Application: A.22-05-002, *et al*

Exhibit No.: ______________________

Witness: E Bradford Mantz

PREPARED SUPPLEMENTAL TESTIMONY OF

E BRADFORD MANTZ – CHAPTER 1C

ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

August 5, 2022

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E BRADFORD MANTZ - CHAPTER 1C
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I. INTRODUCTION

The purpose of my supplemental prepared direct testimony is to specifically address the Scoping Issue 3.2 (1) in the Assigned Commissioner's Scoping Memo and Ruling (dated July 5, 2022) in this proceeding, which asks whether "*the Utilities should be directed to conduct [Demand Response] Auction Mechanism (DRAM) solicitations in 2023, for 2024 deliveries, as a continued pilot without further technical refinements, and if so, what budget should be authorized?*"[1] I submit this supplemental testimony to address the above topic as SDG&E has now had opportunity now to review the recently released DRAM Evaluation Report provided to the Energy Division by Nexant (now a part of Resource Innovations).[2]

II. WELL-FOUNDED POLICY REASONS EXIST TO TERMINATE DRAM

DRAM as a means of procuring Demand Response (DR), should not be extended for 2024 deliveries. On principle, SDG&E has opposed the carve-out that the DRAM gives to DR; requiring the utility to procure DR resources that are not needed, which have not been consistently reliable compared to other resources, and which may prove to be more expensive than other resources. SDG&E has opposed the carve-out based on policy, and advocates here for DR to have to compete against other Distributed Energy Resources (DER) in all-source or

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1 A.22-05-003, Scoping Memorandum, p. 4. To avoid confusion, SDG&E has designated all testimony that relates to the DRAM issues being considered in Phase 1 of this Proceeding with a "C" (*i.e.*, Chapter 1C).

2 The DRAM Evaluation Report refers to the *Demand Response Auction Mechanism Evaluation*, submitted by Nexant in partnership with Gridwell Consulting, May 23, 2022. The DRAM Evaluation Report is attached to the Assigned Commissioner's Scoping Memo and Ruling (dated July 5, 2022) in this proceeding as Attachment 1. Given the size of the DRAM Evaluation Report, I have not attached a separate copy of the DRAM Evaluation Report to this testimony, but rather, incorporate it herein by this reference.

preferred (or renewable) resource requests for offers (RFOs). DR should not be given preferential treatment in its own separate RFOs where it does not have to compete against those other resources. While DR has been given that opportunity in order to develop a viable third-party DR market that would bid DR into the CAISO market, it is clear now from the DRAM Evaluation Report that the Demand Response Providers (DRPs) still have issues that have not been worked out.

At the very least, since no cost effectiveness was to be in scope in this latest evaluation, those DRAM resources should be competing in all-source RFOs against other types of energy and capacity resources so that some financial analysis can be made. When DR competes in the all-source RFOs then stakeholders, as well as regulators, can determine if a resource is valuable based on cost when compared to other resources. Stakeholders can also quantify exactly how valuable it is, whether it is reliable, and finally, after performance is evaluated, whether it is cost effective when compared to other DERs. It is prejudicial to SDG&E's ratepayers to continue to require SDG&E to procure DRAM resources (whose value and cost-effectiveness may be low) up to pre-determined budget caps, rather than requiring DR providers to bid into all-source RFOs and compete.

III. THE DRAM EVALUATION REPORT DOES NOT SUPPORT THE CONTINUANCE OF DRAM

While SDG&E has opposed the DRAM on the above stated policy reasons, SDG&E was nonetheless eager to review the newly completed DRAM Evaluation Report to understand the current state of the DRAM across the state. Upon review, it is clear the DRAM Evaluation Report does not offer any new insights that would indicate that a different position is warranted. To the contrary, the DRAM Evaluation Report highlights the ongoing (and likely incurable) challenges that DRAM faces.

The DRAM Evaluation Report appears to be a robust, thorough, and thoughtful look at the DRAM based on the data that Nexant was provided. SDG&E appreciates that the evaluation reflects a look back on past performance and attempts to identify and offer reasonable recommendations to try to improve the existing pilot. SDG&E commends Nexant for attempting to review a flawed program objectively and trying to present a fair path forward.

A. The DRAM Evaluation Report Makes Clear that DR Procured in the DRAM is Not Reliable

The DRAM Evaluation Report's overarching findings are summarized in the following table, which was included at page 2 of the report:

