving entity (LSE) operating in a complex and dynamic market, MCE uses all the tools in its toolbox to create a balanced portfolio to serve our customers and communities. MCE strives to maintain a balanced portfolio that takes into account GHG-

free and renewable targets set by MCE's Board as well as the need to affordably and reliably meet state mandated compliance requirements.

MCE uses both long-term (> 5 years) and short-term (\leq 5 years) contracts to meet these targets while reliably and affordably serving customers. Long-term contracts serve a critical purpose but due to market constraints it is necessary to shape MCE's portfolio with long- and short-term contracts for both new and existing resources.

Long-term contracts help finance the construction of new clean energy projects, while short-term contracts further drive market demand and allow MCE to manage uncertainty in customer usage, project delays, and changing market and regulatory conditions.

Renewable project investors rely on revenues from both short- and long-term contracts as part of their financial stack; without both short-term and long-term revenues, projects may not have been financed and built. In fact, some of these renewable projects may shut down if they can't sell in short-term markets.

MCE's purchases of short-term renewable energy may come from newly built projects, and similarly, long-term purchases may come from existing resources.

Short-term purchases are also sometimes used to meet Resource Adequacy (RA) and Mid-Term Reliability compliance requirements when new long-term projects that were expected to provide capacity are delayed. In these situations, MCE may procure specified resources from out-of-state large hydro resources or an Asset Controlling Supplier (ACS) as temporary "Bridge Capacity" until long-term resources come online.

These types of contracts are typically used by LSEs like MCE to meet compliance obligations and responsibly manage cost, risk, and uncertainty in electricity supply and demand.

As discussed below, several factors make it necessary for MCE to maintain a balanced portfolio of both long-term and short-term contracts. These include, but are not limited to:

a. Load Forecast Uncertainty

MCE cannot perfectly forecast its customer base and how much electricity its customers will use years in advance. An LSE like MCE can:

- Experience customer fluctuations (e.g. gain or lose large commercial customers)
- Have customers opt up to Deep Green or opt down to Light Green at any time, changing what type of resources need to be procured
- Experience market changes that can lead to significant changes in demand (e.g., electrification, data centers, curtailment of supply, particularly solar).

Long-term contracts must be signed years before power is delivered. The ability to leverage short-term contracts helps LSEs adjust its portfolio to address situations where production or demand is higher or lower than expected. It is therefore prudent for an LSE

to not solely rely on long-term contracts, which would mean committing an LSE to prices and volumes years before the need is clear.

b. Limited and Uncertain Supply

New build renewable projects often experience delays to anticipated online dates, produce less power than expected, or are not available on timelines that are consistent with regulatory requirements. Short-term contracts with existing resources for guaranteed electricity production allow MCE to maintain reliable supply when delays occur.

- For example, according to the CPUC, there are approximately 40.5 GW of new renewable energy resources and energy storage resources with signed interconnection agreements in PG&E and SCE areas; 8.9 GW (about 22%) of those resources are expected to be delayed due to transmission delays (January 2026 Transmission Development Forum).
- Regulatory requirements can increase demand (and price) for new viable projects that MCE might otherwise seek to procure. The use of short-term contracts helps affordably balance MCE's portfolio.

c. Technology Diversity

In certain cases, short-term contracts give MCE access to resource technology types that MCE may not be able to procure (to the extent desired) under long-term contracts. Such technology types may have the hourly generation and emissions profiles that MCE needs for structuring a portfolio that meets its forecasted load. In recent years, MCE's short-term portfolio consisted of technologies like wind, geothermal, and hydroelectric that deliver power to the grid during late evening and early morning hours, when MCE doesn't typically have a lot of long-term resources to meet customer demand.

d. Price Risk Management

Executing contracts at different times, with different term lengths, helps reduce price risk, as prices fluctuate over time. Both long-term and short-term markets go through these fluctuations, and therefore, MCE uses a strategy to gradually build its long-term portfolio over time to spread the pricing risk. For example, in-demand resource types may command higher prices that we expect to drop off in a few years. To ensure MCE and its customers are not locked into paying higher prices for those resources in the long-term, MCE utilizes a mix of short- and long-term contracts. If all power were purchased through long-term contracts signed years in advance, customers could end up paying higher than market rates.

e. Emissions Reductions

Short-term renewable and GHG-free purchases are also a means to cost effectively reduce the emissions intensity of MCE's portfolio by providing carbon-free or renewable power to address gaps between long-term contracts and total energy need. Without short-term

contracts, MCE would be relying on system power, which is largely fossil fuels, to meet demand while we wait for long-term contracts to be executed or new resources to be built. For example, if MCE had relied only on long-term contracts in 2024, a year when solar curtailment was very high, the emissions intensity of its Light Green product would have been dramatically higher.

