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Exhibit No.: SDG&E-13
Witness: D. Thai, B. Baugh

SUPPLEMENTAL TESTIMONY OF
DAVID H. THAI AND BRADLEY M. BAUGH
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY
CHAPTER 13
("APPENDIX B" TOPICS)

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

November 20, 2026

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SUPPLEMENTAL TESTIMONY OF DAVID H. THAI AND BRADLEY M. BAUGH CHAPTER 13 ("APPENDIX B" TOPICS)

I. INTRODUCTION

This rebuttal testimony presents the additional analyses and supplemental testimony described in the Joint Statement Reporting on Results of Meet and Confer Regarding Supplemental Testimony on "Appendix B" Topics filed in this proceeding on October 14, 2026 (Joint Statement).

On October 6, 2026, Small Business Utility Advocates (SBUA), The Utility Reform Network (TURN), and Utility Consumers' Action Network (UCAN) (together, the Joint Movants) filed a Joint Motion to Direct SDG&E to File Supplemental Testimony (Motion) requesting, in pertinent part, that SDG&E be directed "to serve supplemental testimony comparing, on a common cost basis and over a common horizon, the Smart Meter 2.0 program proposed in the Application with the alternative that SDG&E's incumbent Smart Meter 1.0 vendor offered."[1] The Motion focused on two areas related to SDG&E's Smart Meter (SM) 2.0 proposal: (1) whether SDG&E's proposed SM 2.0 platform is reasonable – *i.e.*, whether SDG&E should switch to a new vendor's systems rather than continuing to operate the incumbent vendor's systems while the meters, modules, and components of the incumbent vendor's system are modernized; and (2) whether SDG&E's proposed pace and method of SM 1.0 electric meters and gas modules replacement is reasonable – *i.e.*, whether SDG&E should remove working meters on an accelerated and fixed schedule, as proposed, or should instead replace meters as they fail, or accelerate the replacement of meters with a known capacitor defect and replace the remaining meters as they fail at a lower rate over time.[2] The Motion included Appendix B, which described the scope of the proposed supplemental testimony requested (Appendix B).

On October 9, 2026, SDG&E filed a response to the Motion (Response). In its Response, SDG&E indicated that it did not oppose the request to provide supplemental testimony, with limited exceptions, so long as it was afforded adequate time to respond to intervenor's opening

[1] Motion at 1.

[2] *Id*. at 5-6.

testimony and also prepare the supplemental testimony.[3] On October 9, 2026, Administrative Law Judge (ALJ) Ehren Seybert issued an email ruling directing the parties to meet and confer, and to the extent possible, resolve conflicts, and file a joint statement reporting on the results of the meet and confer by no later than noon on Wednesday, October 14, 2026.

On October 14, 2026, SDG&E filed the Joint Statement Reporting on Results of Meet and Confer Regarding Supplemental Testimony on Appendix B Topics (Joint Statement) on behalf of itself, the Joint Movants, Clean Energy Alliance and San Diego Community Power (CEA/SDCP), Mission:data Coalition (Mission:data), and the Public Advocate Office (Cal Advocates).[4] The Joint Statement described the agreed-upon scope of SDG&E's supplemental testimony on Appendix B topics. SDG&E further agreed in the Joint Statement that for each modeling scenario SDG&E presents in its supplemental testimony, it shall state whether, and to what extent, the Platform Option and Meter Replacement Strategy modeled would change the substance or timing of meter data access compared to what SDG&E described in its prior testimony in this proceeding, and shall identify any data-access capabilities that would be delayed, reduced, or eliminated.

On October 19, 2026, ALJ Seybert granted the Motion and directed SDG&E "to prepare supplemental testimony on the Appendix B topics, as described in the October 14, 2026 Joint Statement."[5]

Section I of this testimony provides an introduction and presents background relevant to this supplemental Appendix B testimony. Section II describes the scope of this supplemental testimony, including the Platform Options (Item 1), Replacement Strategies, and Failure Forecasts (Item 2) that define each modeling scenario. Section III describes the key assumptions SDG&E used to model those scenarios, including the common basis (Item 3). Section IV presents the scenario matrix results. Sections V through IX respond to Items 4 through 8 of Appendix B, respectively.

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[3] Response of SDG&E to UCAN, TURN, SBUA's Joint Motion to Direct SDG&E to File Supplemental Testimony (October 9, 2026) (Response) at 2.

[4] Cal Advocates did not take a position in the Joint Statement regarding the scope of the supplemental testimony and deferred to Joint Movants' and SDG&E's agreement on said scope.

[5] Administrative Law Judge's Email Ruling Granting Joint Motion and Further Amending Proceeding Schedule (October 19, 2026) at 3 (October 19, 2026 Ruling). The ruling also amended the procedural schedule.

II. SCOPE OF SUPPLEMENTAL TESTIMONY

In the Joint Statement, the parties defined the agreed-to scope of SDG&E's supplemental testimony on Appendix B topics. The scope of the supplemental testimony includes modeling and analysis of additional scenarios for SM 2.0 deployment to address Items 1 and 2 of Appendix B, as described in Section II.A below. In addition, the scope includes responses to Items 3-8 of Appendix B, as described in Section II.B below.

The Joint Statement contemplates that intervenors will have the opportunity to serve sur-rebuttal testimony limited to the scope of the supplemental Appendix B testimony, with SDG&E serving sur-reply testimony limited to the scope of intervenors' sur-rebuttal testimony.[6] SDG&E notes that its concurrently-served rebuttal testimony addresses several topics raised in intervenors' opening testimony, including, but not limited to, SDG&E's electric meter and gas module failure forecasts (Chapter 8), the SM 2.0 procurement process (Chapter 11), and data access requirements (Chapter 12). SDG&E refers to its separate rebuttal testimony herein, where relevant, to assist the Commission's broader understanding of the issues before it in this proceeding, but does not incorporate that separate rebuttal testimony by reference into this supplemental testimony or, in referring to it, expand the scope of the supplemental testimony beyond what was agreed to in the Joint Statement.

Finally, SDG&E notes that the absence of a response in this chapter to any particular issue raised, or statement or proposal made, by any party does not imply or constitute agreement by SDG&E with that proposal or contention.

A. Appendix B Items 1 and 2 – SM 2.0 Scenarios to be Evaluated

In the Joint Statement, SDG&E agreed to analyze multiple SM 2.0 platform options with differing assumptions (each a Platform Option), all of which assume issuance of a final Commission decision in Q4 2027:[7]

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[6] *See* Motion at 13 ("parties to conduct discovery on the supplemental testimony . . . [and] serve responsive testimony . . . SDG&E to serve reply testimony limited to the supplemental subject."); Joint Statement at 9.

[7] Joint Statement at 5-7 (Appendix B, Item 1 – Platform Options).

1. Platform Option (a) – the Application as proposed

The SM 2.0 program as described in Exhibits (Ex.) SDG&E-01 through SDG&E-07: the selected vendor's[8] electric meters and gas modules, the selected vendor's head-end system and the meter-data-management integration built around it, the Foundational Technology, program management, the NextGen capabilities, and the device scope of 1,634,498 electric meters and 952,761 gas modules reflected in analysis supporting Chapter 3.

2. Platform Option (b) – the incumbent vendor's hosted transition

The alternative the incumbent SM 1.0 vendor set out as "Scenario 2" in its June 10, 2025 response to SDG&E's follow-up questions, produced with SDG&E's response to CalAdv-SDGE DR-003, Question 30.b: migration of the existing head-end and meter-data-management system (MDMS) to a vendor-hosted environment; continued supply of current-generation devices during the transition; the incumbent's next-generation cellular electric meters and gas modules thereafter; field-area-network maintenance and decommissioning support through 2035, as priced in Scenario 2; and the hosted platform and managed services from 2036 through 2045 at the prices in years 11 through 20 of the incumbent's May 5, 2025 pricing sheet. Wherever the incumbent's May 5, 2025 proposal and pricing sheet or its June 10, 2025 response states a price, schedule, credit or term, SDG&E uses it as stated. For every input those documents do not supply, SDG&E uses its own unit costs and program series from the Application where it has them, and otherwise states the assumption used and its source; the supplemental testimony lists each such input, the value used and the source in a single schedule. SDG&E should state whether it has asked the incumbent whether its 2025 pricing can be renewed or refreshed and report the answer. If the incumbent provides refreshed pricing, SDG&E should present it as an additional case, with the request and the quotation produced in full, and should retain the case priced on the 2025 documents; any change since the June 27, 2025 bid-improvement schedule in the selected vendor's pricing under the draft agreement should likewise be stated and run as an additional Platform Option (a) case. The Parties understand that Platform Option (b) is an analysis of an alternative SDG&E received in 2025, that it does not represent an offer any party has accepted, and that SDG&E should state the estimate class it assigns to it.

