

GLOSSARY OF TERMS

AB – **Assembly Bill** – An Assembly Bill is a piece of legislation that is introduced in the Assembly. In other words, the Assembly, rather than the Senate, is the house of origin in the legislature for the legislation. In California, it is common for legislation to be referred to by its house of origin number (such as, AB 32) even once it becomes law.

AL - **Advice Letter** - An Advice Letter is a request by a CPUC jurisdictional entity for Commission approval, authorization, or other relief.

ALJ – **Administrative Law Judge** – ALJs preside over CPUC cases to develop the evidentiary record and draft proposed decisions for Commission action.

ARB – **Air Resources Board** – The California Air Resources Board (CARB or ARB) is the "clean air agency" in the government of California. CARB is charged with protecting the public from the harmful effects of air pollution and developing programs and actions to fight climate change.

AREM – Alliance for Retail Energy Markets – a not for profit corporation that advocates for continued development of successful customer choice in retail energy markets and provides a focused voice for competitive energy retailers and their customers in selected public policy forums on the state level. AREM represented direct access providers such as Constellation NewEnergy and Direct Energy.

BayREN - Bay Area Regional Energy Network - BayREN offers region-wide energy programs, services and resources to members of the public by promoting energy efficient buildings, reducing carbon emissions and building government capacity.

CAISO – California Independent System Operator - a non-profit independent system operator that oversees the operation of the California bulk electric power system, transmission lines and electricity market generated and transmitted by its members (~80% of California's electric flow). Its stated mission is to "operate the grid reliably and efficiently, provide fair and open transmission access, promote environmental stewardship and facilitate effective markets and promote infrastructure development." CAISO is regulated by FERC and governed by a five-member governing board appointed by the governor.

CALCCA – California Community Choice Association – Association made up of Community Choice Aggregation (CCA) groups which represents the interests of California's community choice electricity providers.

CALSEIA – California Solar Energy Industries - CALSEIA represents more than 200 companies doing solar-related business in California, including manufacturers, distributors, installation contractors, consultants, and educators. Members' annual dues support professional staff and a lobbyist who represent the common interests of California's solar industry at the Legislature, Governor's Office, and state and local agencies.

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CALSLA – California City County Street Light Association - statewide association representing cities, counties and towns before the CPUC that is committed to maintaining fair and equitable street light electric rates and facilities charges, and disseminating street light related information.

CAM – Cost Allocation Mechanism - the cost recovery mechanism to cover procurement costs incurred in serving the central procurement function.

CARB – **California Air Resources Board** – The CARB is charged with protecting the public from the harmful effects of air pollution and developing programs and actions to fight climate change in California.

CARE – California Alternative Rates for Energy – A State program for low-income households that provides a 30% discount on monthly energy bills and a 20% discount on natural gas bills. CARE is funded through a rate surcharge paid by all other utility customers.

CBE – **Communities for a Better Environment** – environmental justice organization that was founded in 1978. The mission of CBE is to build people's power in California's communities of color and low-income communities to achieve environmental health and justice by preventing and reducing pollution and building green, healthy and sustainable communities and environments.

CCA – **Community Choice Aggregator** - A community choice aggregator, sometimes referred to as community choice aggregation, allows local governments to procure power on behalf of their residents, businesses, and municipal accounts from an alternative supplier while still receiving transmission and distribution service from their existing utility provider. CCAs are an attractive option for communities that want more local control over their electricity sources, more green power than is offered by the default utility, and/or lower electricity prices. By aggregating demand, communities gain leverage to negotiate better rates with competitive suppliers and choose greener power sources.

CCSF – **City and County of San Francisco** – The City and County of San Francisco often engage in joint advocacy before the CPUC. San Francisco operates CleanPowerSF, a CCA.

CEC – **California Energy Commission** - the primary energy policy and planning agency for California, whose core responsibilities include advancing state energy policy, achieving energy efficiency, investing in energy innovation, developing renewable energy, transforming transportation, overseeing energy infrastructure and preparing for energy emergencies.

