

Date of Hearing: April 26, 2023

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY

Eduardo Garcia, Chair

AB 1373 (Garcia) – As Amended April 13, 2023

SUBJECT: Energy

SUMMARY: Provides significant policy changes to electricity market structure and regulation as proposed by the Newsom Administration’s 2023 budget energy trailer bill, including the creation of a central procurement entity (CPE) at the Department of Water Resources (DWR); capacity payments for load-serving entities (LSEs) and local publicly owned electric utilities (POUs) that are deficient in their reliability obligations and DWR’s Strategic Reliability Reserve (SRR) was used to meet their reliability needs; and California Public Utilities Commission (CPUC) enforcement and subsequent penalty authority of LSEs’ integrated resource plans. Specifically, **this bill:**

- 1) Applies requirements currently applicable to investor-owned utilities (IOUs) to other LSEs for purposes of the CPUC’s ability to monitor and enforce the integrated resource planning (IRP) process. Some of the sections being applied to other LSEs are inclusive of CPUC review of rates and procurement costs.
- 2) Modifies one of the objectives of the CPUC’s resource adequacy (RA) program to state the program shall facilitate new development to meet California’s SB 100 goals (the policy that all of the state's retail electricity be supplied with a mix of Renewables Portfolio Standard (RPS)-eligible and zero-carbon resources by December 31, 2045, and 100% of electricity procured to serve all state agencies by December 31, 2035, for a total of 100% clean energy).
- 3) Establishes a CPE at DWR, and outlines the process of DWR-CPE procurement as:
 - a. CPUC review of LSEs’ progress toward meeting their IRPs and the SB 100 Policy requirements;
 - b. CPUC directing the IOUs or requesting DWR to procure “diverse clean energy resources,” as defined by the CPUC, that meet the portfolio identified in the IRP;
 - c. If CPUC requests DWR-CPE procurement, the CPUC must first determine, in consultation with the CEC and California Independent System Operator (CAISO), that the procurement is necessary.
 - d. Upon a CPUC determination, DWR would conduct one or more competitive solicitations of “diverse clean energy resources,” as determined by the CPUC, which shall include resources that have a first point of interconnection with the transmission or distribution grid within a California balancing authority (BA) area. Provides considerations to DWR when evaluating bids, which include project viability, developer experience and creditworthiness; the ability to meet in-service dates without cost escalation; the project’s useful life; and resource attributes or any other criteria to be defined by the CPUC and DWR.

- e. If CPUC requests DWR-CPE procurement, the CPUC shall develop and adopt procedures and requirements that govern DWR's procurement; may review that procurement; and if approved, issue an order governing the recovery of DWR's costs if the recovery costs are found just and reasonable and in the public interest, and the recovery of costs does not unreasonably increase costs to customers as compared with similar resource procurement by an IOU.
- 4) Establishes guidelines for DWR procurement costs to be recovered, and if determined to be appropriate by the CPUC, permits recovery through a nonbypassable charge. Cost recovery is specified to be determined through a CPUC proceeding, where costs must be found just and reasonable to be eligible for recovery. Costs may include costs from DWR issuing bonds, costs relating to contracting, and supporting work.
- 5) Requires DWR to have entered into an agreement with the CPUC for the nonbypassable charge before it begins to incur costs, if the CPUC had determined a nonbypassable charge was necessary to fund DWR's activities to implement this measure. Conditions any agreement on DWR providing the CPUC with annual notifications of collections received and amount of excess or deficiency in collection, and DWR notifying the CPUC in writing—and the CPUC acting within 60 days of receipt—that an increase to the nonbypassable charge is necessary because forecasted revenue needed to meet DWR contract obligations would not be met by collections. Requires the agreement to state the CPUC's just and reasonable determination with respect to the revenue requirement is in effect for the duration of the bond.
- 6) Requires the CPUC to annually assess a capacity payment for the use of DWR's SRR by each LSE that fails to meet its system RA requirements during any month in which SRR resources were used to meet a reliability need. Requires capacity payments to be remitted to DWR's SRR Fund by the LSE that failed to meet its system RA requirements within 30 days of the CPUC notifying the LSE. Specifies a calculation methodology for the capacity payment to be a dollar amount equal to the per-kilowatt monthly cost of resource procurement, weighted for the months when the resource was procured. Specifies other multipliers and adjustments to the capacity payment calculation depending on the LSE's load or any resources procured on the LSE's behalf. Permits the CPUC, in consultation with the CEC, to modify the capacity payment calculation methodology.
- 7) Establishes the same process for capacity payments by POUs as by LSEs, except that the executive director of the CEC will annually assess the payment.
- 8) States the purpose of the capacity payment is to replenish DWR's SRR, and is not a penalty nor does it prohibit the CPUC from assessing a penalty on a LSE for failure to comply with RA requirements.
- 9) Provides that the division of statute establishing the CPE shall be "liberally construed in a manner so as to effectuate its purposes and objectives."
- 10) Specifies DWR-CPE's powers and responsibilities are separate from DWR's authority for the State Water Project. Establishes the Clean Energy Central Procurement Fund and specifies fund moneys are separate and distinct from any other moneys administered by DWR. Additionally clarifies that the CPE authority does not subject DWR "to the jurisdictional authority" of the CPUC or expand the CPUC's jurisdiction.