Table 1-1: Summary of DRAM Evaluation Findings

	Evaluation Criteria	Results
1	Did DRAM engage new, viable DRPs?	Yes, two of the nine DRPs that won contracts were new. Viability has improved, but integration challenges remain. The market is moderately to highly concentrated.
2	Did DRAM engage new customers?	Yes, but the proportion of new customers is decreasing in each cycle.
3	Were auction bid prices competitive?	Mostly yes; at the statewide average level, average DRAM contracts are lower than the LRAC and are more competitive with LRAC at the end of this evaluation period (2021 DRAM) than at the beginning (2019 DRAM (IV)). *[REDACTED]*. At the statewide average level, IQR in 2020 was 8% lower than that in 2019 DRAM (IV) and the statewide IQR in 2021 was 21% lower than that of the 2020 DRAM. *[REDACTED]*.
4	Were offer prices competitive in wholesale markets?	No, but they seem to have improved in recent years.
5	Did DRPs meet their contractual obligations?	Mixed; while Must-Offer Obligation (MOO) compliance is high, alignment of Supply Plan Qualifying Capacity and Demonstrated Capacity (DC) with Contracted Capacity is declining year-over-year. Also, only 30% of contracts evaluated fulfilled their 2021 minimum dispatch requirement.
6	Were resources reliable when dispatched?	Mixed; performance is improving but while some DRAM DRPs delivered reliable performance, others did not; accuracy of DRP-estimated delivered energy varies.
RQMD	Should penalties be imposed for delayed customer and meter data that the Utilities provide to DRPs?	Not retroactively, but specific metrics for success and failure of Revenue Quality Meter Data (RQMD) delivery and associated penalties should be established.

The report makes clear that there were performance issues making DRAM resources unreliable as a firm resource. As shown above, the report states that most of the results of the DRAM pilot are continuing to be mixed without clear, compelling, or consistent positive trajectories towards success. In some very crucial areas, the performance is in fact very underwhelming. Take for example whether DRPs generally met their contractual obligations. The demonstrated capacity (DC) – the amount of capacity that was provided by the DRP under a contractual obligation – has continually declined. As Nexant found, only 30% of the contracts evaluated from 2021 fulfilled their minimum dispatch obligations. The DRAM Evaluation Report also indicates that the prices offered in the wholesale market were not, by and large, competitive. SDG&E would offer that in no industry does a company willingly continue to do business with an entity that consistently does not meet contractual obligations. Why then should ratepayers be forced to do so? What compelling reasons are shown to continue this exercise?

SDG&E also sees there are two areas within the broader issue of performance that should be considered. First, there is the issue of whether or not the auction and the business model itself works. The second performance issue is whether or not the DRPs that are winning the contracts (and deemed to have met criteria) perform when called upon near their contracted levels. SDG&E would offer that the DRAM itself as a mechanism appears to be working in that companies bid into the RFOs and bid their prices for SDG&E to offer contracts. However, the DRAM Evaluation Report acknowledges that DRAM competition among DRPs appears to have consolidated in the market.[3] There are still very few DRPs participating and, more specifically, SDG&E's own experience is one of market consolidation. SDG&E averages 2 or 3 DRPs in each auction and they have often been the same DRPs over the last multiple years. In its current

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[3] Report, pp. 5 and 74.

state, there have not been so many bids or so many DRPs that any DRPs who wished to bid and receive contracts have missed out in participating if they bid within somewhat competitive guardrails (staying within ranges where outlier bids would be rejected). The consolidation of the market would be less troubling if the resources were performing as contracted, and as shown on supply plans. As long as companies are not providing contracted energy, SDG&E's hope would be that competition would expand so that better performing DRPs enter the market. As it is, SDG&E has received bids from the same companies who are consistently underperforming, sometimes reducing their supply plan quantities to 50% of their contracted amounts. In addition, as noted in the Nexant report at page 100, we are also seeing a decrease in demonstrated capacity when compared to contracted capacity.[4] At what point should SDG&E be allowed to reject bids from such companies with such a disappointing track record?

Most notably, the DRAM Evaluation Report states that there is a "lack of availability during critical hours, such as the August 2020 heatwave, as studied in more detail in the CAISO Department of Market Monitoring (DMM) report."[5] Figure 9-3 in the Evaluation Report (at page 140) showed that in Nexant's analysis, about 1500 MWs of DRAM resources were awarded in the California Independent System Operator (CAISO) market in August 2020, but only about half of that energy was delivered by DRPs. That is a large delta in the type of event that so severely impacted the state.[6] When the state needed the energy the most and when

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[4] Report, p. 100.

[5] Report, p. 9 and fn. 7.

[6] On January 13, 2021, the CAISO, CPUC and California Energy Commission (CEC) issued a final root cause analysis of the August 2020 heat wave and rotating outages in the state. On August 14 and 15, 2020, the CAISO was forced to institute rotating electricity outages in California in the midst of a West-wide extreme heat wave. Following these emergency events, California Gov. Gavin Newsom asked the CAISO, CPUC, and CEC to report on the root causes of the events leading to the

market prices would have presumably been at the higher end, such as during the August 2020 heatwave, there was not the reliable availability one would hope for after 7 years of a pilot. SDG&E believes that such heatwaves will likely continue for the near future, and if DRAM resources cannot meet those challenges with some greater degree of reliability, then other resources should be prioritized and valued more highly.