CEE – Coalition for Energy Efficiency – non-profit comprised of US and Canadian energy efficiency administrators working together to accelerate the development and availability of energy efficient products and services.

CLECA – California Large Energy Consumers Association – an organization of large, high load factor industrial customers located throughout the state; the members are in the cement, steel, industrial gas, pipeline, beverage, cold storage, food packaging, and mining industries, and share the fact that electricity costs comprise a significant portion of their costs of production. Some members are bundled customers, others are Direct Access (DA) customers, and some are served by Community Choice Aggregators (CCAs); a few members have onsite renewable generation.

CPUC – California Public Utility Commission - state agency that regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies, in addition to authorizing video franchises.

C&I – **Commercial and Industrial** – Business customers. C&I customers generally consume much higher volumes of electricity and gas. Many utilities segment their C&I customers by energy consumption (small, medium and large).

CP – Compliance Period – Time period to become RPS compliant, set by the CPUC (California Public Utilities Commission)

DA – **Direct Access** – An option that allows eligible customers to purchase their electricity directly from third party providers known as Electric Service Providers (ESP).

DA Cap – the maximum amount of electric usage that may be allocated to Direct Access customers in California, or more specifically, within an Investor-Owned Utility service territory.

DACC – **Direct Access Customer Coalition** a regulatory advocacy group comprised of educational, governmental, commercial and industrial customers that utilize direct access for all or a portion of their electrical energy requirements

DA Lottery – a random drawing by which DA waitlist customers become eligible to enroll in DA service under the currently-applicable Direct Access Cap.

DA Waitlist – customers that have officially registered their interest in becoming a DA customer but are not yet able to enroll in service because of DA cap limitations.

DAC – Disadvantaged Community - Disadvantaged communities refers to the areas throughout California which most suffer from a combination of economic, health, and environmental burdens. These burdens include poverty, high unemployment, air and water pollution, presence of hazardous wastes as well as high incidence of asthma and heart disease. One way that the state identifies these areas is by collecting and analyzing information from communities all over the state. CalEnviroScreen, an analytical tool created by the California Environmental Protection Agency (CalEPA), combines different types of census tract-specific information into a score to determine which communities are the most burdened or "disadvantaged."

DASR – Direct Access Service Request – Request submitted by C&I customers to become direct access eligible.

Demand - The rate at which electric energy is delivered to or by a system or part of a system, generally expressed in kilowatts (kW), megawatts (MW), or gigawatts (GW), at a given instant or averaged over any designated interval of time. Demand should not be confused with Load or Energy.

DER – Distributed Energy Resource – A small-scale physical or virtual asset (e.g. EV charger, smart thermostat, behind-the-meter solar/storage, energy efficiency) that operates locally and is connected to a larger power grid at the distribution level.

Distribution - The delivery of electricity to the retail customer's home or business through low voltage distribution lines.

DLAP – Default Load Aggregation Point – In the CAISO's electricity optimization model, DLAP is the node at which all bids for demand should be submitted and settled.

DR – Demand Response - An opportunity for consumers to play a significant role in the operation of the electric grid by reducing or shifting their electricity usage during peak periods in response to time-based rates or other forms of financial incentives.

DRP – Distributed Resource Plans – plans that are required by statute that are intended to identify optimal locations for the deployment of distributed resources.

DWR – Department of Water Resources – DWR manages California's water resources, systems, and infrastructure in a responsible, sustainable way.

ECR – **Enhanced Community Renewable** – An IOU program that reflects the "Community Solar" model of renewable energy purchasing. Customers sign up to purchase a portion of a local solar project directly from a Developer at a level that meets at least 25% of their monthly electricity demand, but up to 100%. The customer will pay the Developer for the subscribed output, and receive a credit on their utility bill that reflects their enrollment level.

ED – **Energy Division** – The CPUC's Energy Division develops and administers energy policy and programs to serve the public interest, advise the Commission, and ensure compliance with the Commission decisions and statutory mandates.