- 11) Allows for POUs to voluntarily obtain resources that DWR-CPE acquires on their behalf. POUs must submit to a nonbypassable charge sufficient at all times to fund its participation to be able to exercise this option. POUs must also enter into an agreement with DWR for a revenue requirement that has the full force and effect of an irrevocable financing order.
- 12) Specifies other details of the DWR-CPE including that IOUs may provide billing, collection, and other services for DWR; that DWR's contracting under the CPE is exempt from requirements under the Public Contract Code; and that DWR may issue bonds to support its procurement and constrains the bonding amounts to DWR estimations of revenue available, among other issues.

EXISTING LAW:

- 1) Requires the CPUC, in consultation with the California Independent System Operator (CAISO), to establish RA requirements for all load-serving entities (LSEs), as defined, in accordance with specified objectives. Further requires each LSE to maintain physical generating capacity adequate to meet its load requirements, including peak demand and planning and operating reserves, deliverable to locations and at times as may be necessary to provide reliable electric service. Requires the CPUC to determine and authorize the most efficient and equitable means for LSEs to achieve specified purposes when meeting their RA requirements. Requires the CPUC, in consultation with the CAISO, to establish RA requirements for all LSEs. (Public Utilities Code § 380)
- 2) Defines "load-serving entities" as IOUs, electric service providers (ESPs), and community choice aggregators (CCAs). (Public Utilities Code § 380 (k))
- 3) Authorizes customers of an IOU to aggregate their electric loads as members of their local community with CCAs. Designates a CCA as solely responsible for all generation procurement activities on behalf of the CCA's customers, except where other generation procurement arrangements are expressly authorized by statute. (Public Utilities Code § 366.2)
- 4) Requires retail sellers and publicly owned utilities to increase purchases of renewable energy such that at least 60% of retail sales are procured from eligible renewable energy resources by December 31, 2030. This is known as the RPS. (Public Utilities Code § 399.11 et seq.)
- 5) Establishes the policy that all of the state's retail electricity be supplied with a mix of RPS-eligible and zero-carbon resources by December 31, 2045, and 100% of electricity procured to serve all state agencies by December 31, 2035, for a total of 100% clean energy. Requires the CPUC, in consultation with the CEC, CARB, and all California balancing authorities, to issue a joint report to the Legislature by January 1, 2021, reviewing and evaluating the 100% clean energy policy. (Public Utilities Code § 454.53)
- 6) Requires the CPUC to adopt a process for each LSE to file an integrated resource plan (IRP) and a schedule for a periodic updates to the plan to ensure that LSEs accomplish specified objectives. Requires each LSE to prepare and file an IRP consistent with those objectives on a time schedule directed by the CPUC and subject to CPUC review. (Public Utilities Code § 454.52)

- 7) Requires that the IRP of each LSE contribute to a diverse and balanced portfolio of resources needed to ensure a reliable electricity supply that provides optimal integration of renewable energy resources in a cost-effective manner, meets the emissions reduction targets for greenhouse gases (GHG) established by the State Air Resources Board (ARB) for the electricity sector, and prevents cost shifting among LSEs. (Public Utilities Code § 454.54)
- 8) Defines “eligible renewable energy resource” as an electrical generating facility that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts (MW) or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, subject to multiple conditions. (Public Utilities Code § 399.12)
- 9) Requires CARB to create a Climate Change Scoping Plan to achieve the maximum technologically feasible and cost-effective reductions in GHG emissions by 2020. CARB must update this Scoping Plan at least once every five years. (California Health and Safety Code § 38561)
- 10) Requires the CEC to adopt the Integrated Energy Policy Report (IEPR) every two years, which must contain an overview of major energy trends and issues facing the state, including, but not limited to, supply, demand, pricing, reliability, efficiency, and impacts on public health and safety, the economy, resources, and the environment. (Public Resources Code §§ 25300-25327)
- 11) Requires the CPUC to work with CAISO to establish RA requirements for LSEs. Existing law specifies the criteria the CPUC must consider when establishing RA requirements and specifies that an electrical corporation’s reasonable costs for meeting RA are recoverable from customers through non-bypassable charges. (Public Utilities Code § 380)
- 12) Establishes the Electricity Supply Strategic Reliability Reserve to implement projects, purchases, and contracts for electricity resources for summer reliability or to meet any reliability need outside of traditional LSE procurement and the CAISO market. (Water Code §§ 80700-80730)

FISCAL EFFECT: Unknown. This bill is keyed fiscal and will be referred to the Committee on Appropriations for its review.

BACKGROUND:

Planning for the Future: the IRP, SB 100, IEPR, and RA – California has a complicated but robust electric planning and procurement regime spread across the CPUC, CEC, and CAISO. This regime guides the current procurement the LSEs conduct, and informs short-, mid-, and long-term procurement strategies. The regime is complementary, where one resource may count toward meeting many facets of an LSE’s procurement requirements and planning goals. The main pieces of the regime are the IRP, the related SB 100 Report, and RA.