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[8] The term “selected vendor” is used by SDG&E for ease of reference to refer to the SM 2.0 vendor with the most favorable bid in SDG&E’s Request for Proposals (RFP) process, described in more detail in Chapter 11. SDG&E has not yet executed a final agreement with the SM 2.0 vendor.

3. Platform Option (c) – the selected vendor's devices on the incumbent vendor's hosted platform

As agreed in the Joint Statement, SDG&E will not perform analysis of Platform Option (c). Rather, SDG&E will identify the specific technical barrier or barriers that it understands exist to using the selected vendor's devices on the incumbent vendor's hosted platform, with the document or communication relied on, its date and its source. To the extent available, SDG&E may also provide (i) written statements from the incumbent vendor and from the selected vendor on whether the selected vendor's devices can be operated on the incumbent's hosted platform and, if not, what would be required to make that possible; (ii) the cost and the time required to resolve each barrier identified; and (iii) if the barriers can be resolved, price Platform Option (c) on the same basis as the other Platform Options with the cost and time of resolution incorporated into the analysis.

4. Platform Option (d) – a foundational-only SM 2.0 program

Platform Option (a) without the NextGen capabilities and without the costs, including recurring charges, that the Application attributes to them, leaving the Foundational Technology, the devices and program management. Rather than separate runs, SDG&E may present the NextGen capabilities and their costs as a separately stated line in every Platform Option (a) strategy and provides a subtotal of costs that subtracts out NextGen capabilities.

Platform Options (a) and (b) are each priced under the following meter replacement strategies (each a Replacement Strategy):[9]

i. **Replacement Strategy (i) – the Applications' schedule**: Installation of SM 2.0 devices in the annual volumes reflected in the analysis supporting Chapter 3, with an initial deployment in the first year and mass deployment in the following years, shifted as necessary so that the schedule begins after a decision in the fourth quarter of 2027. SM 1.0 devices that fail before the SM 2.0 systems are ready to collect billing data are replaced like-for like, as in the Application; from the start of initial deployment, failed devices are replaced with SM 2.0 devices and like-for-like replacement ends;

ii. **Replacement Strategy (ii) – replacement on failure with proactive replacement of the defective cohort**: From the date a SM 2.0 head-end enters production service, SM 1.0 electric meters and gas modules are replaced with SM 2.0 devices as they fail, and like-for-like SM 1.0 replacement ends. In addition,

[9] Joint Statement at 8-9 (Appendix B, Item 2 – Meter Replacement Strategies and Failure Forecasts).

beginning in 2028, SDG&E should proactively replace the electric meters carrying defective capacitors;

iii. **Replacement Strategy (iii) – replacement upon failure without proactive replacement of the defective cohort**: The same scope as Replacement Strategy (ii), but with no proactive replacement of the capacitor-defect population; and

iv. **Replacement Strategy (iv) – the strategy SDG&E would select (optional)**: For each Platform Option, SDG&E has the option to state the strategy and schedule under which it would replace the fleet if it proceeded on that platform, on its own assessment of the failure data, network conditions and the proactive-replacement work described in Replacement Strategies (ii) and (iii), with the reasons for its selection. Under the agreement reflected in the Joint Statement, Meter Replacement Strategy (iv) is optional, at SDG&E's election. This could yield up to another four modeling results.[10]

For each Platform Option, the meter failure forecasts that drive the replacement schedule under Replacement Strategies (ii) and (iii) are run twice: once assuming SDG&E's failure forecast as presented in the analysis supporting Chapter 2 (Failure Forecast A) and a second time based on a revised forecast that follows the trend of SDG&E's actual failures (Failure Forecast B).[11] Replacement Strategy (i) is run on SDG&E's failure forecast only, because under the Application's four-year schedule the difference between the two forecasts affects only the like-for-like replacements made before initial deployment begins and its effect on the results is negligible. This produces a total of ten modeling runs. Note that Replacement Strategy (i), Platform Option (a), Failure Forecast A is the Application itself, updated to assume a Q4 2027 decision in this proceeding.[12]

Platform Option (d) is read from the Platform Option (a) strategies by subtracting out NextGen options to present foundational-only SM 2.0 costs, which presents another five scenario results without the need for additional modeling runs.[13]

Under every Replacement Strategy, all SM 1.0 electric meters and gas modules are replaced by the end of 2035, consistent with the incumbent vendor's statement that it will not support SM 1.0 devices after that date.[14]

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[10] *Id.* at 5.

[11] *Id.* at 9; *see also* at 4.

[12] *Id.* at 4.

[13] *Id*.

[14] *Id.* at 5.

For additional clarity, the Joint Statement included a matrix of modeling runs, set forth as Table 13-1 below, reflecting the parties' joint understanding of the required ten modeling runs (reflected in the dark blue fields) to be conducted by SDG&E:[15]

TABLE 13-1
Scenarios Matrix

Each cell is one present-value revenue-requirement result, varying the selection of Platform Option × Meter Replacement Strategy × Meter Failure Forecast:

Platform Option Varies vendor, devices and/or products	Meter Replacement Strategy Determines schedule of meter & module replacement | All SM 1.0 devices retire before EOY 2035 across all strategies				
	Strategy (i) Application schedule	**Strategy (ii)** On failure + accelerated defect cohort		**Strategy (iii)** On failure, no cohort sweep		**Strategy (iv)** Strategy SDG&E would select by platform
	Failure Forecast A SDG&E filed	**Failure Forecast A** SDG&E filed	**Failure Forecast B** actuals trend	**Failure Forecast A** SDG&E filed	**Failure Forecast B** actuals trend	**Failure Forecast A, B, or SDG&E elects**
(a) Application as proposed Selected vendor devices + platform, NextGen included	SDG&E to Model	SDG&E to Model	SDG&E to Model	SDG&E to Model	SDG&E to Model	**Priced only if (iv) differs from (i)–(iii)** SDG&E states its selected strategy in all cases
(b) Incumbent hosted transition Incumbent's June 10, 2025 Scenario 2	SDG&E to Model	SDG&E to Model	SDG&E to Model	SDG&E to Model	SDG&E to Model	**Priced only if (iv) differs from (i)–(iii)** SDG&E states its selected strategy in all cases
(c) Selected vendor devices on incumbent hosted platform SDG&E: "not technologically feasible"	**Priced if barriers resolvable**	Priced if barriers resolvable	Priced if barriers resolvable	Priced if barriers resolvable	Priced if barriers resolvable	Priced if barriers resolvable & (iv) differs from (i)–(iii) SDG&E states its selected strategy in all cases
(d) Foundational-only SM 2.0 Platform Option (a) without NextGen	Read from (a) NextGen stated as a separate line	Read from (a)	Read from (a)	Read from (a)	Read from (a)	Read from (a)

Table Key:

[ ] Conditional: priced if the stated condition is met

Derived: no separate run

Finally, for each modeling run SDG&E presents in its supplemental testimony, SDG&E agreed to state whether, and to what extent, the Platform Option and Meter Replacement Strategy modeled would change the substance or timing of meter data access compared to what SDG&E described in its prior testimony in this proceeding, and to identify any data-access capabilities that would be delayed, reduced, or eliminated.[16]

B. APPENDIX B ITEMS 3-8

In addition to the scenario modeling and analysis described above, the scope of this supplemental testimony includes responses to Items 3-8 of Appendix B to the Motion:[17]

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[15] *Id.*, Appendix 1.

[16] *Id.* at 3.

[17] *Id.* at 9; Motion, Appendix B at 17-20.

- **Item 3 – States the common basis**. For every option and pace: the same device scope (the meters and modules the Application replaces); the same installation-labor rule (in house crews to capacity, contractor labor above it) and the same removal, program-management, deployment-management, overhead, AFUDC, escalation, contingency and return-on-rate-base treatment; the same depreciation lives and the same horizon (through 2045, with the post-2045 tail of any asset stated separately); the recurring platform, connectivity, software-as-a-service and maintenance charges each option carries after 2031 on both sides; the undepreciated SM 1.0 investment retired early under each schedule; and present values at SDG&E's authorized cost of capital with the discounting convention stated. Any cost that one option avoids and another incurs is to be identified as such rather than omitted.

- **Item 4** – **Documents the status of each option's pricing**. Whether the incumbent's Request for Quote (RFQ) and Scenario 2 pricing remains available or has been renewed, and on what terms, or SDG&E's documented inquiry and the incumbent's reply; the selected vendor's current pricing and the volume-tier, re-pricing and termination provisions of the draft agreement; and the status of contract execution.

- **Item 5** – **Discloses the inputs supplied to each vendor**. Whether SDG&E supplied its SM 1.0 failure forecast or replacement-volume schedule to the incumbent vendor for its Scenario 2 schedule, the basis of that schedule as SDG&E understands it, and what volume schedule each RFP bidder priced, including the June 27, 2025 bid-improvement schedule.

