PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

AGENDA ID# 22677
ENERGY DIVISION **RESOLUTION E-5320**
July 11, 2024

R E D A C T E D   R E S O L U T I O N

Resolution E-5320. San Diego Gas & Electric Company request for approval of one of two mutually exclusive contract options for Utility Owned Energy Storage Contract and related costs pursuant to Decisions 21-12-015 and 23-06-029.

PROPOSED OUTCOME:

- This Resolution denies San Diego Gas & Electric Company's two options for the Emergency Reliability Build, Own, and Transfer Contract for 119 megawatts and 219 megawatts of Utility-Owned Energy Storage.

SAFETY CONSIDERATIONS:

- The Utility Owned Energy Storage contract contains detailed safety provisions provided in Exhibit T (Safety and Site Security Requirements), with related contract technical specifications provided in Exhibit A-2.

ESTIMATED COST:

- The estimated total present value revenue requirement of Westside Canal Energy Storage Expansion Project Phase 1 is $ 307.1 million. The estimated total present value revenue requirement of Westside Canal Energy Storage Expansion Project Phase 1 & 2 is $ 516.2 million, assuming full deliverability status.

By Advice Letter 4403-E, 4403-E-A, 4403-E-B, and 4403-E-C, Filed on March 8, 2024, March 21, 2024, May 10, 2024, and June 5, 2024.

SUMMARY

This Resolution denies San Diego Gas & Electric Company's ("SDG&E") request for approval of one of two options for utility-owned storage ("UOS") contracts procured to address 2024 and 2025 summer reliability. Option one is a Build, Own, and Transfer ("BOT") contract with CED Westside Canal Battery Storage, LLC ("RWE AG") for 119 megawatts ("MW") of nameplate capacity. Option two is a BOT contract with RWE AG for 219 MW of nameplate capacity. This Resolution denies the requested relief in Advice Letter ("AL") 4403-E, 4403-E-A, and 4403-E-B (collectively the "Advice Letter").

BACKGROUND

In Decision ("D.") 21-02-028, the Commission authorized the investor-owned utilities ("IOUs") to contract for capacity available to serve peak and net peak demand in the summer of 2021 on behalf of all benefitting customers, including incremental energy storage capacity.[1] The Commission also determined that potential resources may include utility-owned generation, and authorized the IOUs to submit utility-owned generation for summer 2021 through a Tier 2 AL.[2]

In March 2021, the Commission issued D.21-03-056 which authorized the IOUs to continue their procurement efforts on behalf of all benefitting customers by targeting an effective increase in the planning reserve margin ("PRM") from 15 to 17.5 percent for the summers of 2021 and 2022 and to exceed their respective targets by as much as an additional 50 percent for incremental supply-side generation and in-front-of-the-meter storage resources.[3] The Commission expressed a continuing preference for storage contracts.[4]

On December 6, 2021, the Commission issued a Phase 2 decision, D.21-12-015, adopting several supply and demand-side requirements intended to ensure there would be adequate electric power in the event of extreme weather conditions during the summers of 2022 and 2023.[5] Specifically, the Commission determined a need for contingency resources in the range of 2,000 to 3,000 MW to meet an effective PRM of 20 - 22.5

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[1] D. 21-02-028 at 11, 14, OP 1.
[2] *Id.* at 11.
[3] D.21-03-056 at OP1, 13-14 Attachment 1 at 20-22.
[4] *Id.* at OP1, Attachment 1 at 22.
[5] D.21-12-015 at 2.

percent.[6] The Commission allocated the procurement responsibility for the additional contingency resources to the three large IOUs on a proportional load share basis. SDG&E's share of the procurement range was 200-300 MW.[7]

The Commission established specific requirements for the procurement of additional supply-resources in D.21-12-015, including:

- Resources must be available during both the peak and net peak demand periods.
- Commercial Online Dates ("COD") by June 1, 2022 are preferred, but resources with CODs by August 1, 2023 will be considered.
- New resources that have not yet reached full capacity deliverability status by the above CODs, but are capable of providing energy/grid reliability benefits during the peak and net-peak periods, will also be considered.
- Potential resources may include UOS, with Commission consideration of such projects through a Tier 2 AL.[8]

On July 5, 2023, the Commission issued D.23-06-029, adopting local capacity obligations for 2024-2026, flexible capacity obligations for 2024, and program refinements. D.23-06-029 established a 17 percent PRM for LSEs and an effective PRM procurement target of 170-320 MW for SDG&E for 2024 and 2025.[9] The decision continued the requirements adopted in D.21-12-015 where "resources eligible to count towards the effective PRM will remain unchanged from D.21-12-015 and all resources that are currently eligible to be contingency resources will remain eligible to be contingency resources in 2024 and 2025."[10]

On September 29, 2023, SDG&E submitted AL 4293-E requesting approval for a 119 MW BOT UOS contract with RWE AG. The Commission denied AL 4923-E in Resolution E-5304, citing generally three main concerns: cost, deliverability, and contribution to summer 2024 effective PRM. In January 2024, following Resolution E-5304, SDG&E's Utility Development Team ("UDT") and the seller RWE AG discussed the concerns raised in the Resolution. As a result of those discussions, RWE AG agreed

[6] *Id*. at 12.
[7] *Id*. OP 3.
[8] *Id*. at 100, OP 76.
[9] D.23-06-029, OP 7.
[10] *Id*. OP 8.