The IRP (mid- to long-term procurement) – Since 2015, with the passage of SB 350 (De León, Chapter 547, Statutes of 2015), California regulators have worked to identify a diverse mix of

resources to achieve our clean energy goals. SB 350 requires the CPUC to adopt a process for each LSE to file an IRP starting in 2017 and for each publicly-owned utility (POU) to file an IRP by January 1, 2019. The goal of the IRP is to reduce the cost of achieving GHG emission reductions by looking broadly at system needs, rather than at individual LSEs or resource types, in order to identify generation that reduces GHGs, improves reliability, and reduces overall cost. Compliance with the RPS program occurs separately, but in concert with, the resource mixes selected by LSEs' IRP filings.

The IRP operates on a 2-year planning cycle, and forecasts system need 10 years into the future. The most recent IRP analysis identified almost 86 gigawatts (GW) of new resources needed by 2035,¹ arising from a mix of geothermal, land-based wind, offshore wind, solar, battery storage, pumped storage, and demand response.² This portfolio represents a more than doubling within 12 years of the current nameplate capacity on the system; an enormous goal.

SB 100 Report (long-term procurement planning) – While the IRP focuses on what energy mix is best suited to meet our GHG and reliability goals 10 years into the future, the Joint Agency SB 100 Report looks at a planning horizon 22 years out to determine how best to implement the 100%-clean-electricity-by-2045 policy enacted under SB 100 (De León, Chapter 312, Statutes of 2018).³ The first SB 100 report was finalized in March 2021, and included analyses of many pathways to achieve the state's 2045 clean energy goal.⁴ The SB 100 Report will be updated every four years, with future work focused on system reliability,⁵ among other considerations.

The IEPR (demand forecast) – Alongside the IRP and SB 100 Report, which focus on potential mid- and long-term procurement needs for the electricity system, the CEC conducts an IEPR to forecast all aspects of energy industry supply, production, transportation, delivery, distribution, demand, and pricing. The CEC is then required to use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety. The CEC adopts an IEPR every two years with updates every other year. The information generated from the IEPR's demand forecast informs the IRP and RA processes at the CPUC.

RA (short-term procurement) – Running concurrently with these planning streams is the RA process at the CPUC and CAISO. While the IRP and SB 100 Report focus on potential future needs, RA is designed to identify resources needed to ensure reliability *today*. Following the California energy crisis of 2000-01, the California Legislature enacted AB 380 (Nunez, Chapter 367, Statutes of 2005) to prevent future incidents of widespread blackouts and rolling brownouts due to lack of electricity. This statute established the RA program at the CPUC, which must work in consultation with the CAISO to establish RA requirements for all LSEs. The current RA program consists of system, local, and flexible requirements for each month of a compliance year. System requirements are determined for each LSE based on the CEC's IEPR electricity

¹ Pg. 47; 30 MMT scenario resource stack; CPUC, *Decision Ordering Supplemental Mid-term Reliability Procurement (2026-2027) and Transmitting Electric Resource Portfolios to CAIS for 2023-2024 TPP*; D. 23-02-040; February 23, 2023. <https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=502956567>

² Pg. 48; CPUC, D. 23-02-040; *Ibid*.

³ CEC, CPUC, & CARB; *2021 SB 100 Joint Agency Report: Achieving 100 Percent Clean Electricity in California: An Initial Assessment*; March 2021.

⁴ Pg. 12, *2021 SB 100 Report*.

⁵ Pg. 1, *2021 SB 100 Report*.

forecast plus a 15% planning reserve margin.⁶ Local requirements are determined based on an annual CAISO study using a 1-10 (once in ten years) weather year and an N-1-1 contingency.⁷ Flexible requirements are based on an annual CAISO study that currently looks at the largest three-hour ramp for each month needed to run the system reliably. In October, LSEs must demonstrate that they have procured 90% of their system RA obligations for the five summer months (May-September) of the following year, as well as 100% of their local requirements, and 90% of their flexible requirements for each month of the coming compliance year. There is an additional monthly reporting requirement for RA, where LSEs must demonstrate they have procured 100% of their monthly system and flexible RA obligation.

The RA market has experienced significant constraint recently, largely driven by resource retirements across the western U.S. as well as extreme weather events causing California energy agencies to increase RA obligations for LSEs, such as the PRM adjusting from 15% to an “effective” 20-22.5% for the three large IOUs for summers 2022 and 2023.⁸ These changes have led to a market rush, practically at any cost, to buy resources needed to meet RA obligations for the next few summers. Energy sellers have seemingly taken note. As shown in Figures 1 and 2 below, both system and local RA prices have been increasing significantly over the last few years, and are projected to be even higher for the coming summers.