- **Item 6** – **Addresses the communications question**. The connectivity charges each option would carry (carrier, service category, per-endpoint rate, term and escalation), any quotation SDG&E obtained directly from a carrier, and any preference SDG&E communicated to vendors for a communications technology.

- **Item 7** – **Produces the related consultant deliverables**. The failure re-forecast and deployment-scenario deliverables identified in SDG&E's consultant statements of work, to the extent they inform the comparison.

- **Item 8** – **States the basis for SDG&E's recommendation**. If SDG&E continues to recommend the SM 2.0 program as proposed, the reasons, with reference to the comparison, for rejecting each alternative, and the treatment of the following topics identified in Attachment A to TURN-SBUA-01 (items 2 through 5):

    - The decision to transition away from the incumbent: the costs and risks of changing vendors, including integration, parallel operations, retraining and stranded investments; the evaluation criteria, scoring, rankings and selection of RFP respondents; the roles and work products of the procurement advisors SDG&E engaged, including West Monroe; the accuracy of testimony describing the incumbent's proposal and its decision not to submit an RFP bid; and any independent evaluation of the incumbent's RFQ response.

- The exclusion of the incumbent's proposal from consideration: whether the incumbent's proposed capabilities were assessed against the RFP requirements; the procurement rules or other grounds for excluding a nonconforming submission; who made and approved the exclusion decision; and communications with the incumbent about the RFQ's purpose, evaluation and relationship to the RFP.
- Alternatives and potential cost savings: using another vendor's meters while retaining the incumbent's head-end system; the treatment of existing software licenses and maintenance payments if SDG&E continued with the incumbent; the potential overlap between the incumbent's cloud migration offer and the $27.6 million legacy information-technology forecast; the availability and cost of comparable NextGen capabilities from the incumbent; and the integration of the incumbent's platform with SDG&E's distribution management systems, including any work already under way.
- Vendor performance and ratepayer protections: the incumbent's historical performance problems, disputes, recoveries and resulting ratepayer credits; and a comparison of the incumbent's offered warranty with the proposed SM 2.0 warranties, performance guarantees and remedies.

III. KEY ASSUMPTIONS USED IN MODELING OF APPENDIX B SCENARIOS (ITEMS 1, 2 AND 3)

Section III describes the key assumptions and inputs used to model the scenarios contemplated in the Joint Statement. Section III.A describes the common modeling assumptions ("common basis") applied across all scenarios (Item 3). Section III.B describes the key assumptions specific to each Platform Option (Item 1). Section III.C describes the key assumptions underlying the Failure Forecasts and Replacement Strategies (Item 2), including the resulting implications for meter data access and SM 1.0 costs.

A. Common Basis for Scenario Analysis (Item 3)

The Appendix B analysis compares complete implementation pathways on a common basis. For each Platform Option and Meter Replacement Strategy, SDG&E applied the following modeling assumptions:

- the same device scope, consisting of the 1,634,498 electric meters and 952,761 gas modules that the Application replaces;
- the same installation-labor rule, under which internal crews are used to available capacity and contractor labor is used above that capacity;
- the same treatment of removal, program management, deployment management, overheads, AFUDC, escalation, contingency, and return on rate base;

- the same depreciation lives and the same revenue-requirement horizon through 2045, with any post-2045 tail stated separately;
- the recurring platform, connectivity, software-as-a-service, and maintenance charges each option carries, including after 2031;
- the undepreciated SM 1.0 investment retired early under each schedule; and
- present values calculated at SDG&E's authorized cost of capital, using the discounting convention reflected in analysis supporting Chapter 6.

The analysis also reflects costs that differ among the implementation pathways. Where a particular pathway incurs a cost that another pathway avoids, SDG&E identifies that cost rather than omitting it. To align with a Q4 2027 Commission decision, SDG&E also applied the following to all Platform Options:

- Updated 2024 and 2025 costs to reflect the recorded costs in those years;
- Updated the 2026 and 2027 forecast to reflect recorded (partially for 2026) and currently forecasted spending. Certain program activities continue in advance of a Commission decision and therefore result in costs during 2026 and 2027;
- Shifted the start of Foundational Technology implementation to 2028 to begin following the Commission decision;
- Shifted the start of meter deployment to 2029, to begin following Foundational Technology implementation;

Aligning the SM 2.0 implementation schedule with the assumed Q4 2027 Commission decision shifts the program schedule by two years from what SDG&E presented in its Application. This schedule change does not increase the underlying un-escalated direct cost estimate or scope of the SM 2.0 program. The revised schedule does, however, shift expenditures into later years and therefore increases the escalation and Allowance for Funds Used During Construction (AFUDC) applied to those costs. As a result, the fully loaded and escalated costs of the SM 2.0 program increases from $825 million (in the Application) to $857 million as reflected in Section IV.A below (*e.g.,* Platform Option (a), Replacement Strategy (i), Failure Forecast A. SDG&E will serve errata testimony to reflect the revised implementation schedule.

B. Platform Options – Key Assumptions (Item 1)

1. Platform Option (A): Application as Proposed

Platform Option (a) reflects the SM 2.0 program as proposed in the Application, including the selected vendor's electric meters and gas modules, the selected vendor's head-end system and associated meter-data-management integration, Foundational Technology, program management, NextGen capabilities, and the device scope of 1,634,498 electric meters and 952,761 gas modules. For purposes of modeling Platform Option (a), SDG&E applied the SM 2.0 device pricing and all other program cost assumptions reflected in the Application.

The Joint Statement also indicates that SDG&E should identify any change since the June 27, 2025 bid-improvement schedule in the selected vendor's pricing under the draft agreement, and run such change as an additional Platform Option (a) scenario.[18]

SDG&E has not executed a final agreement with the selected vendor and negotiations remain ongoing. Since the June 27, 2025 bid-improvement submission, the selected vendor has identified potential changes to its supply chain that could affect meter pricing and certain warranty provisions. The parties are continuing to negotiate these matters, and any resulting financial impact cannot be determined until the relevant commercial terms are finalized. Accordingly, Platform Option (a) continues to reflect the June 27, 2025 bid-improvement pricing as its pricing basis, and which remains the appropriate basis for the analysis. Nothing in this testimony should be interpreted as SDG&E's acceptance of any proposed pricing adjustment, warranty provision, or other commercial term currently under negotiations.

Finally, consistent with the Joint Statement, Platform Option (a) is modeled under Replacement Strategies (i), (ii) and (iii). For each strategy, the analysis identifies the costs associated with NextGen capabilities and provides a subtotal with those costs excluded.

2. Platform Option (B): Incumbent Vendor Hosted Transition

SDG&E modeled Platform Option (b) using the pricing information provided in the incumbent vendor's 2025 RFQ responses. To provide a consistent basis for comparison, SDG&E applied the same device scope and financial assumptions as Platform Option (a), where applicable. Where the incumbent vendor's responses did not provide an input necessary to model a scenario, SDG&E used an identified assumption or proxy where a reasonable basis was

[18] Joint Statement at 7.

available. Where no reasonable basis was available, the associated costs were not included in Platform Option (b).

These modeling adjustments allow SDG&E to provide the comparative analysis contemplated by the Joint Statement. It is important to note, however that use of assumptions and proxy inputs for modeling purpose does not make the incumbent's RFQ response equivalent to a conforming RFP proposal and does not result in an alternative vendor proposal capable of being accepted by SDG&E or approved by the Commission.

Accordingly, Platform Option (b) models the costs using "apples to apples" components of the transition approach described in the incumbent's June 10, 2025 response: implementation of a SM 2.0 head-end system in a vendor-hosted environment; continued supply of current-generation devices during the transition; the incumbent's next-generation cellular electric meters and gas modules thereafter; Advanced Metering Infrastructure (AMI) operations and support, and hosted platform and managed services. Wherever those documents state a price, schedule, credit, or term, SDG&E used it as applicable.

For every input that those documents do not supply, SDG&E used its own unit costs from the Application, where available, and otherwise stated the assumption and its source. Table 13-2 below lists each substituted input. SDG&E identifies them as such and does not present them as vendor quotations or commitments.

In Table 13-2, "Proxy" identifies an input for which the incumbent vendor's RFQ response did not provide the information necessary to model Platform Option (b) and SDG&E therefore supplied an identified value. The use of a proxy allows the analysis to estimate certain components of Platform Option (b); it does not establish that the incumbent vendor's RFQ response contained the information or commitments required of a conforming RFP proposal.

TABLE 13-2
Platform Option (b) Input-Substitution Schedule

Cost Category	Incumbent RFQ Response	Proxy	Notes
Electric meter hardware	Provided		Incumbent unit pricing applied to SDG&E's required quantity of 1,634,498 meters.
Gas module hardware	Provided		Incumbent unit pricing applied to SDG&E's required quantity of 952,761 modules.