to accelerate the COD for Westside Canal Energy Storage Expansion Project Phase 1 from October 31, 2024 to August 1, 2024. In addition, RWE AG reduced the project's costs.[11] On March 8, 2024, SDG&E submitted AL 4403-E requesting approval of one of two mutually exclusive UOS options. Option one is a BOT UOS contract with RWE AG for a total of 119 MW. Option two is a BOT UOS contract with RWE AG for a total of 219 MW. Collectively, these two options will be referred to as Westside Canal Expansion 2. In AL 4403-E, SDG&E states that both options will be operated to provide incremental capacity available to serve peak and net peak demand to meet summer 2024 and 2025 reliability needs. Under both options SDG&E will own the storage facility, with RWE AG to provide operation and maintenance ("O&M") services for a period of 10 years under a Long-Term Services Agreement ("LTSA").[12]

The Commercial Online Date for the Westside Canal Energy Storage Expansion Project Phase 1 ("Westside Canal Expansion 2 Phase 1") is August 1, 2024. The Commercial Online Date for the Westside Canal Energy Storage Expansion Project Phase 1 & 2 ("Westside Canal Expansion 2 Phase 1 & 2") is August 1, 2024 for the first 119 MW and June 1, 2025 for the remaining 100 MW. Under either option, the project would be located in the Imperial Valley, California.

The two options of the project are summarized in the table below:

Project / Location	Technology	Counterparty	Megawatts (MW)	Duration	Contract Type	Commercial Operation Date	O&M Contract Term
Westside Canal Expansion 2 Phase 1 / Imperial Valley, CA	Lithium-Ion Energy Storage	RWE AG	119	4 hours	BOT	8/1/24	10 years

[11] SDG&E AL 4403-E, at 4.
[12] *Ibid*. at 5.

Project / Location	Technology	Counterparty	Megawatts (MW)	Duration	Contract Type	Commercial Operation Date	O&M Contract Term
Westside Canal Expansion 2 Phase 1 & 2/Imperial Valley, CA	Lithium-Ion Energy Storage	RWE AG	219	4 hours	BOT	Phase 1 – 119 MW - 8/1/24 Phase 2 – 100 MW - 6/1/25	10 years

The estimated total present value revenue requirement of Westside Canal Expansion 2 Phase 1 is $307.1 million. The estimated total present value revenue requirement of Westside Canal Expansion 2 Phase 1 & 2 is $516.2 million. [redacted].[13]

SDG&E's UDT issued a competitive solicitation seeking proposals ("RFP") for utility-owned energy storage Engineer Procure Construct ("EPC") and BOT projects available to come online by 2027. SDG&E UDT then assessed the results of this RFP by comparing capital and O&M costs of proposed projects against one another, against prior CPUC-approved utility-owned projects, and against relevant market data. The evaluation process concluded with the selection of the Westside Canal Expansion 2 project. As further discussed below, SDG&E UDT brought in an Independent Evaluator ("IE") PA Consulting to assist with the cost competitive analysis.[14]

The Westside Canal Expansion 2 Phase 1 and the Westside Canal Expansion 2 Phase 1 & 2 do not have Full Capacity Deliverability Status ("FCDS"). However, the seller has requested interim deliverability status ("IDS") as part of the CAISO annual transmission plan deliverability allocation process which began in early February 2024 after Cluster 14 phase II interconnection studies were published. Specifically, RWE AG

[13] *Ibid*. at 12.
[14] *Ibid*. at 3-4.

filed a Transmission Plan Deliverability ("TPD") affidavit in February 2024 to receive interim FCDS for the remaining 219 MW of capacity of the site.[15] The project's queue position is Q1531 and it is a Cluster 11 project and is a subset of the larger Bateria Del Sur 350 MW interconnection queue position. Both the Phase 1 & 2 expansions have already obtained environmental and conditional use permits needed for construction of the project, which RWE AG obtained during the permitting for the original and now operating Westside Canal Energy Storage project.[16]

The Westside Canal Expansion 2 Phase 1 and the Westside Canal Expansion 2 Phase 1 & 2 projects will not require additional CAISO interconnection upgrades (aside from additional Remedial Action Scheme panels and meters), as the project will leverage the existing interconnection upgrades that were built as part of the first Westside Canal 131 MW project, including the loop into the existing Campo Verde-Imperial Irrigation District ("IID") gen-tie line and transmission interconnect (230 kV) to SDG&E's Imperial Valley Substation.[17]

Regarding cost recovery, SDG&E proposes that the associated cost of the Westside Canal Expansion 2 Phase 1 and the Westside Canal Expansion 2 Phase 1 & 2 projects be recovered through the Cost Allocation Mechanism ("CAM") consistent with OP 11 of D.21-12-015, which orders that the net costs associated with the supply side procurement shall be passed through to all benefitting customers, consistent with the CAM.[18]

SDG&E requests that the Commission find the following:

1. The selected contract option complies with the directives in D.23-06-029 and D.21-12-015;
2. The selected contract is approved and counts towards SDG&E's procurement requirements in D.23 -06-029 and D.21-12-015; and
3. SDG&E is authorized to recover the costs associated with the project via the standard CAM.[19]

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[15] *Ibid*. at 7.
[16] *Ibid*. at 8.
[17] *Ibid*. at 8.
[18] *Ibid*. at 13.
[19] *Ibid*. at 14.

On March 21, 2024, SDG&E submitted AL 4403-E-A (supplemental filing to AL 4403-E), which provided an analysis performed by SDG&E's Electricity and Fuel Procurement Bid Evaluation Team ("BET") of the proposed utility-owned storage projects described in AL 4403-E. The analysis includes a net market value ("NMV") evaluation using the BET's methodology, which is not available to SDG&E's UDT per SDG&E's Code of Conduct that prohibits SDG&E's UDT from obtaining market information via SDG&E's BET, and cost comparison to bids recently received.[20] On May 10, 2024, SDG&E filed AL 4403-E-B (a supplemental filing to AL 4403-E-A) to correct certain redactions made in AL 4403-E-A, Appendix N.

NOTICE

Notice of AL 4403-E, AL 4403-E-A, and AL 4403-E-B were made by publication in the Commission's Daily Calendar. SDG&E states that a copy of the Advice Letter was mailed and distributed in accordance with General Rule 4 of GO 96-B.