Figure 1: Weighted Average Price of System RA (\$/kW-month).⁹

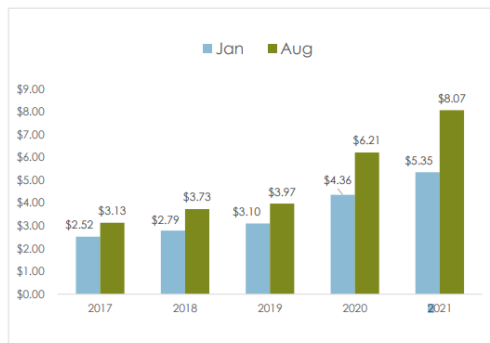
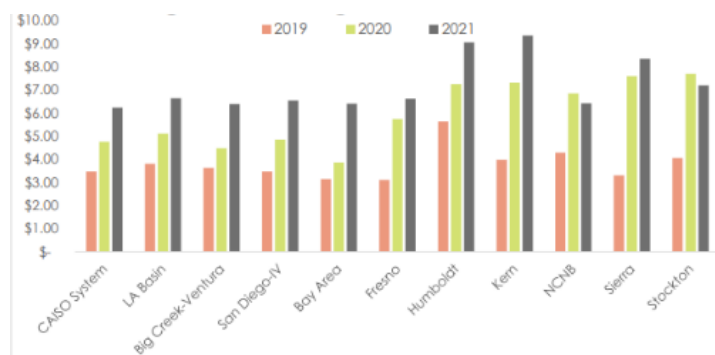


Figure 2: Weighted Average Prices for Local RA (\$/kW-month).¹⁰



Breaking the Cycle: IRP Procurement Orders – The regulatory framework of the IEPR, IRP (or long-term procurement planning, as it was previously known), and RA has been in place since the early 2000s, operating with relative stability. However, since that time, market fundamentals have changed to the point that it may be prudent for the energy agencies to re-evaluate the planning regime governing the market. Some of these trends include:

⁶ The CPUC has recently adopted changes to RA, including increasing the planning reserve margin from 15% to 17.5% and in some cases to 21%.

⁷ N-1-1 Contingency: A sequence of events consisting of the initial loss of a single generator or transmission component (Primary Contingency), followed by system adjustments, followed by another loss of a single generator, or transmission component (Secondary Contingency).

⁸ D. 21-12-015, CPUC, *Phase 2 Decision Directing PG&E, SCE, and SDG&E to Take Actions to Prepare for Potential Extreme Weather in the Summers of 2022 and 2023*, R. 20-11-003, December 2, 2021.

⁹ Figure 4, pg. 29, CPUC, *2021 Resource Adequacy Report*, April 2023; https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/resource-adequacy-homepage/2021_ra_report_040523.pdf

¹⁰ Figure 5, pg. 31, *2021 Resource Adequacy Report*, *Ibid*.

- Increased role of CCAs – Procurement decisions are now being made by more than 40 CCAs and ESPs, as well as the six IOUs; with the role of the IOUs in procurement shrinking substantially since the early 2000s. Prior to the expansion of CCAs into procurement, the CPUC relied heavily on the IOUs’ bundled procurement plans to establish and enforce obligations for contracting for existing resources beyond the RA program (i.e., mid- or long-term resources). Via the bundled procurement plans, the CPUC requires the IOUs to contract for a certain amount of forward energy and capacity to minimize financial risk to bundled customers. The CCAs are not similarly obligated to maintain forward contract positions (though many of them do), or share them with the CPUC, for energy and capacity.¹¹
- Increased capacity (RA) market tightness – over the last 20 years, over 20 GWs of aging natural gas plants have retired in the state.¹² This statewide trend has been mirrored throughout the west, where aging, inefficient powerplants have been retired due to market and regulatory pressure, leading to capacity tightness across the western U.S. This market tightness has led to increased potential for high energy prices during scarcity conditions, as utilities are no longer adequately hedged, and the potential for energy suppliers to exert market power over buyers desperate for any megawatt to meet RA compliance and ensure reliability. This committee has been made aware of circumstances in the 2023 RA showings where utility buyers offered astronomical prices for resources, and still received no bids from suppliers.
- Increasing GHG reduction goals – California’s utilities will need to contract for significant amounts of new clean energy resources to meet our 2045 100% clean energy policy. Ensuring reliability while these new resources come online, some with potentially significant delays, will be paramount, and will take enormous effort from the energy agencies to ensure a smooth transition.

In light of these trends, and as updates to IEPR demand forecasting and IRP modeling assumptions evolved, the CPUC utilized the IRP proceeding to order new near- and mid-term resources, requiring all LSEs to bear some responsibility for their costs. Beginning in 2019, these procurement orders were issued outside the IRP cadence due to the urgent nature of the procurement need, and resulted in the CPUC calling for 3.3 GWs to incrementally come online from 2021-2023¹³ and 11.5 GWs to come online from 2023-2026.¹⁴ Recently the CPUC called for an additional 4 GW to come online from 2026-2027.¹⁵ These orders call for the new resources to be net qualifying capacity (NQC), so the IRP procurement will ensure RA eligibility for these new resource additions. Importantly, the 2021 mid-term order for 11.5 GWs specified certain resource attributes that must be procured, specifically calling for 1 GW of long-duration

¹¹ Pg. 5; McGarry, J.; Ortego, J.; and Raffan, N., CPUC Energy Division Staff Options Paper, “Reliable and Clean Power Procurement Program,” Attachment A to D.23-02-040, R.20-05-003; January 2023.

¹² Pg. 5; McGarry, 2023; *Ibid*

¹³ D. 19-11-016, CPUC, *Decision Requiring Electric System Reliability Procurement for 2021-2023*, R. 16-02-007, November 7, 2019.