Cost Category	Incumbent RFQ Response	Proxy	Notes
Meter-to-cloud connectivity	Not provided	SDG&E used existing SM 1.0 telecom plans from SDG&E's lowest cost plans that matched the expected data volumes from selected vendor RFP response.	SDG&E calculated the per-meter per-month costs for each planned installed gas module and electric meter, for the duration required in each scenario.
Network hardware (non-coverage areas)	Unit prices: Provided Quantity: Not provided	Quantity: 1,250	SDG&E used a planning-level proxy based on SDG&E's existing SM 1.0 network-extension footprint to determine quantity of 1,250.
Headend Hosting Services	Provided as a Bundled Response		RFQ provided bundled costs for hosting that included both SM 1.0 and SM 2.0 HES systems. 50% of the costs were allocated for Platform Option (b).
Headend Software License Costs	Not provided	Incumbent vendor SM 1.0 HES license cost used to forecast SM 2.0 HES license cost. Quantity: 100,000	Used MSA escalation provisions to escalate to 2025 dollars.
Head-end operations services	Provided as a Bundled Response		RFQ provided bundled costs for operations services that included both SM 1.0 and SM 2.0 HES systems, 50% of the costs were allocated for Platform Option (b).
Project Management Implementation AND Configuration, and Integration	Provided as a Bundled Response		RFQ provided bundled costs for project management, implementation, configuration, and integration for both SM 1.0 and SM 2.0 HES systems, 50% of the costs were allocated for Platform Option (b).
Network Decommissioning	Provided but not used.	SDG&E provided network decommissioning costs	Since the RFQ costs contained other services beyond the original application proposal, SDG&E used its own costs consistent with Platform Option (a).
NextGen-equivalent capabilities Software and Services	Not provided	Not included	NextGen costs were excluded from Platform Option (b); as such Platform Option (b) is only comparable to Platform Option (d)

The extent of these substitutions is important to interpreting the comparison. SDG&E was able to normalize certain elements directly. For example, electric meter and gas module hardware costs were calculated using the incumbent vendor's unit prices applied to the device counts contemplated in the Application. For the remaining cost categories, however, the incumbent vendor's RFQ response did not provide what a complete estimate requires, and

SDG&E had to supply it. For meter-to-cloud connectivity, the incumbent vendor's response did not provide carrier, service plan, per-endpoint rate, expected data volumes, or term information. SDG&E therefore developed a proxy using existing SM 1.0 cellular-meter communications costs and expected data volumes.

For network hardware, the incumbent vendor provided certain unit prices but did not provide the quantities necessary to support the proposed solution. SDG&E therefore applied a planning-level proxy of network devices, based on the existing SM 1.0 network-extension footprint. Those devices were allocated equally between two device types solely to develop a cost estimate. This assumption was developed solely to provide a reasonable basis for estimating costs and is not an engineering design, operations forecast or vendor commitment. Similarly, because the incumbent vendor priced hosting and project management on a combined basis for SM 1.0 and SM 2.0, SDG&E allocated 50 percent of those costs to SM 2.0 for modeling purposes. Where head-end operations services were provided for a period shorter than the applicable scenario (*e.g.*, for only four years), SDG&E extended those costs through the relevant modeling period (*e.g.*, to program end). These allocations and extensions are SDG&E modeling assumptions, and do not represent incumbent vendor quotations or commitments. **Importantly, the incumbent vendor's RFQ response did not price next-generation-equivalent capabilities.** SDG&E therefore did not include those capabilities or associated costs in Platform Option (b) altogether. As a result, Platform Option (b) should not be compared to a Platform Option (a) that includes NextGen capabilities and should only be compared to Platform Option (d).

Taken together, these adjustments permit SDG&E to provide the comparative analysis contemplated by the Joint Statement and increase transparency regarding the incumbent vendor's alternative. They do not transform the incumbent vendor's RFQ response into a confirming RFP proposal or demonstrate that Platform Option (b) represents a complete, executable SM 2.0 solution at the modeled costs. Without that information, the Commission cannot determine whether the incumbent's concept would have met the RFP's requirements on the same basis as the bidders that did.

a. Status of the Incumbent's 2025 Pricing and Use of a Common Pricing Vintage

SDG&E agreed in the Joint Statement to state whether it has asked the incumbent vendor whether its 2025 pricing can be renewed or refreshed.[19]

SDG&E submits that it would be inappropriate and unfair to invite *only* the incumbent vendor to update its quote to reflect 2026 pricing; thus, it has not requested that the incumbent renew or refresh its 2025 pricing for Scenario 2 in its RFQ submission. Thus, both modeling pathways rest on pricing developed in the same 2025 market window: Platform Option (a) on the selected vendor's June 27, 2025 bid-improvement schedule, and Platform Option (b) on the incumbent's May 5 and June 10, 2025 responses. Holding both pathways to 2025 pricing keeps the comparison on a common vintage. The terms of RFQ submission have expired; by contrast, the RFP required bidder pricing to remain valid for 24 months. Applying the incumbent vendor's 2025 pricing does not give the incumbent's expired pricing the binding status of the selected vendor's bid. SDG&E models Platform Option (b) using the incumbent's 2025 pricing as a reference point, *not as an available offer*.

3. Platform Option (c): Selected Vendor Devices on Incumbent Hosted Platform

Consistent with the Joint Statement, SDG&E did not perform a cost analysis of Platform Option (c).[20] Neither the incumbent nor the selected vendor proposed, priced, or committed to a "mix and match" hybrid configuration in which the selected vendor's devices would operate on the incumbent vendor's hosted platform. SDG&E's understanding is that the cross-vendor configuration contemplated by Platform Option (c) is not currently available; SDG&E has verbally confirmed this understanding with both the incumbent vendor and the selected vendor.

Thus, as a practical matter, there exists no fully vetted and sufficiently detailed bid reflecting the Platform Option (c) configuration that is capable of being evaluated with the level of certainty needed to be considered for adoption by the Commission.

SDG&E does not offer an opinion as to whether the Platform Option (c) is technically feasible or at what point such a configuration might become a commercially available option. Rather, SDG&E notes only that the specific cross-vendor configuration contemplated by

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[19] *Id.* at 6–7.

[20] *Id.* at 7.

Platform Option (c) is not *currently* available and, thus, cannot meet the SM 2.0 implementation timeline required by SDG&E. Nor is it possible to perform modeling of a hybrid scenario; there is not currently a sufficiently defined and available Platform Option (c) that can be modeled on a comparable basis with the other Platform Options. The technical and commercial requirements necessary to implement a hybrid configuration are not sufficiently developed to establish a reliable cost estimate, implementation schedule, or risk profile for purposes of conducting the scenario analysis. Among the matters that would need to be addressed and resolved in order to implement a hybrid configuration are certification and integration of SDG&E's specific meter configurations, and the management of a heterogeneous electric meter population over the life of the system.

4. Platform Option (D) – Foundational-Only SM 2.0

Platform Option (d) is Platform Option (a) without the NextGen capabilities and without the costs, including recurring charges, the Application attributes to them, leaving the Foundational Technology, the devices, and program management.[21] SDG&E derived Platform Option (d) from each Platform Option (a) scenario by subtracting the NextGen costs, including its share of contingency and overheads.

C. Meter Replacement Strategies – Key Assumptions

1. Failure Forecasts Options

Failure Forecast A is SDG&E's failure forecast reflected in analysis supporting Chapter 2. Failure Forecast B provides an alternative failure trajectory based on the actual failure trends described in Chapter 8. The Appendix B scenario analysis uses both forecasts to assess the implications of different failure-driven replacement volumes and timing across the modeled Meter Replacement Strategies.

For modeling purposes, SDG&E developed Failure Forecast B by applying the actual-to-forecast failure factors identified in Chapter 8 to the corresponding electric meter and gas module failures projected under Failure Forecast A. Specifically, SDG&E applied a factor of 81 percent for electric meters failure volumes and 67 percent for gas modules failure volumes projected under Failure Forecast A. This methodology reduces the projected failure-driven replacement volumes to reflect the lower level of failures observed to date. The resulting replacement

[21] *Id.* at 7.

volumes and timing are used to model failure-driven replacements under Replacement Strategies (ii) and (iii).

Under all modeled scenarios, any remaining SM 1.0 devices are assumed to be replaced by the end of 2035.

2. Replacement Strategies

a. Replacement Strategy (i): Application Schedule, Failure Forecast A

Replacement Strategy (i) follows the annual SM 2.0 devices deployment volumes reflected in the analysis supporting Chapter 3, shifted to reflect the assumption that a Commission decision will be issued in Q4 2027.[22] Beginning in 2029, when SM 2.0 deployment commences, devices are replaced with SM 2.0 devices with deployment volumes assumed in the Application. Table 13-3 shows the resulting schedule.