PROTESTS

SDG&E's Advice Letter 4403-E was timely protested by the Independent Energy Producers ("IEP"), and the Public Advocates Office ("Cal Advocates") on March 28, 2024. SDG&E's Advice Letter 4430-E-A was timely protested by IEP on April 10, 2024.

IEP protests AL 4403-E on the grounds that the relief requested in the advice letter is unjust, unreasonable, or discriminatory, because SDG&E fails to demonstrate that the costs of the project are reasonable in comparison to other available options. IEP states that it welcomes the changes in AL 4403-E where the COD of the 119 MW Phase 1 has been accelerated to August 1, 2024, and the price of the BOT agreement has been reduced, subject to potential recapture of the price reduction. But IEP notes that the project's deliverability risk is unchanged and the price discount could be recaptured by the project developer if the project can achieve FCDS earlier than expected.[21] IEP states that more significantly, this project was selected in a solicitation that was exclusively limited to projects that will be owned by SDG&E, and cost comparisons appear to be limited to only utility-owned storage projects. IEP argues that for the Commission to conclude that the costs of this project are just and reasonable, a fair comparison with

[20] SDG&E AL 4403-E-A, at 1.
[21] IEP protest to AL 4403-E at 1.

projects that are not owned by the utilities is required.[22] IEP further argues that the UOS proposals were safeguarded from competition from independently owned storage resources in SDG&E UDT's RFP because no bids from independent developers were considered. IEP states that this approach is contrary to the Commission's "competitive market first" policy.[23]

In addition, IEP states that when the IE compared the capital costs of the Westside Canal Expansion 2 Phase 1 and Westside Canal Expansion 2 Phase 1 & 2 to publicly available data, the projects' costs were higher than other projects. IEP states that the IE's report also hints that the capital costs of the project are higher than the $1,800 per kilowatt ("kW") cost of a similar storage project being built by Portland General Electric Company.[24]

Finally, IEP states that although Westside Canal Expansion 2 Phase 1 is now expected to come online on August 1, 2024, the project still does not have FCDS, which means that

ratepayers will not receive the benefit of Resource Adequacy ("RA") capacity from the project. In response to SDG&E that the project could receive interim deliverability status, IEP points out that those allocations are made annually, for a one-year duration. IEP argues that there is no certainty that ratepayers will receive the benefit of RA capacity from the project until at least 2034, when a network upgrade is expected to be completed. IEP urges the Commission to deny AL 4403-E. [25]

Cal Advocates argues that the Commission should reject AL 4403-E because the bilaterally renegotiated contracts impose the same increased costs and low ratepayer value as the contract denied in Resolution E-5304 and the project has an uncertain deliverability status that poses risks of higher costs for ratepayers. The problem is particularly acute for the 219 MW project option.[26]
Cal Advocates states that in SDG&E's updated cost comparison with public data for the renegotiated contracts in AL 4403-E, [redacted]

[22] *Ibid*. at 2.
[23] *Ibid*. at 3.
[24] *Ibid*. at 3.
[25] *Ibid*. at 3-4.
[26] Cal Advocates protest at 2.

[redacted].[27]

Cal Advocates argues that SDG&E's cost comparison, reflecting [redacted] two previously approved UOS resources,[28] is also not reasonable, because the two approved projects have full deliverability, are smaller in size, and have lower total costs that ratepayers must bear.[29] Further, Cal Advocates argues that the high costs, for either contract option, translate to unreasonably low value for ratepayers. Cal Advocates states that SDG&E's NMV analysis performed by the UDT indicates that [redacted]

[redacted].[30] Cal Advocates states that the project unnecessarily inflates ratepayer costs because [redacted]. Cal Advocates states that [redacted].[31]

Further, Cal Advocates states that SDG&E provides a revised deliverability screening assessment that concludes [redacted]. However, Cal Advocates states that [redacted]. Cal Advocates also states that [redacted]. Therefore, Cal Advocates argues that the assumptions of the revised deliverability screening assessment in SDG&E AL 4403-E are speculative and not reasonable, and the Commission should disregard the analysis.[32]

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[27] Cal Advocates protest at 4.
[28] Fallbrook 2 and Santee approved in Resolution E-5303
[29] *Ibid*. at 5.
[30] *Ibid*. at 5.
[31] *Ibid* at 7.
[32] *Ibid*. at 7.

Finally, Cal Advocates states that the NMV analysis performed by SDG&E's BET[33] [redacted]. Moreover, Cal Advocates argues that [redacted]. Thus, Cal Advocates argues that [redacted].[34]

IEP protests AL 4403-E-A on the grounds that the relief requested in the advice letter is unjust, unreasonable, or discriminatory, because SDG&E fails to demonstrate, at least in any manner that is discernable to the public, that the costs of the project are reasonable in comparison to other available options.[35] IEP states that AL 4403-E-A is presented as a net market value analysis of the project using the methodology that SDG&E's BET used

to evaluate offers submitted in its Summer 2024 and 2025 Emergency Reliability RFO, but lacks any additional information about this evaluation. IEP states that the IE report is so extensively redacted that nothing is revealed about the methodology used for the evaluation and it only reinforces the conclusion that the project does not compare favorably to similar projects whose developers retain ownership of their projects.[36] IEP also makes several arguments with regards to the confidentiality protections cited by SDG&E in AL 4403-E-A including: SDG&E's reply to the protests of AL 4403-E, dated April 4, 2024, quotes liberally and publicly from documents that SDG&E had previously verified as being entirely confidential. Nevertheless, IEP states that in its reply, SDG&E quotes from the confidential materials, apparently conceding that the confidential materials could in fact be protected "in a way that allows partial disclosure," since its reply makes a partial disclosure of the materials.[37] IEP argues that SDG&E (and other utilities) should not be permitted to manipulate the Commission's confidentiality procedures in this way. IEP argues that SDG&E can't have it both ways, asserting broad claims of confidentiality but then making partial disclosures when it suits its purposes.[38] Further, IEP notes that of the two evaluation options identified in AL 4403-

[33] Submitted in SDG&Es supplemental AL 4403-E-A
[34] *Ibid*. at 8.
[35] IEP protest to AL 4403-E-A at 1.
[36] *Ibid*. at 1-2.
[37] *Ibid*. at 2.
[38] *Ibid*. at 2.