EE – Energy Efficiency- the use of less energy to perform the same task or produce the same result. Energy-efficient homes and buildings use less energy to heat, cool, and run appliances and electronics, and energy-efficient manufacturing facilities use less energy.

ELCC – Effective Load Carrying Capacity – The additional load met by an incremental generator while maintaining the same level of system reliability. For solar and wind resources the ELCC is the amount of capacity which can be counted for Resource Adequacy purposes.

EPIC – **Electric Program Investment Charge** – The EPIC program was created by the CPUC to support investments in clean energy technologies that provide benefits to the electricity ratepayers of PG&E, San Diego Gas & Electric Company (SDG&E), and Southern California Edison Company (SCE)

ERRA – Energy Resource Recovery Account – ERRA proceedings are used to determine fuel and purchased power costs which can be recovered in rates. The utilities do not earn a rate of return on these costs, and only recover actual costs. The costs are forecast for the year ahead. If the actual costs are lower than forecast, then the utility gives money back, and vice versa.

ES – Energy Storage - the capture of energy produced at one time for use at a later time to reduce imbalances between energy demand and energy production.

ESA – **Energy Storage Agreement** – means a battery services contract, a capacity contract, demand response contract or similar agreement.

ESP – Energy Service Provider - An energy entity that provides service to a retail or end-use customer.

EV – Electric Vehicle - a vehicle that uses one or more electric motors for propulsion.

FCR – Flexible Capacity Requirements – "Flexible capacity need" is defined as the quantity of resources needed by the CAISO to manage grid reliability during the greatest three-hour continuous ramp in each month. Resources will be considered as "flexible capacity" if they can sustain or increase output, or reduce ramping needs, during the hours of "flexible need." "FCR"

means the flexible capacity requirements established for LSEs by the CPUC pursuant to the CPUC Decisions.

GHG – **Greenhouse gas** - water vapor, carbon dioxide, tropospheric ozone, nitrous oxide, methane, and chlorofluorocarbons (CFCs). A gas that causes the atmosphere to trap heat radiating from the earth. The most common GHG is Carbon Dioxide, though Methane and others have this effect as well.

GRC – **General Rate Case** – Proceedings used to address the costs of operating and maintaining the utility system and the allocation of those costs among customer classes. For California's three large IOUs, the GRCs are parsed into two phases. Phase I of a GRC determines the total amount the utility is authorized to collect, while Phase II determines the share of the cost each customer class is responsible and the rate schedules for each class. Each large electric utility files a GRC application every three years for review by the Public Advocates Office and interested parties and approval by the CPUC.

GTSR – Green Tariff Shared Renewables – The GTSR program enables customers to receive 50 to 100 percent of their electricity demand from renewable sources. The GTSR program has two components: the Green Tariff (GT) component and the Enhanced Community Renewables (ECR) component. Through GT, a customer may pay the difference between their current generation charge and the cost of procuring 50 to 100 percent renewables. With ECR, a customer agrees to purchase a share of a community renewable (typically solar) project directly from a developer, and in exchange will receive a credit from their utility for the customer's avoided generation procurement.

GWh – **Gigawatt-hour** – The unit of energy equal to that expended in one hour at a rate of one billion watts. One GWh equals 1,000 megawatt-hours.

ICA – **Integration Capacity Analysis** – The enhanced integrated capacity and locational net benefit analysis quantifies the capability of the system to integrate Distributed Energy Resources (DERs) within the distribution system. Results are dependent on the most limiting element of the various power system criteria such as thermal ratings, power quality, system protection limits and safety standards of existing equipment.

IDER – Integrated Distributed Energy Resources – A CPUC proceeding that aims to more effectively coordinate the integration of demand-side resources in order to better meet customer and grid needs, while enabling California to attain its greenhouse gas reduction goals.

IDSM – **Integrated Demand-Side Management** – an approach that joins together all the resources utilities have at their disposal to plan, generate and supply electricity in the most efficient manner possible.