TABLE 13-3
Replacement Strategy (i); Failure Forecast A Device Installations

Device	2029	2030	2031	2032	Total
Electric meters	132,363	388,681	653,596	459,858	1,634,498
Gas modules	30,904	224,038	399,968	297,851	952,761
Total	163,267	612,719	1,053,564	757,709	2,587,259

Under Replacement Strategy (i), Failure Forecast A, SM 2.0 deployment is substantially complete by the end of 2032, and the SM 1.0 head-end, RF mesh, and supporting systems can be decommissioned on that timeline.

b. Replacement Strategy (ii): Replacement on Failure + Accelerated Defect-Cohort Replacement

Under Replacement Strategy (ii), SDG&E does not undertake a coordinated deployment. Instead, from the date the SM 2.0 head-end system enters production service, SM 1.0 devices are replaced with SM 2.0 devices as they fail. Because SM 1.0 electric meters serve as communication paths in the RF mesh, replacing a failed electric meter can leave neighboring dependent ("child") electric meters and gas modules without a communications path to the SM 1.0 network. Under Replacement Strategy (ii), those dependent devices are replaced at the same time as the failed meter. These replacements are dispersed across the service territory as failures

[22] *Id.* at 8.

occur. Much of this work is therefore performed by outsourced field resources, rather than internally.

In addition to these failure-driven replacements, Replacement Strategy (ii) assumes proactive replacement beginning in 2029 of the remaining electric meters associated with the known capacitor defect. The size of that the remaining defect cohort depends on the applicable failure forecast because meters within the cohort that fail before 2029 are replaced like-for-like with SM 1.0 meters and are no longer part of the original defective cohort remaining in service at the start of SM 1.0 deployment. This relationship produces different 2029 defective-cohort quantities under Failure Forecast A and Failure Forecast B.

Failure Forecast A projects a greater number of defective capacitor meter failures before 2029, leaving approximately 268,524 meters from the defect cohort in service at the beginning of 2029. Failure Forecast B assumes lower failure volumes before 2029 and therefore leaves approximately 299,125 meters from the defect cohort in service at the beginning of 2029. These quantities are incorporated directly into the Replacement Strategy (ii) deployment schedules and associated cost estimates.

SM 1.0 devices that do not fail and are not included in the defect cohort replacement remain in service through 2035. For modeling purposes, SDG&E assumes that 70 percent of the SM 1.0 devices remaining after 2033 are replaced in 2034 and the remaining 30 percent are replaced in 2035. This allocation avoids concentrating all remaining replacements in the final year of SM 1.0 support and preserves time in 2035 for the activities necessary to complete the transition and decommission the legacy system.

Two operational realities drive the cost of Replacement Strategy (ii). First, the defect cohort is dispersed across the service territory rather than concentrated in particular geographic areas. Although the defect cohort is replaced proactively, its geographic dispersion means it cannot be replaced within the same proximity and routing efficiency as a coordinated deployment. A coordinated deployment allows installations to be planned geographically, enabling dense, route-based work, advance customer notifications, and multiple installations within a defined area. By contrast, failure-driven replacements and proactive replacements of a geographically dispersed defect cohort require work at locations distributed throughout the service territory, resulting in additional travel and mobilization and fewer completed installations per crew per day.

Second, each replacement of a failed parent electric meter extends beyond that single device. As described above, the dependent child electric meters and gas modules that relay through the failed meter must be replaced at the same time to preserve their communications path. Each failure may trigger a cluster of unscheduled replacements at that location. This multiplies the dispersed, unplanned work that a failure-led strategy creates.

These operational characteristics inform the labor assumptions used in the model. For coordinated deployment work, the model applies the installation cost assumptions reflected in the Application. For dispersed replacement work the model applies the dispersed-work rate informed by installation vendor labor rate insights, reflecting the additional travel, mobilization and other costs associated with performing installations at geographically dispersed locations.

TABLE 13-4
Replacement Strategy (ii), Failure Forecast A Device Installations

Device	2029	2030	2031	2032	2033	2034	2035	Total
Electric meters	418,056	82,114	96,645	107,868	113,565	534,364	281,885	1,634,498
Gas modules	327,473	240,626	384,662	0	0	0	0	952,761
Total	745,529	322,740	481,307	107,868	113,565	534,364	281,885	2,587,259

TABLE 13-5
Replacement Strategy (ii), Failure Forecast B Device Installations

Device	2029	2030	2031	2032	2033	2034	2035	Total
Electric meters	444,969	66,512	78,283	87,373	91,987	575,783	289,591	1,634,498
Gas modules	315,032	167,887	228,984	240,858	0	0	0	952,761
Total	760,001	234,399	307,267	328,231	91,987	575,783	289,591	2,587,259

c. Replacement Strategy (iii): Replacement on Failure No Cohort Sweep

Replacement Strategy (iii) uses the same failure-driven replacement approach as Replacement Strategy (ii) but does not include proactive replacement of the capacitor-defect cohort beginning in 2029. Instead, meters within that cohort remain in service until they fail or are replaced by 2035 if they do not fail.

TABLE 13-6
Replacement Strategy (iii), Failure Forecast A Device Installations

Device	2029	2030	2031	2032	2033	2034	2035	Total
Electric meters	144,622	165,468	177,194	171,983	149,834	543,512	281,885	1,634,498
Gas modules	168,881	288,972	376,773	118,136	0	0	0	952,761
Total	313,503	454,440	553,967	290,119	149,834	543,512	281,885	2,587,259

TABLE 13-7
Replacement Strategy (iii), Failure Forecast B Device Installations

Device	2029	2030	2031	2032	2033	2034	2035	Total
Electric meters	117,144	134,029	143,527	139,306	121,365	657,633	321,494	1,634,498
Gas modules	124,893	207,047	266,826	253,658	100,337	0	0	952,761
Total	242,037	341,076	410,353	392,964	221,702	657,633	321,494	2,587,259

d. Replacement Strategy (iv): SDG&E-Selected Strategy, If Presented

The Joint Statement permits, but does not require, SDG&E to present the strategy it would select on each platform.[23] SDG&E does not present a Replacement Strategy (iv).

3. Effect of Each Scenario on Meter Data Access (Customer Insights: Real-time Energy Monitoring)

This section evaluates how the meter replacement strategies affect the availability and timing of meter data access. For purposes of this analysis, "meter data access" refers specifically to Customer Insights: Real-Time Energy Monitoring, the proposed NextGen capability that would allow residential customers who opt in to access near-real-time electricity-usage information. For each modeling scenario, the Joint Statement requires SDG&E to state whether, and to what extent, the platform and replacement strategy would change the substance or timing of meter data access compared with SDG&E's prior testimony, and to identify any capabilities that would be delayed, reduced, or eliminated.[24] Table 13-8(a) presents that assessment.

[23] *Id.* at 5, 9.

[24] *Id.* at 3.

TABLE 13-8(a)
Meter Data Access by Modeling Scenario

Scenarios	Platform / Strategy	Initial Availability	Full Availability
Platform Option (a), Strategy (i), Failure Forecast A	Selected vendor, coordinated deployment	**2031**	**2032**
Platform Option (a), Strategy (ii), Failure Forecast A; Platform Option (a), Strategy (ii), Failure Forecast B	Selected vendor, on failure + accelerated cohort	**2031**	**2035**
Platform Option (a), Strategy (iii), Failure Forecast A; Platform Option (a), Strategy (iii), Failure Forecast B	Selected vendor, on failure, no cohort sweep	**2031**	**2035**
Platform Option (b), Strategy (ii), Failure Forecast A; Platform Option (b), Strategy (ii), Failure Forecast B; Platform Option (b), Strategy (iii), Failure Forecast A; Platform Option (b), Strategy (iii), Failure Forecast B	Incumbent platform	Not Available	Not Available

As shown in Table 13-8(b), the number of residential customers eligible to enroll in Customer Insights: Real Time Energy Monitoring for each scenario corresponds to the cumulative number of residential customers with SM 2.0 meters at the end of each year. For example, under Platform Option (a), Replacement Strategy (i), Failure Forecast A, approximately 1,045K residential customers would be eligible to enroll by the end of 2031.