E-A, only the option that assumed no FCDS for the project and no RA capacity deserves any consideration. IEP urges the Commission to deny AL 4403-E-A.[39]

SDG&E REPLY TO PROTESTS

On April 4, 2024, SDG&E timely responded to the protest of IEP and Cal Advocates on AL 4403-E.

In response to Cal Advocates and IEP's protest that the project does not yet have FCDS, SDG&E states that D.21-12-015 clearly states that projects that do not have full deliverability status should be considered and that the decision acknowledged the possibility that UOS resources might still lack full deliverability status even after conclusion of the emergency procurement period. SDG&E further states that the decision noted that ongoing UOS costs can continue to be recovered from all benefitting customers in the service territory, and these resources would become "part of the baseline used to calculate future reliability needs," and thereby benefit customers by lowering the amount of overall procurement required.[40] SDG&E then states that D.23-06-029 extended these rules for resources that can be online in 2024 and 2025 and enables the IOUs "to procure contingency resources, including resources that are not subject to strict RA counting rules" such as resources without full deliverability, to meet the procurement requirement established in the decision.[41]

Further, SDG&E argues that the project is in a good position to be awarded Net Qualifying Capacity ("NQC") even prior to achieving FCDS due to the manner in which NQC is awarded. SDG&E states that this is highlighted and confirmed through two separate independent assessments, the first being Appendix J of AL 4403-E – Q1531 Deliverability Study, performed by USE Consulting. The second is a review of USE Consulting's Q1531 Deliverability Study requested by Energy Division from PA Consulting. SDG&E states that Appendix J of AL 4403-E – Q1531 Deliverability Study concluded that "it is likely that the project will receive a TPD allocation in the 2024 TPD allocation cycle and be eligible to receive an interim allocation in the years prior to achieving FCDS." SDG&E states that the study further concludes that assuming a high

[39] *Ibid*. at 2-3.
[40] SDG&E Reply to Protest on AL 4403-E at 2.
[41] *Ibid*. at 3.

system need with 10% solar output assumption as would be the case in the net peak hours of 5 pm - 9 pm, "a full allocation of 350 MW of TPD [is] possible."[42]

In response to Cal Advocates' argument, that the assumptions used in SDG&Es contracted deliverability screening assessment[43] are speculative and not reasonable, SDG&E states that Cal Advocates fails to consider that the assumption in the Q1531 Deliverability Study are actually more conservative than what is used in CAISO's deliverability assessment methodology. Specifically, SDG&E states that as referenced by both USE Consulting and PA Consulting, the Q1531 Deliverability Study could have modeled solar projects in SDG&E's territory at 3% Pmax level consistent with the CAISO's methodology, however, a more conservative approach was taken and the Q1531 Deliverability Study used a 10% Pmax level.[44]

In response to Cal Advocates' protest regarding NMV, SDG&E states that the capital costs compared favorably with other recently approved projects, especially when considering current market dynamics. SDG&E states that using the revenue

requirements of either 119 MW or 219 MW option and either with or without deliverability, the costs per kW-mo. are cheaper than both projects approved in Resolution E-5303. In response to Cal Advocates' protest that the price per kW is higher than the high range, or the maximum observed value in CA adjusted cost data in the IE report, SDG&E states that Cal Advocates' simple comparison ignores current market dynamics, supply constraints, and the expedited nature of this project.[45]

In response to IEP's reference to Portland General Electric Company's project cost in the IE report, SDG&E states that the IE also stated that after reviewing the project further, it is not clear that it provides a good comparison because it is located in Oregon, which typically has lower development cost than California, and it does not appear to be on an expedited schedule.[46] SDG&E emphasizes that the publicly available data used in the IE report are battery energy storage cost projections and not based on recent project costs. SDG&E argues that projects should be compared to actual, recent project pricing, such as recently approved projects in Resolution E-5303, instead of projections.[47]

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[42] *Ibid*. at 4.
[43] AL 4403-E Appendix J- Q1531 Deliverability Study
[44] SDG&E Reply to Protest on AL 4403-E at 4-5.
[45] *Ibid*. at 5.
[46] *Ibid*. at 6.
[47] *Ibid*. at 6.

In response to IEP's protest that the UOS offers were favored, SDG&E points to numerous references in D.21-12-015 which encourage consideration of UOS as an additional source of projects, that were then extended by D.23-06-029 for 2024 and 2025. SDG&E also notes that power producers who wanted to remain owners were able to participate in SDG&E BET's 2024 Summer Reliability Solicitation. Further, SDG&E states that its UDT and IE compared the project to two approved UOS projects, which competed and were short-listed against the open market in SDG&Es 2024-2025 Summer Reliability Solicitation. Finally, SDG&E notes that the proposed project is cheaper on a $/MW basis than a 2024-2025 Summer Reliability Solicitation's approved projects, demonstrating the project's cost competitiveness.[48]

In response to IEP's allegation of protectionism, SDG&E notes that it adheres to a Code of Conduct which prohibits SDG&E's UDT team from obtaining market information via SDG&E's BET team. In addition, SDG&E notes that separately designated IEs oversaw both processes to ensure fairness.[49]