¹⁴ D. 21-06-035, CPUC, *Decision Requiring Procurement to Address Mid-term Reliability (2023-2026)*, R. 20-05-003, June 24, 2021.

¹⁵ D. 23-02-040, CPUC, *Decision Ordering Supplemental Mid-term Reliability Procurement (2026-2027) and Transmitting Electric Resource Portfolios to California Independent System Operator for 2023-2024 Transmission Planning Process*, R. 20-05-003, February 23, 2023.

storage and 1 GW of firm resources.¹⁶ In its 2023 IRP decision, the CPUC extended the delivery timeline for these long-lead time resources to 2028, citing potential delays for these projects.¹⁷

While these decisions mark an unprecedented level of procurement ordered by the CPUC, at 18.8 GWs over six years, they represent little more than half of the additional resources needed by 2030 to meet the adopted IRP system portfolio, which calls for approximately 35 GWs by the end of the decade.¹⁸ Procurement is needed, urgently. But the procurement orders have raised concerns that the just-in-time, order-by-order approach leads to uncertainty for the LSEs, and presents the potential for the broader market to constrain further or increase costs, as LSEs rush to procure anything and everything to meet the targets. It appears as if the resources called for the meet the 2021-2022 requirements are coming online; while the projects required for 2023 are contracted but their online dates are uncertain.¹⁹ While this progress is positive and demonstrates a level of urgency for procurement not seen in decades, from both the CPUC and LSEs, these procurement orders also suggest that the historic planning efforts of the energy agencies may be inadequate to meet our current needs, and must also urgently evolve to ensure reliability at least-costs while transitioning the electricity sector to meet our clean energy goals.

The Safety Nets: CAISO backstop procurement and DWR’s Strategic Reliability Reserve. RA rules require that where there is a failure to provide sufficient resources, the CAISO is compelled to utilize centralized backstop procurement mechanisms in order to maintain electric system reliability. Centralized backstop procurement occurs when the CAISO contracts with a generator to address the observed shortfall. Under Federal Energy Regulatory Commission (FERC) rules, the CAISO, like all other balancing authorities, must ensure system reliability or face penalties by FERC. The CAISO has two mechanisms for centralized backstop procurement: Reliability Must Run (RMR) and the Capacity Procurement Mechanism (CPM). A resource receiving RMR designation must continue to operate and is compensated by a rate set by the CAISO, per FERC approved tariffs. RMR contracts can be expensive relative to procurement through the CPUC process, especially considering the limited operating parameters of the contracted resources. The use of RMR contracts declined after implementation of the local RA program. For 2023, three powerplants make up the CAISO RMR resource portfolio, as listed in Table 1.

Table 1: 2023 CAISO RMR contracted powerplants.²⁰

Owner	Unit	MW
Starwood Energy Group	Greenleaf II Cogen	49.2
KES Kingsburg, LP	Oakland, Unit 1	55

¹⁶ Not defined as such, but rather resources that must have no on-site emissions (or are RPS eligible), have at least an 80% capacity factor, and be available continuously during the evening peak and all weathers.

¹⁷ D. 23-02-040, *Ibid.*

¹⁸ Pg. 8, D. 23-02-040, *Ibid.*

¹⁹ Pg. 9, D. 23-02-040, *Ibid.*

²⁰ Millar, Neil; “Memorandum to ISO Board of Governors RE: Update on results of reliability must-run extensions for 2023,” October 19, 2022; <http://www.caiso.com/Documents/ReliabilityMust-RunContractsUpdate-Oct2022.pdf>

Dynergy Oakland, LLC	Oakland, Unit 2	55
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CPM can be used for resources that may be needed in the following year and where the resource is at risk of retirement. Like RMR contracts, CPM contracts are also, generally, at a higher price relative to generation procured through the CPUC process. The CAISO does not currently have any CPM resources for 2023. The procurement costs of both mechanisms are shouldered by ratepayers in the insufficient Local Capacity Area or by all ratepayers of the LSE(s) lacking the adequate RA.

In June 2022, AB 205 (Committee on Budget, Chapter 61, Statutes of 2022), AB 178 (Ting, Budget Act of 2022, Chapter 45, Statutes of 2022), and AB 180 (Ting, Budget Act of 2021, Chapter 44, Statutes of 2022) were signed into law. These three pieces of legislation collectively established the Electricity Supply Strategic Reliability Reserve Program (SRR),²¹ which set forth new responsibilities and activities for DWR, separate from the State Water Project, to procure—or even outright own and operate—energy resources to provide backstop reliability for the CAISO balancing area. These resources are meant to operate “outside” of CAISO’s market, meaning they do not regularly schedule into the market, and only operate during grid emergency events, as specified. For 2022 (which only encompassed 6 months of program development, given the June passage of the statute), DWR procured approximately 1.6 gigawatts (GW) of imported energy and 202 MW of emergency and temporary power generators,²² with an allocated combined budget of roughly \$249 million for the year.²³ 2023 activities of the SRR include up to 171 MW of procured emergency and temporary power generation, as well as ongoing negotiations to include retiring once-through cooling natural gas powerplants into the SRR portfolio. Interestingly, some resources previously designated as CAISO RMR are now part of the SRR.²⁴ Procurement of resources in the SRR is currently paid for through budget appropriation, with the Governor’s January 2023 budget requesting an additional \$800 million over 4 years after \$1.5 billion was authorized in 2022 to stand up the program.²⁵ However, the longevity of such appropriation, and the longevity of the SRR itself, remains a topic of ongoing discussion.