IEP – Independent Energy Producers – California's oldest and leading nonprofit trade association, representing the interest of developers and operators of independent energy facilities and independent power marketers.

IMD – **Independent Marketing Division** – Under state law, IOUs are prohibited from lobbying or marketing on community choice unless the IOU forms an independent marketing division funded by shareholders rather than ratepayers. SDG&E' and its parent company Sempra were permitted by the CPUC to create such an independent marketing division, which allowed SDG&E to lobby against plans to create a CCA program.

IOU – Investor-Owned Utility – A private electricity and natural gas provider, such as SDG&E, PG&E or SCE, which are the three largest IOUs in California.

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IRP – Integrated Resource Plan – A plan which outlines an electric utility's resource needs in order to meet expected electricity demand long-term.

kW – **Kilowatt** – Measure of power where power (watts) = voltage (volts) x amperage (amps) and 1 kW = 1000 watts

kWh – **Kilowatt-hour** – This is a measure of consumption. It is the amount of electricity that is used over some period of time, typically a one-month period for billing purposes. Customers are charged a rate per kWh of electricity used.

LCE – Lancaster Choice Energy - the CCA that serves the City of Lancaster, California.

LCFS – Low Carbon Fuel Standard – A CARB program designed to encourage the use of cleaner low-carbon fuels in California, encourage the production of those fuels, and therefore, reduce greenhouse gas emissions.

LCR – Local (RA) Capacity Requirements – The amount of Resource Adequacy capacity required to be demonstrated in a specific location or zone.

LMP – Locational Marginal Price – Each generator unit and load pocket is assigned a node in the CAISO optimization model. The model will assign a LMP to the node in both the day- ahead and real time market as it balances the system using the least cost. The LMP is comprised of three components: the marginal cost of energy, congestion and losses. The LMP is used to financially settle transactions in the CAISO.

LNBA – Locational Net Benefits Analysis – a cost-benefit analysis of distributed resources that incorporates location-specific net benefits to the electric grid.

Load - An end use device or customer that receives power from an energy delivery system. Load should not be confused with Demand, which is the measure of power that a load receives or requires. See Demand.

LSE – Load-serving Entity – Entities that have been granted authority by state, local law or regulation to serve their own load directly through wholesale energy purchases and have chosen to exercise that authority.

LTPP – **Long-Term Procurement Rulemaking** – This is an "umbrella" proceeding to consider, in an integrated fashion, all of the Commission's electric procurement policies and programs.

MCE – **Marin Clean Energy** - the first CCA in California that began serving customers in 2010. They serve customers in Contra Costa, Marin, Napa and Solano counties in Northern California.

MEO – **Marketing Education and Outreach** – a term generally used to describe various strategies to inform customers, such as to motivate consumers to take action on energy efficiency or conservation measures and change their behavior.

MW – Megawatt – measure of power. A megawatt equals 1,000 kilowatts or 1 million watts.

MWH – Megawatt-hour – measure of energy

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NAESCO – **National Association of Energy Service Companies** – – an advocacy and accreditation organization for energy service companies (ESCOs). Energy Service Companies

contract with private and public sector energy users to provide cost-effective energy efficiency retrofits across a wide spectrum of client facilities.

NBC – **Non-Bypassable Charge** – fees that are paid on every kilowatt-hour of electricity that is consumed from the grid. These charges can be used to fund things like energy assistance programs for low-income households and energy efficiency programs. These charges apply even if customers buy grid-supplied power from an outside power company such as a CCA.

NDA – **Non-Disclosure Agreement** – a contract by which one or more parties agree not to disclose confidential information that they have shared with each other.

NEM – Net Energy Metering – A program in which solar customers receive credit for excess electricity generated by solar panels.

NRDC – Natural Resources Defense Council - non-profit international environmental advocacy group.

NP-15 – **North Path 15** – NP-15 is a CAISO pricing zone usually used to approximate wholesale electricity prices in northern California in PG&E's service territory.