TABLE 13-8(b)
Cumulative Meter Data Access by Modeling Scenario (thousands)

Scenarios	Description	2029	2030	2031	2032	2033	2034	2035
Platform Option (a), Strategy (i), Failure Forecast A	Proposed-vendor coordinated deployment	N/A	N/A	1,045	1,455	1,455	1,455	1,455
Platform Option (a), Strategy (ii), Failure Forecast A	Proposed vendor, defect-cohort strategy, Forecast A	N/A	N/A	683	779	880	1,211	1,455
Platform Option (a), Strategy (ii), Failure Forecast B	Proposed vendor, defect-cohort strategy, Forecast B	N/A	N/A	628	700	776	1,173	1,455
Platform Option (a), Strategy (iii), Failure Forecast A	Proposed vendor, replacement on failure, Forecast A	N/A	N/A	434	587	720	1,150	1,455
Platform Option (a), Strategy (iii), Failure Forecast B	Proposed vendor, replacement on failure, Forecast B	N/A	N/A	325	440	540	1,081	1,455
Platform Option (b), Strategy (ii), Failure Forecast A; Platform Option (b), Strategy (ii), Failure Forecast B; Platform Option (b), Strategy (iii), Failure Forecast A; Platform Option (b), Strategy (iii), Failure Forecast B	Incumbent-vendor scenarios; NextGen capabilities unavailable	Not Available						

4. SM 1.0 Cost Implications

a. Incremental 2027 and 2028 SM 1.0 Costs

The modeling assumes a Q4 2027 Commission decision and approximately 12 months to implement the Foundational Technology necessary to support SM 2.0 device deployment. As a result, SM 2.0 meter deployment is modeled to begin in 2029. Until that deployment begins, SDG&E will continue replacing failed SM 1.0 electric meters and gas modules with SM 1.0 devices in 2027 and 2028.

As described in the Application, ongoing SM 1.0 costs are separate from the SM 2.0 project costs for which SDG&E seeks recovery in this proceeding. These SM 1.0 costs are recorded in the Smart Meter 2.0 Memorandum Account (SM2MA) and will be presented for Commission review and recovery in a separate application. Accordingly, the incremental costs associated with continued like-for-like replacements of failed SM 1.0 electric meter and gas module in 2027 and 2028 are not included in the scenario model runs or added to the modeled results presented in Section IV. Because SM 2.0 meter deployment does not begin until 2029, these 2027 and 2028 replacement costs do not vary by Platform Option. They would vary between Failure Forecast A and Failure Forecast B because each forecast results in a different number of expected SM 2.0 device failures in 2027 and 2028 as shown in Table 13-9 below:

TABLE 13-9
2027-2028 Incremental SM 1.0 devices

Incremental SM 1.0 devices	**2027 and 2028**	
Description	**Failure Forecast A**	**Failure Forecast B**
Electric Meter Replacement	165,000	133,650
Gas Module Replacement	63,000	42,210
Total Cost	**228,000**	**175,860**

SDG&E therefore presents these costs separately for transparency to show the estimated incremental SM 1.0 costs associated with the assumed implementation timeline.

As shown in Table 13-10, the estimated incremental 2027 and 2028 SM 1.0 costs are $66.3 million under Failure Forecast A and $51.1 million under Failure Forecast B.

TABLE 13-10
Estimated Incremental 2027 and 2028 SM 1.0 Costs
(millions, fully loaded and escalated)

Incremental SM 1.0 costs	2027 and 2028	
Description	**Failure Forecast A**	**Failure Forecast B**
Electric Meter Replacement	$ 49.8	$ 40.1
Gas Module Replacement	$ 16.5	$ 11.0
Total Cost	**$ 66.3**	**$ 51.1**

b. Incremental 2029 and Beyond SM 1.0 Costs

SM 1.0 technology and network support costs continue until full decommissioning. Any pathway that extends replacement beyond the Application schedule also extends the period during which SDG&E must operate SM 1.0 and SM 2.0 in parallel. The incremental costs are driven by the decommissioning date, not by when hardware purchases end. SDG&E does not seek recovery of these costs through this Application. However, because the amount and duration of these costs vary by deployment pathway, they are included in the scenario comparison to reflect the incremental customer costs associated with continued SM 1.0 and dual system operation. The SM2MA keeps these incremental SM 1.0 costs separate from the SM 2.0 costs requested in this Application.

These costs include migrating the SM 1.0 head-end system to a vendor-hosted environment where necessary to support continued SM 1.0 operation until the applicable scenario completes the transition and the legacy system can be decommissioned. SDG&E estimated this cost using the incumbent vendor's 2025 RFQ pricing as a modeling reference only.

Table 13-11 below shows the estimated incremental SM 1.0 costs for 2029 to 2033 associated with Platform Option (a) and Platform Option (b).

TABLE 13-11
Estimated Incremental SM 1.0 Costs for 2029 to 2033
(millions, fully loaded and escalated)

Deployment Timing	2029 to 2033	
Description	**Platform Option (a)**	**Platform Option (b)**
Legacy SM 1.0 Technology	$ 25.9	$ 20.7
Total Cost	**$ 25.9**	**$ 20.7**

Table 13-12 below shows the estimated incremental SM 1.0 costs for 2029 to 2035 associated with Platform Option (a) and Platform Option (b).

TABLE 13-12
Estimated Incremental SM 1.0 Costs for 2029 to 2035
(millions, fully loaded and escalated)

Deployment Timing	**2029 to 2035**			
Description	**Platform Option (a)**		**Platform Option (b)**	
Legacy SM 1.0 Technology	$	41.5	$	31.6
Total Cost	**$**	**41.5**	**$**	**31.6**

c. Undepreciated SM 1.0 Investment

SDG&E applies the same accounting and ratemaking treatment to SM 1.0 assets in every scenario, consistent with the group-accounting treatment applicable to mass assets. As discussed in Chapter 10, SM 1.0 meters and modules are accounted for on a group basis under SDG&E's Average Life Group depreciation methodology.[25] Under this methodology, depreciation is established for the asset group as a whole, recognizing that individual assets will not all have identical service lives. Some assets retire before the group's average service life, while others remain in service beyond that period.[26]

The timing of SM 1.0 retirements nevertheless varies across the modeled deployment schedules. For clarity, Table 13-13(a) presents the modeled undepreciated SM 1.0 investment associated with devices retired under each scenario based on Failure Forecast A. Table 13-13(b) presents the modeled undepreciated SM 1.0 investment associated with devices retired under each scenario based on Failure Forecast B. The amounts represent the modeled net book value of the applicable SM 1.0 assets at the time of retirement, including SM 1.0 devices forecasted to be installed in 2027 and 2028 to support continued like-for-like replacements (as discussed above in Section III.C.4.a), calculated as original plant cost less accumulated depreciation through the retirement date. Because the modeled deployment schedules result in different retirement timing relative to the group's average service life, they also result in different levels of undepreciated SM 1.0 investment at retirement. Generally, assets modeled to retire earlier will have experienced less depreciation and therefore have a higher remaining net book value, while assets modeled to remain in service longer will have experienced additional depreciation and therefore have a lower remaining net book value.

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[25] Ex. SDG&E-10, Rebuttal Testimony of Jack Guidi and Terence Elliot, Chapter 10 (November 20, 2026) (Ex. SDG&E-10 (Guidi/Elliott Direct)) at 17.

[26] *Id*. at Section III.D.

These amounts are scenario-modeling outputs intended to illustrate the effect of differing retirement timing and are not forecasts of the precise timing of actual plant retirements. SDG&E is not requesting different ratemaking treatment of these remaining SM 1.0 investments in this application. Rather Tables 13-13(a) and 13-13(b) below illustrate the effect that different modeled retirement timing has on the remaining net book value of SM 1.0 assets across the scenarios. Regardless of the modeled retirement timing or associated net book value, SDG&E would continue to account for SM 1.0 retirements consistent with the applicable group-depreciation methodology.[27]

TABLE 13-13(a)
Failure Forecast A
(millions)

Failure Forecast A	2032	2035
Electric	$46	$25
Gas	$21	$10
Total	**$67**	**$35**

TABLE 13-13(b)
Failure Forecast B
(millions)

Failure Forecast B	2032	2035
Electric	$43	$23
Gas	$19	$9
Total	**$62**	**$32**

IV. RESULTS OF THE COMPARISON

This section presents the results of the ten modeling scenarios and five derived Platform Option (d) results.

[27] *See id.* at Sections III.D–E.

A. Results by Modeling Scenario

Table 13-14 presents the modeled financial results of the ten modeling scenarios and five derived Platform Option (d) results. As indicated in Section III.A above, aligning the SM 2.0 implementation schedule with the assumed Q4 2027 Commission decision shifts the program schedule by two years from what SDG&E presented in its Application. This schedule change does not increase the underlying un-escalated direct cost estimate or scope of the SM 2.0 program. The revised schedule does, however, shift expenditures into later years and therefore increases the escalation and AFUDC applied to those costs. As a result, the fully loaded and escalated costs of the SM 2.0 program increases from $825 million (in the Application) to $857 million as reflected in Table 13-14 below (*e.g.,* Platform Option (a), Replacement Strategy (i), Failure Forecast A). SDG&E will serve errata testimony to reflect the revised implementation schedule.