COMMENTS:

- 1) *Author’s Statement.* According to the author, “California is on the precipice of a clean energy transition that is poised to bring vast new clean energy projects, jobs, and economic development to the state. While the last decades of California’s renewable development has favored intermittent renewables, policymakers are overdue in planning for and valuing other renewable development that can better match intermittent

²¹ Confusingly, the administration uses the term Strategic Reliability Reserve (SRR) as an umbrella term for three programs – the Electricity Supply Strategic Reliability Reserve program mentioned here, the Demand Side Grid Support program, and the Distributed Electricity Backup Assets program.

²² 202 MW represents total from both the 82MW from the “>5 MW” generator bucket and the 120MW from the State Power Augmentation Program.

²³ DWR, *Progress Report: Electricity Supply Reliability Reserve Fund*, January 31, 2023.

²⁴ The 27.5 MW Channel Islands power was released in December 2022 from the RMR obligations, and now is listed as a 2023 resource in the SRR.

²⁵ Cornett, Sarah; LAO, *The 2023-24 Budget: Proposed Energy Policy Changes*, March 2023; <https://lao.ca.gov/reports/2023/4735/Proposed-Energy-Policy-Changes-031023.pdf>

resources' profiles. These resources, which include geothermal, large-scale storage, and offshore wind projects, are either just getting started and carry development risks and higher costs, or have historically cost more to operate and maintain. AB 1373 provides a tool – DWR procurement authority – for the CPUC to be able to exercise when planning efforts show these diverse clean energy resources are needed, but the state utilities are unable to procure them. Using the DWR authority is likely to lead to lower costs to ratepayers for these higher-value resources than the utilities could achieve on their own, due to state bonding authority, state tax breaks, and minimizing project development risk by having a state entity negotiating contracts. Such ratepayer reductions should be encouraged during a time of increased electric and gas unaffordability. AB 1373 provides the path to establish this DWR procurement option to the benefit of California's ratepayers and workforce, and to reliably meet our clean energy goals.”

- 2) *Where's the Shortfall?* As noted above, California has incredibly ambitious clean energy targets that LSEs must meet over the next 20+ years. The most recent IRP analysis identified almost 86 GW of new resources needed by 2035,²⁶ arising from a mix of geothermal, land-based wind, offshore wind, solar, battery storage, pumped storage, and demand response.²⁷ This portfolio represents a more than doubling within 12 years of the current nameplate capacity on the system; an enormous goal.

However, recent years have demonstrated that planning alone cannot ensure the state's ambitious electric sector GHG emission reduction targets will be met. The procurement LSEs need to conduct over the next two decades is enormous, but LSEs are simultaneously faced with a variety of barriers (including land-use issues, financing, and supply chain disruptions) that may make it challenging for new resources to come online on time. The CPUC demonstrated this planning gap when it utilized the IRP proceeding to order new near- and mid-term resources, requiring all LSEs to bear some responsibility for their costs. As noted above, beginning in 2019, these procurement orders were issued outside the IRP cadence due to the urgent nature of the procurement need, and resulted in the CPUC calling for approximately 18.8 GWs over six years. This volume of procurement represents little more than half of the additional resources needed by 2030 to meet the adopted IRP system portfolio, which calls for approximately 35 GWs by the end of the decade.²⁸

To meet reliability, procurement is urgently needed. In response to the CPUC orders, LSEs procured over 11GW of new resources, at an NQC of 6 GW to count toward RA obligations between 2020 and 2022.²⁹ This volume of procurement appears to meet the 2021-2022 order requirements, and are coming online; however it remains unclear how indicative this success is to future procurement schedules, as many of the projects that came online have been suggested to have already been in the development pipeline prior to the CPUC order being adopted. Moreover, most of the new energy resources

²⁶ Pg. 47; 30 MMT scenario resource stack; CPUC, *Decision Ordering Supplemental Mid-term Reliability Procurement (2026-2027) and Transmitting Electric Resource Portfolios to CAIS for 2023-2024 TPP*; D. 23-02-040; February 23, 2023. <https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=502956567>

²⁷ Pg. 48; CPUC, D. 23-02-040; *Ibid.*

²⁸ Pg. 8, D. 23-02-040, *Ibid.*

²⁹ Pg. 29, CEC & CPUC, *Joint Agency Reliability Planning Assessment: SB 846 Quarterly Report and AB 205 Report*, February 2023; CEC-200-2023-002.

developed between 2020 and 2022 were solar, battery energy storage, and wind. The pipeline of new energy resources under contract, but not yet online, are similar in terms of technology mix.³⁰ Yet both the mid-term IRP planning cycles and the long-term SB 100 analysis demonstrate that a more robust resource mix is needed to ensure reliability at least-cost.