OIR – Order Instituting Rulemaking – A procedural document that is issued by the CPUC to start a formal proceeding. A draft OIR is issued for comment by interested parties and made final by vote of the five Commissioners of the CPUC.

OSC – Order to Show Cause - order requiring an individual or entity to explain, justify, or prove something.

ORA – Office of Ratepayer Advocates – the independent consumer advocate within the CPUC, now called Public Advocates office.

PA – Program Administrator (for EE Business Plans) IOUs and local government agencies authorized to implement CPUC-directed Energy Efficiency programs.

PCE – Peninsula Clean Energy Authority – CCA serving San Mateo County and all 20 of its cities and towns as well as the City of Los Banos.

PCC1 – RPS Portfolio Content Category 1 – Bundled renewables where the energy and REC are dynamically scheduled into a California Balancing Authority (CBA) such as the CAISO. Also known as "in-state" renewables.

PCC2 – RPS Portfolio Content Category 2 – Bundled renewables where the energy and REC are from out-of-state and not dynamically scheduled to a CBA.

PCC3 – RPS Portfolio Content Category 3 – Unbundled REC

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PCIA or "exit fee" - Power Charge Indifference Adjustment (PCIA) is an "exit fee" based on stranded costs of utility generation set by the California Public Utilities Commission. It is calculated annually and assessed to customers of CCAs and paid to the IOU that lost those customers as a result of the formation of a CCA.

PCL – Power Content Label – A user-friendly way of displaying information to California consumers about the energy resources used to generate the electricity they sell, as required by AB 162 (Statue of 2009) and Senate Bill 1305 (Statutes of 1997).

PD – **Proposed Decision** – A procedural document in a CPUC Rulemaking that is formally commented on by parties to the proceeding. A PD is a precursor to a final Decision voted on by the five Commissioners of the CPUC.

PG&E – Pacific Gas & Electric - the IOU that serves 16 million people over a 70,000 square mile service area in Northern California.

PHC – Prehearing Conference - CPUC hearing to discuss the scope of a proceeding among other matters. Interested stakeholders can request party status during these.

Pnode – Pricing Node – In the CAISO optimization model, it is a point where a physical injection or withdrawal of energy is modeled and for which a LMP is calculated.

PPA – Power Purchase Agreement – A contract used to purchase the energy, capacity and attributes from a renewable resource project.

PRP – **Priority Review Project** - transportation electrification pilot projects approved by the CPUC pursuant to SB 350.

PRRR – Progress on Residential Rate Reform – Pursuant to a CPUC decision, the IOUs must submit to the CPUC and parties periodic updates on the progress of their efforts to assist customers with residential rate design changes related to rate reform, including tier collapse and transition to a default time of use rate.

PUC – Public Utilities Code – California statute that contains 33 Divisions, and the range of topics within this Code includes natural gas restructuring, private energy producers, telecommunication services, and specific municipal utility districts and transit authorities. Primary statute for governance of utilities as well as CCAs in California.

PURPA – Public Utilities Regulatory Policy Act – federal statute passed by Congress to encourage fuel diversity via alternative energy sources and to introduce competition into the electric sector. It was meant to promote energy conservation (reduce demand) and promote greater use of domestic energy and renewable energy (increase supply). The law was created in response to the 1973 energy crisis.

RA – Resource Adequacy - Under its Resource Adequacy (RA) program, the California Public Utilities Commission (CPUC) requires load-serving entities—both independently owned utilities and electric service providers—to demonstrate in both monthly and annual filings that they have purchased capacity commitments of no less than 115% of their peak loads.

RAM – Renewables Auction Mechanism - a procurement program the Investor-owned Utilities (IOUs) may use to procure RPS eligible generation. The IOUs may use RAM to satisfy authorized procurement needs, for example, system Resource Adequacy needs, local Resource Adequacy needs, RPS needs, reliability needs, Local Capacity Requirements, Green Tariff Shared Renewables needs, and any need arising from Commission or legislative mandates.