TABLE 13-14
Scenario Matrix Results Summary
($ millions)

Platform Option Varies vendor, devices and/or products		Strategy (i) Application schedule	Strategy (ii) On failure + accelerated defect cohort		Strategy (iii) On failure, no cohort sweep	
		Failure Forecast A SDG&E filed	Failure Forecast A SDG&E filed	Failure Forecast B actuals trend	Failure Forecast A SDG&E filed	Failure Forecast B actuals trend
(a) Application as proposed Selected vendor devices + platform, NextGen included	Nominal Cost:	$857.3	$1,189.3	$ 1,188.2	$1,183.1	$1,180.2
	Revenue Requirement:	1,437.6	1,973.0	1,972.0	1,966.6	1,965.5
	PV Revenue Requirement:	713.0	938.2	930.6	913.1	892.5
(b) Incumbent hosted transition Incumbent's June 10, 2025 Scenario 2	Nominal Cost:	927.3	1,282.3	1,277.9	1,268.9	1,256.6
	Revenue Requirement:	1,541.3	2,107.8	2,102.6	2,093.4	2,080.5
	PV Revenue Requirement:	772.4	999.9	990.0	968.0	939.7
(d) Foundational-only SM 2.0 Platform Option (a) without NextGen	Nominal Cost:	799.0	1,123.7	1,123.3	1,122.0	1,122.3
	Revenue Requirement:	1,360.0	1,886.8	1,886.9	1,886.4	1,889.2
	PV Revenue Requirement:	669.8	894.2	887.1	872.4	854.1

B. Analysis of Modeling Results

The modeled results show that Replacement Strategy (i), the coordinated replacement schedule reflected in the Application, produces the lowest present-value revenue requirement under both the full SM 2.0 program and the derived alternative excluding NextGen capabilities.

For the full SM 2.0 program, including the proposed NextGen capabilities, Platform Option (a) combined with Replacement Strategy (i) produces the lowest present-value revenue requirement at approximately $713.0 million. The alternative Platform Option (a) scenarios that rely primarily on failure-driven replacement produce higher present-value revenue requirements.

When the comparison excludes NextGen capabilities, the lowest-cost result is the derived Platform Option (d) combined with Replacement Strategy (i), with a present-value revenue requirement of approximately $669.8 million. Platform Option (d) uses the same selected-vendor platform and coordinated replacement schedule as Platform Option (a), but excludes the proposed NextGen capabilities.

Accordingly, under both comparisons, the modeling identifies the selected-vendor platform combined with Replacement Strategy (i), the coordinated replacement schedule, as the lowest-cost implementation approach. The difference between the $713.0 million and $669.8 million results reflects the inclusion or exclusion of the proposed NextGen capabilities, which the Commission can evaluate separately based on their associated costs and benefits.

The modeled results presented herein reflect the total program costs associated with each scenario. Whichever scenario, the Commission ultimately authorizes, the corresponding program costs necessary to implement that scenario would also need to be authorized.

V. STATUS OF EACH OPTION'S PRICING (APPENDIX B ITEM 4)

Item 4 asks SDG&E to document whether the incumbent's RFQ and Scenario 2 pricing remain available or has been renewed, the selected vendor's current pricing and the volume-tier, repricing, and termination provisions of the draft agreement, and the status of contract execution.[28]

With regard to incumbent vendor pricing, as discussed in Chapter 11, the pricing offered in the incumbent vendor's RFQ response expired in 2025 during the RFP response evaluation period. SDG&E explains in Section III.B.2.a above that it would be inappropriate and unfair to

[28] Motion at 18.

invite *only* the incumbent vendor to update or renew its quote (and supply missing bid terms) at this point, nearly 18 months after the quote was originally provided. Accordingly, SDG&E uses the incumbent's 2025 pricing solely as a modeling reference for Platform Option (b), not as a currently available offer.

The selected vendor's current pricing is discussed in Section IV above. As of November 20, 2026, SDG&E has not executed a final master services agreement for the proposed SM 2.0 hardware and software solution.

VI. INPUTS SUPPLIED TO EACH VENDOR (APPENDIX B ITEM 5)

Item 5 asks SDG&E to disclose whether SDG&E supplied its SM 1.0 failure forecast or replacement-volume schedule to the incumbent vendor for its Scenario 2 schedule, the basis of that schedule as SDG&E understands it, and what volume schedule each RFP bidder priced, including the June 27, 2025 bid-improvement schedule.

SDG&E did not provide its SM 1.0 failure forecast as an input to the incumbent vendor's Scenario 2 schedule for the RFQ. The incumbent vendor developed Scenario 2 as a proposed transition approach for migrating from the existing RFLAN environment to SM 2.0 devices by the end of 2035.

The SM 2.0 RFP pricing materials provided information regarding SDG&E's existing electric meter and gas module populations, including customer growth.

VII. COSTS RELATED TO COMMUNICATIONS (APPENDIX B ITEM 6)

Item 6 asks SDG&E to address the connectivity charges each option would carry (carrier, service category, per-endpoint rate, term and escalation), any quotation SDG&E obtained directly from a carrier, and any preference SDG&E communicated to vendors for a communications technology.

SDG&E did not require vendors to propose a particular communications technology or architecture. The RFP permitted each vendor to propose a communications solution that satisfied SDG&E's technical and functional requirements. The selected vendor proposed a cellular, point-to-point solution using multiple commercial carriers.

The selected vendor's communications costs are modeled using the rate provided as part of its proposal. These rates reflect the selected vendor's proposed commercial arrangement and are incorporated into the model for the selected vendor pathway.

By contrast, the incumbent's RFQ response did not include a bid-in rate for public cellular backhaul or a directly comparable endpoint-connectivity charge. To avoid omitting a necessary communications cost from the incumbent pathway, SDG&E used its current rate for existing point-to-point/cellular meters. Specifically, the model applies the lower of SDG&E's currently available third-party telecom plan rates. This represents the best guess proxy for the communications service contemplated under the incumbent pathway.

The two inputs should not be conflated. The selected vendor input is a rate provided through the vendor's proposal and reflects the commercial arrangements the selected vendor has underlying that proposal. The incumbent input is not a negotiated or bid-in rate from the incumbent; it is an SDG&E modeling assumption based on the lower current carrier rate available for SDG&E's existing point-to-point/cellular meters.

Additionally, SDG&E did not request any quotation obtained directly from a carrier as part of the SM 2.0 RFP. SDG&E did, however, evaluate whether proposed devices could support communications over Private LTE should such capabilities be desired in the future. The inclusion of those requirements was intended to assess device capabilities and future flexibility and should not be construed as a request for, evaluation of, or preference for a Private LTE network solution.

VIII. CONSULTANT DELIVERABLES (APPENDIX B ITEM 7)

Item 7 asks SDG&E to produce the failure re-forecast and deployment-scenario deliverables identified in its consultant statements of work, to the extent they inform the comparison.[29]

The failure re-forecast and deployment-scenario deliverables identified in the consultant statements of work reflected interim work products developed as part of the analytical process and were not the final representation of SDG&E's analyses, conclusions, or positions. To the extent that this work informed the comparison at issue, the relevant analyses, results, and conclusions are reflected in SDG&E's served testimony, as well as in the analysis supporting its opening testimony, which represent the final analyses and positions relied upon by SDG&E. SDG&E has also previously provided, in its served testimony, substantive information regarding the underlying failure-forecast methodologies and related analyses, including applicable

[29] *Id*. at 19 (Appendix B, Item 7) (internal citation omitted).

assumptions, calculations, supporting data, model logic, inputs, outputs, and explanatory materials.

IX. BASIS FOR SDG&E RECOMMENDATION ("APPENDIX B" ITEM 8)

Item 8 asks SDG&E, if it continues to recommend the SM 2.0 program as proposed, to state the reasons, with reference to the common basis comparison, for rejecting each alternative, and to address four topics identified in Attachment A to Ex. TURN-SBUA-01.[30]

SDG&E provides a general overview of the SM 2.0 procurement process in Chapter 11;[31] this section provides specific information in response to Appendix B Item 8.

A. Reasons SDG&E Continues to Recommend the SM 2.0 Program as Proposed

SDG&E continues to recommend the SM 2.0 program as proposed. As demonstrated by the scenario comparison in Section IV, Platform Option (a) combined with Replacement Strategy (i) has the lowest present-value requirement of the modeled alternatives that include the full scope of the proposed SM 2.0 program, including NextGen capabilities at approximately $713.0 million. The comparison also demonstrates that the selected vendor platform combined with Replacement Strategy (i) remains the lowest cost implementation when NextGen capabilities are excluded (*e.g.*, Platform Option (d), Replacement Strategy (i)).