On April 17, 2024, SDG&E timely responded to the protest of IEP on AL 4403-E-A. SDG&E states that the Commission's confidentiality rules adopted in D.06-06-066, *et seq*. provide detailed guidance regarding the categories of procurement-related information that are protected from disclosure under Public Utilities Code Section 454.5(g) and other applicable statutory provisions. SDG&E states that the rules were adopted in response to market manipulation and significant resulting harm to utility bundled service customers that occurred during the 2000-2001 energy crisis. SDG&E states that as the Commission pointed out in D.06-06-066, the rules are designed "to ensure the best balancing between the broadest disclosure and the narrowest confidentiality."[50]

In response to IEP's protest stating that the heavy redactions, provided in AL 4403-E-A, reinforce the conclusion that the project costs are not reasonable, SDG&E states that contrary to IEP's assertion, the Commission is permitted to rely on information submitted under seal in rendering a judgment concerning the reasonableness of a given recovery request. In addition, SDG&E states that IEP's claim is even less convincing given the existence of procedures under the Commission's confidentiality rules that

[48] *Ibid*. at 6-7.
[49] *Ibid*. at 7.
[50] SDG&E Reply to Protest on AL 4403-E-A, at 2.

allow parties such as IEP to review confidential materials through a reviewing representative, a process that IEP made no effort to avail itself of in connection with AL 4403-E.[51]

In response to IEP's protest that SDG&E misapplied the Commission's confidentiality rules in its Reply, SDG&E states that IEP offers no details to support this vague claim beyond a footnote reference to SDG&E's discussion of information contained in Appendix J. SDG&E states that contrary to IEP's suggestion that SDG&E quoted "liberally and publicly" from Appendix J, the Reply includes a limited, partial quotation from the conclusion section of Appendix J. SDG&E argues that this *de minimus* reference to material contained in Appendix J does not disturb the applicability of the Commission's D.06-06-066 confidentiality rules to this Appendix.[52]

In response to IEP's protest based on General Order (G.O.) 96-B, General Rule 7.4.2(6), where "[t]he relief requested in the AL is unjust, unreasonable, or discriminatory", SDG&E states that the rule provides an important caveat: "such a protest may not be made where it would require relitigating a prior order of the Commission." SDG&E states that IEP is attempting to relitigate the Commission's findings in D.06-06-066 (and several subsequent decisions) that form the basis of the Commission's well-established procurement confidentiality rules. SDG&E claims that IEP's request is an improper collateral attack on multiple Commission orders that must be soundly rejected.[53]

Finally, in response to IEP's protest that the degree of redaction in the IE Memo Report demonstrates that the projects do not compare favorably to third-party owned projects, SDG&E states that the redaction of confidential market sensitive information in an IE report clearly has no bearing on the overall value of a given project. In addition, SDG&E states that G.O. 96-B, General Rule 9.5 requires a party that objects to requested confidential treatment to "meet and confer with the requester to resolve such objections informally", but IEP failed to do so and instead improperly raised its concerns regarding confidential treatment requested in the Reply in a protest to an entirely separate AL filing.[54]

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[51] *Ibid*. at 3.
[52] *Ibid*. at 3.
[53] *Ibid*. at 3.
[54] *Ibid*. at 4.

DISCUSSION

The Commission has reviewed AL 4403-E, 4403-E-A, 4403-E-B, 4403-E-C, the protests, and SDG&E's reply. We consider issues raised by the protestants to AL 4403-E and 4403-E-A in the following discussion. Ultimately, we find that SDG&E's request in AL 4403-E, 4403-E-A, 4403-E-B, and 4403-E-C is not reasonable.

Consistency with Commission decisions D.21-02-028, D.21-03-056, D.21-12-015, and D.23-06-029

We find that the resource SDG&E is proposing to procure in SDG&E's Advice Letter is inconsistent with Commission decisions D.21-02-028, D.21-03-056, D.21-12-015, and D.23-06-029 (collectively, the "Decisions"). As directed in the Decisions, SDG&E has filed a Tier 2 AL seeking approval of one of two options for its BOT contract with RWE AG. Option one is the BOT contract for a total of 119 MW of incremental storage capacity expected to be online by August 1, 2024, that can dispatch to meet peak and net peak demand. Option two is the BOT contract for 219 MW of incremental storage capacity, with the 119 MW expected to be online by August 1, 2024, and the remaining 100 MW expected to be online by June 1, 2025.

The Advice Letter includes a discussion of the following elements as required by the Decisions:

- The procurement process and resources selected;
- Operational information on the resources selected;
- Pricing and net market value analysis and summary of key contract terms;
- Independent evaluator report;
- Showing of cost competitiveness to extent comparable data exist;
- A demonstration that the resource is incremental; and
- A demonstration that the resource has a path to deliver its online date.

SDG&E did not adequately fulfill the required showing of cost competitiveness, as discussed below.

Procurement Methodology, Evaluation, and Cost Reasonableness

The Westside Canal Expansion 2 Phase 1 was derived from SDG&E's UDT competitive solicitation seeking proposals for UOS EPC and BOT projects available to come online by 2027. SDG&E submitted AL 4293-E seeking the approval of Westside Canal Expansion 2 Phase 1 for 119 MW on September 29, 2023. The Commission denied AL 4293-E via Resolution E-5304. SDG&E resubmitted the project through AL 4403-E on March 8, 2024, AL 4430-E-A on March 21, 2024, AL 4430-E-B on May 10, 2024, seeking approval of one of two options for a BOT contract for 119 MW or 219 MW of energy storage.