As part of its 2021 mid-term order, the CPUC identified specified resource attributes that must be procured as part of the 11.5 GWs called for by 2026; specifically including 1 GW of long-duration storage and 1 GW of firm resources.³¹ The resource procurement to date to meet this mid-term order is shown below in Table 2, and demonstrate LSEs are not collectively on track to meet their 2023 requirements; moreover the specific resource attributes called for by 2026 to meet identified system needs are failing to appear. In recognition of this, in January 2023, the CPUC extended the delivery timeline for these long-lead time resources to 2028, citing potential delays for these projects.³²

Table 2: Mid-Term Reliability Procurement by LSE Type and Online Date.³³

LSE Type	Obligation 2023	Claimed	Obligation 2024	Claimed	Obligation 2025	Claimed	Obligation 2026 (LLT resource)	Long-duration claimed	Firm zero-carbon claimed	Total Obligated vs. Claimed
CCA	620	630	1,854	1,042	463	409	620	108	120	3,556 / 2,308
ESP	126	170	378	71	94	-	126	-	-	724 / 241
IOU	1,087	896	3,261	1,684	815	105	1,087	-	-	6,250 / 2,685

These recent procurement showings suggest development may not be occurring at the pace needed; moreover that LSE procurement (with exceptions) is not able to deliver needed resource attributes to the system. The Tracking Energy Development taskforce (TED Taskforce) is a joint energy entity-developed effort beginning in late 2021 to help ensure that new resources ordered for reliability were brought online as quickly as possible. The TED Taskforce has observed there are three issues facing all generation projects currently in development in California that are often raised by developers: supply chain disruptions, interconnection approval delays, and permitting delays.³⁴

³⁰ Pg. 30, *Reliability Assessment; Ibid.*

³¹ Not defined as such, but rather resources that must have no on-site emissions (or are RPS eligible), have at least an 80% capacity factor, and be available continuously during the evening peak and all weathers.

³² D. 23-02-040, *Ibid.*

³³ Slide 32; CPUC Energy Division Staff Review of IRP August 2022 Data Filing; February 2023; <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/d1911016andd21.pdf>

³⁴ Pg. 36, *Reliability Assessment; Ibid.*

Given these various factors, the CEC and CPUC recommended in their 2023 *Joint Agency Reliability Planning Assessment* that “statutory and regulatory changes should be considered to create a central procurement mechanism or a new cost-recovery mechanism to secure the development path for certain large, long-lead time clean energy resources.”³⁵ This bill, originally a budget trailer proposal from the Newsom administration, represents such an approach.

- 3) *What Resources are Included?* As suggested in the previous section, a new planning and procurement scheme may be needed to address the delay in LSEs procurement of adequate supplies of IRP-selected long-lead time resources. This bill, in proposing a DWR central procurement entity, provides that new tool. However the bill language is lacking description as to what type of resources DWR might be called on to purchase. Rather the bill allows the procurement of “diverse clean energy resources” through the DWR mechanism, and leaves it to the CPUC to define what resources or resource attributes would qualify. As discussed above, LSEs are mostly meeting their procurement targets; it is just specific long-lead time resources that appear delayed. While an argument could be made for leaving the CPUC with the utmost discretion to choose which resources are needed based on their modeling, it may be prudent for the Legislature to appropriately define which resources DWR can procure. It is unclear what DWR’s presence in the electricity market might portend for LSE participation, especially if DWR and the LSEs are negotiating for the same or remarkably similar resources. As a result, the Legislature may wish to consider establishing guards around DWR procurement, permitting long-lead time resources, as defined in the CPUC’s 2021 mid-term reliability order,³⁶ that will take five years or more to develop.
- 4) *Doubling Up on Payments.* Under this bill, LSEs that do not procure sufficient energy resources would be required to make a capacity payment to support the SRR. The bill language is explicit that such a capacity payment is not a penalty, and deficiencies in RA procurement or rules would still be levied on top of any capacity payment requirement. The benefit of this double payment is unclear. As described above, the RA market has experienced significant constraint recently, largely driven by resource retirements across the western U.S. as well as extreme weather events causing California energy agencies to increase RA obligations for LSEs.³⁷ These changes have led to a market rush, practically at any cost, to buy resources needed to meet RA obligations for the next few summers. Energy sellers have seemingly taken note, and increased RA resource costs to staggering levels in some months. In such circumstances, levying a penalty on an LSE that has taken all reasonable action to meet their RA obligation only to face market constraint, and then further charging them a capacity payment to replenish the SRR for its use, would seemingly not drive the LSE toward the desired behavior – that is, procuring RA resources. Rather it would punish them for a market condition outside their control.

³⁵ Pg. 61, *Reliability Assessment; Ibid.*

³⁶ D. 21-06-035, CPUC, *Decision Requiring Procurement to Address Mid-term Reliability (2023-2026)*, R. 20-05-003, June 24, 2021.

³⁷ such as the PRM adjusting from 15% to an “effective” 20-22.5% for the three large IOUs for summers 2022 and 2023D. 21-12-015, CPUC, *Phase 2 Decision Directing PG&E, SCE, and SDG&E to Take Actions to Prepare for Potential Extreme Weather in the Summers of 2022 and 2023*, R. 20-11-003, December 2, 2021.