RE – Renewable Energy - Energy from a source that is not depleted when used, such as wind or solar power.

REC - Renewable Energy Certificate - A REC is the property right to the environmental benefits associated with generating renewable electricity. For instance, homeowners who generate solar

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electricity are credited with 1 solar REC for every MWh of electricity they produce. Utilities obligated to fulfill an RPS requirement can purchase these RECs on the open market.

RES-BCT – **Renewables Energy Self-Generation Bill Credit Transfer** – This program enables local governments and universities to share generation credits from a system located on one government-owned property with billing accounts at other government-owned properties. The system size limit under RES-BCT is 5 MW, and bill credits are applied at the generation-only portion of a customer's retail rate.

RFO – **Request for Offers** a competitive procurement process used by organizations to solicit the submission of proposals from interested parties in response to a scope of services.

RPS - Renewable Portfolio Standard - Law that requires CA utilities and other load serving entities (including CCAs) to provide an escalating percentage of CA qualified renewable power (culminating at 33% by 2020) in their annual energy portfolio.

SB – **Senate Bill** – a piece of legislation that is introduced in the Senate. In other words, the Senate, rather than the Assembly, is the house of origin in the legislature for the legislation.

SCE – **Southern California Edison** – the large IOU that serves the Los Angeles and Orange County area.

SCP – **Sonoma Clean Power Authority** – CCA serving Sonoma County and surrounding areas in Northern California.

SDG&E – **San Diego Gas & Electric** - the IOU that serves San Diego county, they own the infrastructure that delivers SDCP energy to customers.

SGIP – Self-Generation Incentive Program – A program which provides incentives to support existing, new, and emerging distributed energy resources (storage, wind turbines, waste heat to power technologies, etc.)

SUE – Super User Electric - electric surcharge that's intended to penalize consumers for excessive energy use.

SVCE – Silicon Valley Clean Energy - CCA serving Silicon Valley Area.

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TCR EPS Protocol – The Climate Registry Electric Power Sector Protocol – Online tools and resources provided by The Climate Registry to assist organizations to measure, report, and reduce carbon emissions.

TE – **Transportation Electrification** – For the transportation sector, electrification means replacing fossil fuels with electricity as the means of powering light-duty vehicles, medium- and heavy-duty trucks, and buses. The primary goal is to reduce greenhouse gas (GHG) emissions and, ultimately, contribute to mitigating the effects of climate change on the planet.

Time-of-Use (TOU) Rates — The pricing of delivered electricity based on the estimated cost of electricity during a particular time-block. Time-of-use rates are usually divided into three or four time-blocks per 24 hour period (on-peak, mid-peak, off-peak and sometimes super off-peak) and by seasons of the year (summer and winter). Real time pricing differs from TOU rates in that it is based on actual (as opposed to forecasted) prices that may fluctuate many times a day and are weather sensitive, rather than varying with a fixed schedule.

TM – Tree Mortality - refers to the death of forest trees and provides a measure of forest health. In the context of energy, the CPUC is tasked with utilizing its authority to extend contracts and take actions to authorize new contracts on bioenergy facilities that receive feedstock from high hazard zones.

TURN – The Utility Reform Network - A ratepayer advocacy group charged with ensuring that California IOUs implement just and reasonable rates.

Unbundled RECs - Renewable energy certificates that verify a purchase of a MWH unit of renewable power where the actual power and the certificate are "unbundled" and sold to different buyers.

VPP – Virtual Power Plant – A cloud-based network that leverages an aggregation of distributed energy resources (DERs) to shift energy demand or provide services to the grid. For example, thousands of EV chargers could charge at a slower speed and hundreds of home batteries could discharge to the grid during a demand peak to significantly reduce the procurement of traditional supply resources.

VAMO – Voluntary Allocation, Market Offer - the process for SDG&E to allocate a proportional share of their renewable portfolio to SDCP and other LSEs within the service territory.

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