SDG&E retained PA Consulting ("PA") as the IE for its emergency reliability ownership efforts. PA monitored the RFP activity, bidder communications, meetings with bidders, bidder scoring and selection, and contract negotiations in developing the agreement. PA also participated in the CAM procurement review group meetings. PA continued to be engaged after the first iteration of Westside Canal Expansion was denied. PA conducted its own independent evaluation for Westside Canal Expansion 2 Phase 1 and Westside Canal Expansion 2 Phase 1 & 2. The IE analysis is included in SDG&E's AL 4403-E Confidential Appendix I. The IE performed cost comparisons for the project, including comparing the costs of the project against: (1) publicly-available energy storage cost information; and (2) projects shortlisted and approved in SDG&E's Summer 2024-2025 Emergency Reliability Solicitation.[55] The IE compiled capital cost data for lithium-ion battery energy storage systems ("BESS") from several public sources.[56]

The IE finds that both Westside Canal Expansion 2 Phase 1 and Westside Canal Expansion 2 Phase 1 & 2 contract prices are higher than the publicly available cost information without the additional contract RA value. However, the IE notes that while the public data provides a reference point, it does not capture near-term market dynamics. The IE explains that the cost of the lithium-ion batteries is a significant portion of the total capital costs for Westside Canal Expansion 2 Phase 1 and Westside Canal Expansion 2 Phase 1 & 2 and the cost of lithium has increased significantly over the last several years and spiked again in early 2023. The IE further notes that although prices have come down since the highs experienced in 2022 and mid-2023, the current

[55] SDG&E AL 4403-E, Public Appendix A at 6-8.

[56] *Id*. at 6. Resources include Energy Information Administration, Pacific Northwest National Laboratory, National Renewable Energy Laboratory, and Lazard.

prices are similar to the prices experienced at the end of 2021 when SDG&E contracted the original Westside Canal 131 MW project. Additionally, the IE notes that the expeditated schedule to meet the August 1, 2024 COD puts additional upward pressure on costs.[57]

The IE's analysis also shows that when compared to shortlisted and approved projects that SDG&E's UDT submitted to the 2024-2025 Summer Reliability RFO, [redacted]. However, this comparison assumes both options of the Westside Canal Expansion 2 can provide RA in all years prior to 2034. The IE also notes that the Westside Canal Expansion 2 projects may not have FCDS until 2034 and both Fallbrook 2 and Santee have FCDS.[58]

SDG&E states that it compared both the capital and O&M costs of the current proposed energy storage projects against the other UDT bids, including Fallbrook 2 and Santee in AL 4290-E, against prior CPUC-approved utility-owned projects, and against relevant market data.[59]

Cal Advocates and IEP argue that the costs for both project options are not competitive. Cal Advocates states that [redacted]. IEP states that the costs of both project options are higher than the publicly available data and that SDG&E only compared the subject projects with other utility-owned storage projects. We agree with Cal Advocates and IEP that the costs of both options are higher than the publicly available data. In its reply to protests, SDG&E argues that the publicly available data are cost projections and do not reflect actual project costs. SDG&E points to the cost comparison with Fallbrook 2 and Santee, approved in Resolution E-5303. However, as the IE noted, Fallbrook 2 and Santee have FCDS and the Westside Canal Expansion

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[57] *Id*. at 7.
[58] *Id*. at 7-8.
[59] SDG&E AL 4403-E at 4.

2 options do not. The IE also notes that although the Westside Canal Expansion 2 Phase 1 appears competitive with capital costs from recent market data, the simplified approach of comparing the cost of the contract plus 100% of the annual payments over ten years does not fully capture the economics (e.g., different COD, RA value, and augmentation assumptions). The IE notes that a better approach would be to develop a NMV analysis where the net present value of the projected annual costs of the contract are subtracted from the net present value of the annual benefits.[60] Accordingly, we have reviewed the NMV analysis that SDG&E performed.

SDG&E's UDT analyzed the NMV of both the 119 MW and 219 MW options with and without RA values, as well as with and without GHG adder.[61] As further discussed in the Deliverability section below, the deliverability status of the resource is still highly uncertain, which reflects significant uncertainty that the resource would receive an RA value benefit. Without an RA capacity value, the NMV for the "Without GHG Adder" scenario of the 119 MW option falls from [redacted], the NMV for the "Without GHG Adder" scenario of the 219 M option falls from [redacted]. With and without RA capacity benefit, the NMV analysis shows a [redacted] and shows that the resource is [redacted]. Without RA capacity benefit, this resource is [redacted]. Further, we have reviewed the NMV analysis with and without RA benefit performed by SDG&E's BET using the BET's methodology, submitted in AL 4403-E-A, which is not available to SDG&E's UDT. The analysis shows that both options of the Westside Canal Expansion 2 projects [redacted].[62] The IE notes that the results of the NMV analysis and additional sensitivity analysis show that [redacted].[63] Further, the NMV analysis performed by SDG&E's BET shows [redacted]. Finally, Energy Division Staff requested SDG&E to compare both options of the Westside Canal Expansion 2 projects with the bids received in the 2024-2025 Summer Reliability RFO.

[60] SDG&E AL 4403-E, Public Appendix A at 8.
[61] SDG&E AL 4403-E, Appendix G.
[62] SDG&E AL 4403-E-A, Appendix M.
[63] SDG&E AL 4403-E-A, Appendix N at 4.

The results show that both options of Westside Canal Expansion 2 without RA benefits [redacted].

SDG&E's 2024 and 2025 summer reliability target is 170-230 MW. In Resolution E-5304, SDG&E had 136 MW of approved supply-side procurement to meet its 2024-2025 EPRM target. As reported in the more recent Procurement Review Group ("PRG"), SDG&E has already procured [redacted] MW of supply-side resources and estimates [redacted] MW demand-side resources for June 2024. SDG&E's summer reliability need is [redacted] MW for June 2024. Locking in a UOS resource at such high prices, with no certainty of obtaining any RA value for a considerable amount of the project's life, to meet summer reliability targets that are currently set to end in 2025 would not be an effective use of ratepayer money. SDG&E can meet its summer reliability targets with more affordable options.