B. The Decision to Transition Away from the Incumbent

1. The costs and risks of changing vendors, including integration, parallel operations, retraining and stranded investments

The incumbent vendor stated that SM 1.0 was being transitioned to its SM 2.0 solution. It also stated that it did not guarantee supply of SM 1.0 devices from 2028 through 2035 and could not secure supplier guarantees for RF mesh support beyond 2035, and it advised SDG&E to develop a transition plan.[32] Thus, every pathway available to SDG&E involved transition to a new platform, new devices, parallel operations, retraining, and retirement of SM 1.0 assets. As such, SDG&E elected to conduct a competitive procurement process for its SM 2.0 program.

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[30] *Id.* at 19-20 (Appendix B, Item 8).

[31] Ex. SDG&E-11, Rebuttal Testimony of Brittany A. Malowney, Chapter 11 (November 20, 2026) (Ex. SDG&E-11 (Malowney Direct)).

[32] Ex. SDG&E-03, Prepared Direct Testimony of David H. Thai and Bradley M. Baugh (December 18, 2025) (Ex. SDG&E-03 (Thai/Baugh Direct) at DT/BB-36.

2. The evaluation criteria, scoring, rankings and selection of RFP respondents

In 2025, SDG&E solicited bids through a competitive solicitation, from the five industry leading smart meter vendors. SDG&E evaluated proposals using a cross-functional review process that considered pricing together with technical, operational, cybersecurity, communications, implementation, and commercial considerations. The evaluation, scoring, and rankings considered the extent to which proposed solutions satisfied SDG&E's requirements, supported long-term operational needs, and addressed implementation and operational risks.

3. The roles and work products of the procurement advisors SDG&E engaged, including West Monroe

SDG&E retained West Monroe to provide specialized utility AMI procurement and process support. West Monroe supported the development of the procurement strategy and requirements, direction-setting workshops, solicitation materials, supplier communications, evaluation frameworks and scoring tools, assessment of supplier responses, bidder presentations, down-selection activities, bid-improvement and best-and-final-offer activities, and support for vendor recommendations and contract development. West Monroe was also engaged to help design and execute a comprehensive supplier selection and commercial negotiation process consistent with utility-industry best practices.

West Monroe helped ensure that SDG&E's evaluation considered not only upfront pricing, but also important factors such as technology maturity, implementation risk, operational requirements, long-term support considerations, and overall improved value to customers.

Importantly, the scope of work required a detailed review of numerous architectural, operational, and commercial considerations that are central to a utility-scale AMI deployment. The SM2.0 program scope addressed software licensing, communications architecture, network and hosting models, managed services, warranty provisions, holdbacks, service levels, performance obligations, legacy-system interfaces, implementation responsibilities, and other commercial terms intended to allocate and mitigate project risk.

West Monroe's involvement also included contract development, as well contract negotiation, which is still ongoing.

4. The accuracy of testimony describing the incumbent's proposal and its decision not to submit an RFP bid; and any independent evaluation of the incumbent's RFQ response

SDG&E's prior testimony accurately describes the incumbent's proposal and its decision not to submit an RFP bid. SDG&E invited the incumbent to participate in the SM 2.0 RFP, and the incumbent did not submit a bid. SDG&E reviewed the incumbent's separate RFQ response for its intended purpose, including through follow-up discussions with the incumbent. SDG&E did not obtain an independent third-party evaluation of the RFQ response as it did not conform to the requirements of the procurement activity.

C. The Exclusion of the Incumbent's Proposal from Consideration

1. Whether the incumbent's proposed capabilities were assessed against the RFP requirements

SDG&E reviewed the RFQ response for the purpose for which it was requested and engaged in follow-up discussions to understand the incumbent vendor's proposal. That review informed SDG&E's understanding of the incumbent vendor's proposal, but it did not convert the submission into a conforming RFP proposal capable of being evaluated against the RFP requirements.

2. The procurement rules or other grounds for excluding a nonconforming submission; who made and approved the exclusion decision

SDG&E conducted two separate solicitations. The RFP requested SM 2.0 proposals that met a common set of technical, commercial, implementation, pricing, and contractual requirements. The RFQ requested information about continued support of the existing SM 1.0 environment and did not impose the same requirements as the RFP. The incumbent vendor did not submit a proposal under the RFP. Advancing the incumbent vendor's pathway in SM 2.0 would therefore have required SDG&E to step outside the competitive process and negotiate an SM 2.0 solution with the incumbent vendor on a sole-source basis.

3. Communications with the incumbent about the RFQ's purpose, evaluation and relationship to the RFP

Chapter 11 generally describes the distinct purposes of the RFQ and RFP and SDG&E's evaluation process. With regard to the question of how SDG&E communicated "the RFQ's purpose, evaluation and relationship to the RFP," to the incumbent vendor, SDG&E stated the following in the RFQ package:

In parallel to the open RFP and to evaluate the feasibility and costs associated with continuing with an AMI 1.0 solution, we request that Itron submit a quote detailing the costs and requirements necessary to achieve this outcome.

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The response to this Request for Quote ("RFQ") has no implication or connection with the open Smart Meter 2.0 Technology RFP.

D. Alternatives and Potential Cost Savings

1. Using another vendor's meters while retaining the incumbent's head-end system

The alternative involving selected vendor devices operating on the incumbent vendor's hosted platform is addressed in the discussion of Platform Option (c) in Section III above.

2. The treatment of existing software licenses and maintenance payments if SDG&E continued with the incumbent; the potential overlap between the incumbent's cloud-migration offer and the $27.6 million legacy information-technology forecast

SDG&E modeled Platform Option (b) using the pricing in the incumbent's RFQ response. Consistent with Platform Option (a), SM 1.0 software maintenance fees are excluded from Platform Option (b) because SDG&E is not seeking recovery of those costs in this Application. Under Platform Option (b), the incumbent waives SM 2.0 maintenance fees until the SM 1.0 HES is decommissioned.

With respect to the potential overlap between the incumbent's cloud-migration offer and the $27.6 million legacy IT forecast, that forecast covers SM 1.0 costs only through 2031. It is limited to cybersecurity and resiliency updates to the SM 1.0 HES and does not include SM 2.0 scope. To avoid double counting, the Appendix B, Platform Option (b) scenarios exclude costs already included in that forecast, including migration of the MDMS to the vendor-hosted cloud and the associated MDMS hosting fees.

3. The availability and cost comparable Next Gen capabilities from the incumbent

SDG&E did not model Platform Option (b) with NextGen capabilities because the incumbent vendor's RFQ response did not provide cost for comparable NextGen capabilities. Accordingly, Platform Option (b) excludes NextGen capabilities and should be compared only to the foundational-only Platform Option (d).

4. The integration of the incumbent's platform with SDG&E's distribution management systems, including work already under way

As it relates to the SM 2.0 proceeding, SDG&E clarifies it is not already performing, and has not performed, any SM 2.0 integration work with its distribution management systems. The implementation of any SM 2.0 integrations described in this Application is prospective and depends on Commission approval.

SDG&E understands 'integration of the incumbent's platform with SDG&E's distribution management systems' to be akin to what SDG&E would pursue as part of its SM 2.0 integration activity. With that context, SDG&E is not pursuing said integration. SDG&E's strategy is to minimize further investment in aging SM 1.0 technology. Activity on that platform is limited to the updates needed for safe, reliable, and secure operations, including cybersecurity patching and routine system maintenance, SDG&E is not making, and does not plan, material enhancements or expansions of a legacy platform that is scheduled for retirement. Finally, as stated in Chapter 3, SDG&E is not seeking to recover the costs of keeping SM 1.0 operable in this proceeding and will request recovery of those costs in a separate application.

E. Vendor Performance and Ratepayer Protections

1. The incumbent's historical performance problems, disputes, recoveries and resulting ratepayer credits

Over the life of SM 1.0, SDG&E experienced a number of device performance and vendor-support challenges with the incumbent vendor, including defective socket-based router (SBR) issue, capacitor manufacturing defects, and base meter defects. When these issues arose, SDG&E relied on the contractual protections in its agreements with the incumbent vendor to hold the vendor accountable and pursue appropriate remedies rather than simply absorbing costs associated with vendor-related performance issues.

Those protections included warranty rights, return and replacement obligations, and other contractual remedies through which SDG&E required the incumbent vendor to address defective equipment and other performance issues. As a result, the value of the protections obtained for customers is not reflected solely in direct monetary recoveries. Vendor-funded repair or replacement of defective equipment, replacement hardware provided without additional cost, and other corrective actions required of the vendor also represent important forms of ratepayer protection. SDG&E's experience under SM 1.0 reinforces the importance of establishing strong and enforceable vendor accountability provisions for SM 2.0. Accordingly, vendor warranties,

performance requirements and contractual remedies are important components of the SM 2.0 procurement and contracting process.

2. A comparison of the incumbent's offered warranty with the proposed SM 2.0 warranties, performance guarantees and remedies

The terms of the SM 2.0 agreement, including its warranties, performance guarantees, and remedies, remain under negotiation. Accordingly, there are no final terms to compare at this time.

This concludes this rebuttal testimony.