While it seems appropriate to have some form of payment from LSEs flow back to the SRR to offset the procurement cost and to retain a financial obligations for LSEs that are deficient; it is unclear why both a payment and a penalty are needed. The Legislature may wish to discuss modifications to this proposal that leads to only one charge being levied against an LSE for an RA deficiency, and having that charge—be it a penalty or a payment—partially go to covering the costs of SRR procurement.

- 5) *Which PRM will Meet Compliance?* While an LSE's PRM is a number articulated by the CPUC that guides RA compliance, the PRM of POU is murkier. POU is held in statute to criteria established by the Western Electricity Coordinating Council³⁸ and, if participating in the CAISO market, the PRM of the CAISO. It has been shared with the committee that these values generally indicate a PRM for POU of approximately 15%. However the actual values of the POU's PRMs are unclear. This murkiness led to 2022's Budget establishing a collaborative process at the CEC to determine an appropriate minimum PRM for POU within the CAISO BA.³⁹ While that process is scheduled to conclude in December of this year, POU report it has barely begun.

This bill ties POU capacity payments to the SRR to this PRM development at the CEC. The timing of such a design is unclear. Should this measure be adopted as a budget trailer bill, it would take effect immediately, meaning POU payments to the SRR for PRM deficiency could foreseeably begin in summer 2023. This would be months before the collaborative process at the CEC is scheduled to conclude, with the stakes of such a process now significantly raised. This has the effect of holding the POU to a standard still in development, and for the potential that payments will be assessed against a value the POU were unaware they needed to meet. The Legislature may wish to consider modifications to this structure to enable, at minimum, the POU to have certainty of what PRM they are meant to achieve for summer 2023.

- 6) *Other Matters.* This measure has other provisions that require further explanation or detail to understand their intent or impact. These include granting DWR exemptions from Public Contract Code compliance for the contracts they undertake as part of the CPE; the exemption from the Administrative Procedures Act to CEC regulations to implement the capacity payment for POU; clarifying CPUC sign-off on every procurement contract DWR enters; and whether the IRP enforcement sections are appropriately tailored to provide CPUC the information and compliance tools needed while not infringing upon CCA ratemaking authority. The Legislature may also wish to consider additional requirements to add community benefits, workforce training, manufacturing or other priorities as part of DWR procurement efforts.
- 7) *Related Legislation.*

AB 1538 (Muratsuchi, 2023) establishes an incentive program, the Clean Energy Reliability Program, to pay LSEs a specified amount for the procurement of eligible resources that exceed the LSEs' procurement targets as set by the CPUC. Status: *pending hearing* in the Assembly Committee on Appropriations, after passage in this committee on April 12, 2023 by a 12-2-1 vote.

³⁸ PUC § 9620

³⁹ AB 209 (Committee on Budget, Chapter 251, Statutes of 2022); PRC § 25704.5

8) *Prior Legislation.*

AB 205 (Committee on Budget), among its many provisions, established the SRR at DWR to fund procurement of backstop resources to provide reliability to CAISO's grid. Status: Chapter 61, Statutes of 2022.

SB 846 (Dodd), among its many provisions, directed the CEC to develop a \$1 billion investment plan for clean energy resources, subject to subsequent budget appropriations. Status: Chapter 239, Statutes of 2022.

AB 1161 (E. Garcia, 2021) would have required DWR to procure newly developed eligible renewable energy resources or zero-carbon resources, and energy storage associated with those resources, in an amount that satisfies 100% of the electricity procured to serve all state agencies by December 31, 2030. Status: Died – Assembly Committee on Utilities and Energy.

AB 56 (E. Garcia, 2019) would have required the CPUC to empower the CAEATFA to undertake backstop procurement of electricity that would otherwise be performed by an electrical corporation to meet state resource adequacy, integrated resource planning, and renewable portfolio standard goals not satisfied by retail sellers or load-serving entities. Status: Died – Senate Committee on Energy, Utilities, and Communications.

SB 520 (Hertzberg) establishes a provider of last resort as an electric LSE that meets specified requirements, including those determined by the CPUC, to ensure electric service for customers not otherwise served by another LSE. Status: Chapter 408, Statutes of 2019.

SB 100 (De León) established the 100 Percent Clean Energy Act of 2018 which increases the RPS requirement from 50% by 2030 to 60%, and creates the policy of planning to meet all of the state's retail electricity supply with a mix of RPS-eligible and zero-carbon resources by December 31, 2045, for a total of 100% clean energy. Status: Chapter 312, Statutes of 2018.

REGISTERED SUPPORT / OPPOSITION:**Support**

American Clean Power Association
California Wind Energy Association
Environment California
Offshore Wind California

Oppose Unless Amended

Alliance for Retail Energy Markets
California Community Choice Association
California Municipal Utilities Association
Clean Power Alliance
Marin Clean Energy (MCE)
National Parks Conservation Association

San Jose Clean Energy
Sonoma Clean Power

Other

Independent Energy Producers Association
Pacific Gas and Electric Company and Its Affiliated Entities

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