We have reviewed SDG&E's price comparison analyses and the IE report which contain price comparisons to publicly available energy storage cost information as well as recent market data, including the shortlisted and approved projects that SDG&E's UDT submitted to the 2024-2025 Summer Reliability RFO. We have also evaluated the price of both options of the UOS projects with and without RA capacity benefit. On balance, we find that the costs of both of the BOT contracts are not reasonable given the fact that the projects do not have certainty in obtaining FCDS and/or IDS – potentially resulting in no RA value for a significant portion of the resource life. We find that although SDG&E has performed the net market value and cost competitiveness analysis required by D.21-12-015, SDG&E has not demonstrated that either of the proposed UOS projects are cost competitive without deliverability status (RA value).

Deliverability

Cal Advocates and IEP assert that there is uncertainty in the projects' deliverability status and therefore no certainty that ratepayers will receive RA capacity benefits from the projects until as late as 2034. SDG&E submitted a Q1531 Deliverability Study conducted by USE Consulting. The study takes the Cluster 14 Phase 1 High System Need ("HSN") case and performs a deliverability analysis on it for Q1531, the queue position for Westside Canal Expansion 2 projects. The study also uses the Cluster 14 Phase 1 HSN case and tunes the case so that solar in the SDG&E study area is at 10% dispatch and battery at full dispatch, then using the new dispatch scenario, performs another deliverability analysis on Q1531. The study concludes that it is likely that the project will receive a TPD allocation in the 2024 TPD allocation cycle[64] and be eligible to receive an interim allocation in the years prior to achieving FCDS. The study also concludes that in the HSN scenario where PV dispatch is reduced (10%), TPD for the full 350 MW was found as early as 2026.[65]

However, we agree with Cal Advocates that CAISO uses a different methodology than the study in allocating TPD.[66] Specifically, SDG&E's study doesn't take into account projects that have already received TPD allocations. Our review of the CAISO's TPD allocation process hasn't changed since Resolution E-5304 and still shows that it is uncertain that SDG&E will receive interim deliverability status every year (for all or some portion of the 119 MW or 219 MW) until FCDS may be awarded in 2034 (which is dependent on local network upgrades to this area). SDG&E's deliverability assessment does not provide us with any additional confidence that the project would receive deliverability status for a significant portion of its useful life. Westside Canal Expansion 2 is behind two key transmission deliverability constraints, San Luis Rey-San Onofre and East of Miguel. East of Miguel is the more binding constraint. As in Resolution E-5304, Energy Division Staff looked at the viability of the resources that received TPD allocation at the binding constraint to evaluate the likelihood of the Westside Canal Expansion 2 projects receiving IDS (until network upgrades were completed). To do this, Energy Division Staff cross checked these projects against Integrated Resource Plan ("IRP") busbar mapping data, which reflects the most up-to-date information of the current resource fleet under development. Our review of this data supports the conclusion that the probability of SDG&E receiving IDS for all (or some portion of the 119 MW or 219 MW) is extremely low.

The probability that SDG&E will receive IDS each year until the local network upgrades are completed is dependent on other projects that have been awarded FCDS not coming online as expected. However, it does appear that these projects are likely to come online, although project development is always subject to unknown risks of delay or failure. While it is possible that SDG&E could receive some level of IDS for some period, it is impossible to estimate what level that could be as it is really tied to whether Westside Canal Expansion 2 is able to develop itself before the other projects with TPD allocation are and if so, how long these other projects delayed by because once they

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[64] The results of this allocation would likely not result in FCDS until 2034 at the earliest.
[65] SDG&E AL 4403-E, Appendix J.
[66] CAISO Generator On-Peak Deliverability Assessment Methodology, [STRAW-PERSON DELIVERABILITY PROPOSAL (caiso.com)]

come online any Westside Canal Expansion 2 project will stop receiving IDS. Without IDS or FCDS, Westside Canal Expansion 2 will not produce RA capacity value. Due to the high level of uncertainty that this project will receive IDS every year, and will not receive FCDS until at least 2034, if approved, ratepayers would be required to pay for a resource that doesn't have RA value for ten years or more. Although the Decisions do not require deliverability for the summer reliability resources, the summer reliability period will eventually end, after which ratepayers will have to pay for a resource that is unlikely to have RA capacity benefit for the project life. D.21-12-015 states that:

> If an IOU procures resources that are not fully deliverable, it shall work with the Commission's Energy Division and the CEC to ensure that benefits are allocated to all LSEs once the emergency procurement period has ended. During the emergency period, any associated load reduction will be applied toward the IOU's contingency procurement target.[67]

SDG&E misinterprets the language in D.21-12-015, as the Commission clearly intended for UOS resources to have RA value.

As Cal Advocates states, SDG&E's bilaterally renegotiated contracts impose the same increased costs and low ratepayer value as the contract denied in Resolution E-5304 and the project has an uncertain deliverability status that poses risks of higher costs for ratepayers. Although SDG&E is directed to procure resources to meet its effective PRM target, it is not directed to do so at any cost. SDG&E should be able to meet its 2024 and 2025 effective PRM targets with more cost-effective resources. If this project is approved, ratepayers would be locked into having to pay for a resource that may or may not provide RA value for the next twenty years.

We find that the deliverability concerns associated with this project are significant enough to not justify the high cost of this resource to support summer reliability for 2024 and 2025.
SDG&E filed supplemental AL 4403-E-C on June 5, 2024, purportedly to provide updated deliverability information, but the supplemental AL contained no additional information regarding deliverability beyond what is described herein.