B. The DRAM Evaluation Report Does Not Contain any Results or Findings that Would Support Continuing the DRAM in 2024

SDG&E believes that after 7 years of a pilot, the performance results should be more compelling to continue the auctions at all. There has been enough time and ratepayer funds used to experiment with the mechanism as well as how to attract DRPs and their customers into the wholesale markets. After years of effort, the DRAM has not succeeded in the development of a robust third-party DR market where DRPs demonstrate consistent performance that warrants the carve-out they have received – *i.e.*, not having to compete against other DERs who may be able to prove themselves more reliable. If a carve-out must be given for DR, the DRPs should at least deliver what they have been contracted to provide.

Because of the lack of reliability, SDG&E does question whether the entire business model of the DRAM is working. Since DRPs are awarded contracts to supply certain amounts of energy, the DRPs know they will be compensated for delivery of that energy – and yet (according to the DRAM Evaluation Report) they mostly do not deliver that energy. It seems clear that having a contract and payment guaranteed (if their demonstrated capacity/qualifying capacity ratio is greater than 50%) is not a strong enough impetus, even with such latitude given

August outages. The report, "Final Root Cause Analysis – Mid-August 2020 Heatwave" can be found at [Final-Root-Cause-Analysis-Mid-August-2020-Extreme-Heat-Wave.pdf (caiso.com)](Final-Root-Cause-Analysis-Mid-August-2020-Extreme-Heat-Wave.pdf) in a 50% floor, for having the customers a DRP needs to drop the appointed loads when needed. Yet the results are abysmal.

Another issue to keep in mind is the cost. Cost-effectiveness was out of scope of the recent evaluation of the DRAM and, thus, there was no comparison of costs and benefits – although Nexant recommends such an effort be undertaken.[7] Further, no load impacts using the load impact protocols have been applied to the DRPs in the DRAM. SDG&E believes this is very unfortunate as having this information would help inform stakeholders about the true benefits of DRAM.

If a cost effectiveness analysis had been done, and *if* DRAM resources were found to have been cost effective, then SDG&E could see a case being at least entertained in continuing the DRAM as a pilot to work out the remaining issues to improve reliability for delivery on contracted amounts and/or limiting companies to smaller contracts who consistently underperform. But since no such analysis was done, and the issues remain across all the major categories of performance, SDG&E does not find any compelling reasons to continue with the DRAM. Conversely, if the report had not found the resources to be cost-effective, but the report found the DRAM resources to be extremely reliable and consistent when delivering energy up to contracted amounts, then SDG&E could also see there may be a role for DRAM resources to provide an amount of additional capacity when needed in some limited way to protect ratepayers. But with the DRAM Evaluation Report that was provided, without a cost/benefits analysis of any kind, and without load impacts being calculated according to the protocols, it is extremely difficult to argue for the DRAM to continue after 7 years of effort. The lack of financial analysis

[7] Report, p. 69.

is coupled with overall spotty performance and few benefits at all. Simply put, the time has come to end the DRAM.

SDG&E must note that if an IOU were proposing to extend a 7-year pilot for additional years that had the track record of the DRAM, we surmise that the Commission might hesitate to approve the proposal. The DRAM must not be extended for 2024 since the resources are so far consistently not reliable. Most egregiously, the ratepayers have no idea if the program is cost effective with any surety, nor do we know what the load impacts would show.

SDG&E does not take this time to address every issue in the evaluation of DRAM which would appear to be scoped in Phase II of this proceeding. But as it pertains to the issues being considered in Phase 1, the DRAM Evaluation Report supports SDG&E's position that DRAM should not be continued in 2024 on sound policy; no carveout should be provided to DRAM resources ahead of other resources sans an all-source RFO. The DRAM Evaluation Report simply does not point to overwhelming evidence that the DRAM resources are so reliable that they should be afforded that carve-out.

IV. CONCLUSION

DRAM resources have not had to compete with other resources to be cost effective, or reliable. SDG&E believes that the playing field should be level for all resources. In my earlier testimony, I stated that SDG&E is open to the Commission ending any SDG&E DR program that is not shown to be cost effective. SDG&E does not support the continuance of a long multiple-year pilot that has not shown clear and substantial improvements or indicate it can be overall reliable (much less one for which e cost-effectiveness has not been established). The recommendations provided by Nexant offer interesting food for thought but most of those recommendations are not tied directly to the heart of the matter which is *reliability*.

For the reasons above, SDG&E urges the Commission not to direct it to conduct DRAM solicitations in 2023 for 2024, but to end the DRAM at the end of 2023, and not extend it even as a pilot. This would not end third-party run demand response since there would still be opportunities for the DRPs. However, it would end the required procurement and ratepayer spend up to arbitrary budget caps for DR that has not performed and could be replaced by other resources.

This concludes my prepared direct testimony.

V. WITNESS QUALIFICATIONS

My name is E Bradford Mantz. My business address is 8335 Century Park Court, San Diego, California 92123. I am employed by SDG&E as the Demand Response and Segmentation Manager for Customer Programs. My responsibilities include the design, implementation and management of demand response programs for SDG&E. I have been employed by SDG&E since 2010.

I graduated from the University of Texas, Austin with a Bachelor of Arts in Business Administration with emphasis in Marketing and Petroleum Land Management and a minor in Geology.

I have testified previously before the California Public Utilities Commission.