Impact of Short-Term Renewable Purchases on Portfolio Emissions and Power Content Label (PCL)
Based on Light Green Power Content Label - 2024

Long-term Contracts Only (Hypothetical)	Actual 2024 Portfolio
<ul style="list-style-type: none"> • No short-term renewable/GHG-free • Light Green service is 35% renewable • 606 lbs. CO₂e/MWh 	<ul style="list-style-type: none"> • Includes short-term renewable/greenhouse gas-free • Light Green service is 69% renewable • 1 lb. CO₂e/MWh

4. What challenges affect the development of new renewable energy projects?

Even when load serving entities like MCE want to contract for new renewable energy projects, several factors can limit supply. Outdated Grid Infrastructure and Interconnection Constraints

More than 227 GW of new energy sources are waiting in the CAISO interconnection queue, largely renewable and battery storage, creating delays, risk, and price impacts.

a. Development Challenges

Siting Challenges for renewable technologies, e.g., securing affordable land, locating available resources (specific to geothermal)

- Permitting Challenges, e.g., finding supportive host communities, permits for projects on federal land have become backlogged from red tape created by the new administration
- Supply Chain Challenges, e.g., tariff uncertainty creating risk in Sellers' supply contracts which can increase costs and delay development of new projects
- Financing Challenges, e.g., tax credit reductions and lack of guidance from Treasury Department on tax treatment from OBBBA changes

b. Regulatory Challenges

Changing regulations and incomplete guidance from regulatory agencies regarding treatment of new resources and technologies creates uncertainty and risk related to the

long-term compliance and market value of long-term contracts. Utilizing short-term contracts can help smooth and mitigate regulatory risks and uncertainty.

5. What role or impact do short-term renewable and GHG-free contracts have on the Power Source Disclosure Program?

Short-term renewable and GHG-free contracts also help MCE achieve its internal clean energy targets and are recognized by the CEC as eligible to mitigate the GHG-intensity of a retail supplier's portfolios. Current CEC regulations do not distinguish emissions based on length of contract. Emissions are based on resource type (solar, wind, natural gas, etc.), specific resource identification (i.e. can the energy delivered under the contract be traced to specific generating facilities), and title to the energy delivered under the contract.

Starting in 2027 (reported in 2028), CEC regulations will require hourly emissions reporting. MCE's current understanding is that there will continue to be no difference in emissions reporting based on length of contract, and the PCL will not reflect hourly accounting, and will remain reflective of annual accounting. Some of MCE's customers rely on MCE's products to meet their local climate action goals and/or meet state regulatory requirements. Therefore, we rely on the CEC provided guidelines to estimate the renewable and GHG content of our portfolio.

MCE's current long-term contract portfolio is solar-heavy. Short-term PPAs for other renewables or GHG-free energy with different generation profiles help reduce hourly emissions and better follow MCE load shape.

6. Are MCE's short-term renewable and GHG-free energy contracts "attribute-only"?

No. MCE purchases bundled renewable energy (called PCC1) and GHG-free energy. These products include both electricity and the respective environmental attributes. They involve the purchase of actual electricity supply that is scheduled into CAISO and to which MCE has legal title; they are not transactions for standalone environmental certificates.

These are different from unbundled renewable certificates (called PCC3), which do not include legal title to the underlying electricity. Such purchases are therefore considered "attribute-only" purchases. MCE does not currently purchase unbundled Renewable Energy Certificates (RECs) directly but may end up with small amounts of unbundled RECs in MCE's overall portfolio as a result of specific portfolio transactions that may come with unbundled RECs in addition to PCC1s, as described below.

From 2023 through 2024, MCE received a small percentage of legacy PCC0 RECs from PG&E under the Voluntary Allocation and Market Offer (VAMO) contract, which appeared on the [2024 PCL](#) as unbundled RECs. These PCC0s are RECs that were generated prior to the existence of the RPS program.

Many short-term contracts for GHG-free energy or PCC 1 renewable energy are structured as "index-plus" contracts. It's important to note that index-plus is a contract type, not a

resource or product type. Product types refer to PCC1, PCC2, and PCC3, which are specific to renewable resources. GHG-free resources are not defined as part of a PCC. Resources include wind, solar, geothermal, etc.

In accordance with the payment terms of index-plus contracts, MCE pays a price that is discounted by a market index price. As the buyer, MCE is given this discount because the seller, who is responsible for scheduling the power into the CAISO market, keeps the CAISO revenue. The end result is that MCE pays a net price that is fixed and equal to the value of the environmental attribute: the PCC 1 REC or the GHG-free attribute.

As the buyer, MCE takes legal title to both the energy and the environmental attributes associated with that energy. Importantly, this energy is physically delivered to the CAISO grid. In the case of renewable energy purchases, because both the energy and attributes come from the same renewable resource, these contracts qualify as bundled PCC1 renewable procurement under California's Renewable Portfolio Standard; they are not attribute-only REC purchases, which are purchases wherein the energy and attributes are sold separately.