Cost Recovery

[67] D.21-12-015, at 109, 188, OP 91

In D.21-02-028 and D.21-03-056, the Commission directed the IOUs to continue procurement efforts to meet or exceed the effective 17.5 percent PRM with a preference for new storage contracts, including UOS, with costs to be recovered through CAM. D.21-02-028 specified the parameters of CAM-based cost recovery for conforming procurement.[68] In addition, D.21-12-015 affirmed cost recovery though CAM consistent with prior summer reliability decisions.[69]

Most recently, in D.23-06-029, the Commission extended the use of the effective PRM to 2024 and 2025 and reaffirmed the use of CAM as the cost recovery mechanism for this procurement. "All costs associated with the effective PRM procurement will be assigned to all customers through the CAM, as adopted in D.21-12-015."[70]

D.21-12-015 required the submittal of the following information for evaluation.

· A summary of the resources being selected and a brief discussion of the procurement and selection method and criteria.
· Operational information of the resources contracted and a demonstration that the resource will be available during the peak and net peak demand hours.
· Pricing and net market value analysis along with a summary of the key contract terms.
· A completed analysis by the independent evaluator.
· A demonstration of cost competitiveness.
· A demonstration that the resource is incremental.
· A demonstration that the resource has a path to deliver its online date.

SDG&E's request and clarification to recover the cost of one of two proposed UOS projects via CAM is not reasonable because it has not met the procurement requirements specified in D.21-12-015, namely a demonstration of cost competitiveness.

IEP's Protests

[68] D.21-02-028 at 11.
[69] D.21-12-015, OP 86
[70] D.23-06-029, at 25.

IEP argues that the UOS proposals were safeguarded from competition from independently owned storage resources in SDG&E UDT's RFP because no bids from independent developers were considered. IEP states that this approach is contrary to the Commission's "competitive market first" policy. D.21-02-028 allowed UOS projects to be considered for summer reliability and for the IOUs to contract bilaterally.

Potential resources may include utility-owned generation, with Commission consideration for utility owned generation projects with a COD in 2021 through a Tier 2 advice letter. The large electric IOUs should initiate new bilateral negotiations and revisit offers from recent IRP requests for offers bid stacks.[71]

D.23-06-029 extended the summer reliability requirements for 2024-2025.

As the Commission allows UOS projects to be considered for summer reliability, SDG&E's UDT issued the solicitation for the EPC and BOT offers. The UDT operates under a code of conduct and firewall that prohibits UDT's access to market data obtained by SDG&E's Energy Supply function or BET team. The IE finds that the negotiations were fair and that SDG&E's behavior was reasonable during the bid review and contract negotiation process.

Regarding IEP's arguments that SDG&E improperly redacted portions of the Independent Evaluator Memo Report in 4403-E-A, we find that SDG&E's corrected redactions in 4403-E-B are consistent with relevant law and Commission decisions. The redactions in 4403-E-B concern the specifics of BET's NMV modeling and fall under Section VIII.B of the IOU confidentiality matrix established in D.06-06-066.
In D.11-04-007, the Commission stated that Section VIII.B, "provides that specific quantitative analysis involv[ing] the scoring and evaluation of participating bids in a competitive solicitation for electric resources (other than evaluation guidelines) shall be confidential for three years after the winning bidders are selected."[72] As the 4403-E-B redactions concern quantitative analysis involved in bid evaluation, confidential treatment is appropriate.

[71] D.21-02-028, at 11.
[72] D.11-04-007, at 4.

COMMENTS

Public Utilities Code section 311(g)(1) provides that this Resolution must be served on all parties and subject to at least 30 days public review. Any comments are due within 20 days of the date of its mailing and publication on the Commission's website and in accordance with any instructions accompanying the notice. Section 311(g)(2) provides that this 30-day review period and 20-day comment period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day review and 20-day comment period for the draft of this resolution is neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the Commission's agenda no earlier than 30 days from today.

FINDINGS

1. Commission decisions D.21-02-028 and D.21-03-056 directed the IOUs to contract for incremental capacity available to serve peak and net peak demand during the summers of 2021 and 2022 on behalf of all benefitting customers and expressed a preference for storage resources. The Commission determined that potential resources may include utility-owned generation and authorized the IOUs to submit utility-owned generation projects through a Tier 2 Advice Letter.
2. Commission decision D.21-12-015 adopted several supply and demand-side requirements intended to ensure that there is adequate electric power in the event of extreme weather conditions during the summers of 2022 and 2023.
3. Commission decision D.23-06-029 extended D.21-12-015 and established a 17 percent PRM and an effective PRM procurement target of 170-320 MW for SDG&E.
4. There is a high level of uncertainty regarding the deliverability status of Westside Canal Expansion 2 Phase 1 and the Westside Canal Expansion 2 Phase 1 & 2 such that neither project warrants the total revenue requirement of $307.1 million for the 119 MW option and $516.2 million for the 219 MW option.
5. Assuming no deliverability status and RA benefit for both options of the Westside Canal Expansion 2 projects, either option does not warrant the total revenue requirement of [redacted] for the 119 MW option and [redacted] for the 219 MW option.
6. SDG&E should be able to meet its 2024 and 2025 effective PRM targets with more cost-effective resources.

7. SDG&E's request to recover the cost of either proposed utility owned energy storage project through the Cost Allocation Mechanism is not reasonable.
8. SDG&E filed supplemental AL 4403-E-C on June 5, 2024, purportedly to provide updated deliverability information, but the supplemental AL contained no additional information regarding deliverability beyond the assumptions that informed the deliverability analysis in this resolution.

THEREFORE IT IS ORDERED THAT:

1. The request of SDG&E to approve one of two utility-owned energy storage contracts as requested in Advice Letter 4403-E, 4403-E-A, 4403-E-B, and 4403-E-C is denied.

2. SDG&E is not authorized to recover the costs of the utility-owned energy storage contract via the Cost Allocation Mechanism.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on July 11, 2024; the following Commissioners voting favorably thereon:

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Rachel Peterson
Executive Director