

PUBLIC UTILITIES COMMISSION

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SAN FRANCISCO, CA 94102-3298



January 9, 2020

Advice Letter 5707-E

Erik Jacobson
Director, Regulatory Relations
c/o Megan Lawson
Pacific Gas and Electric Company
77 Beale Street, Mail Code B13U
P.O. Box 770000
San Francisco, CA 94177

Subject: Approval of Contracts Resulting from Competitive Solicitation for the 2019 Distribution Investment Deferral Framework (DIDF) Request for Offers (RFO)

Dear Mr. Jacobson,

Advice Letter (AL) 5707-E (filed December 3, 2020) is partially approved and effective today. The three energy storage contracts with Dimension Renewable Energy resulting from the PG&E 2019 DIDF RFO are approved. The Coalition of California Utility Employees (CUE) protest is dismissed for the reasons described below. PG&E's contingency plan is approved in accordance with the allowable contingency planning process under the DIDF and associated decisions and rulings of the Distribution Resources Plan (DRP) proceeding (R.14-08-013). However, requests in AL 5707-E to pre-approve cost recovery for the contingency plan are rejected without prejudice as discussed below.

Background

The AL seeks approval of three contracts with Dimension Renewable Energy resulting from the 2019 DIDF RFOs related to two deferral opportunities associated with Santa Nella Substation and one deferral opportunity associated with Huron Substation. The AL was filed pursuant to the November 19, 2018 Ruling in the DRP proceeding.¹ PG&E requested approval to issue competitive solicitations for the three deferral opportunities in AL 5435-E, on November 28, 2018, and Energy Division approved this request on February 5, 2019.

PG&E's analysis and the advisory input of both the Distribution Planning Advisory Group and Independent Professional Engineer indicated that the three deferral opportunities ranked "Tier 1," which means they were the most likely to be deferrable of the opportunities

¹ Administrative Law Judge's Ruling on the Application of the Competitive Solicitation Framework for Distribution Investment Deferrals in the Distribution Resource Planning Proceeding, November 19, 2018, in proceeding R.14-08-013.

considered. PG&E continues to find that the two Santa Nella grid needs are Tier 1 deferral opportunities.

The contracts are for storage installations to defer the need for transformer bank upgrades at Huron and Santa Nella substations and a new distribution circuit (Ortiga). The combined capacity of the three storage installations is 14.2 MW with contract terms of 6 to 7 years. The contracts satisfy the cost-effectiveness requirements adopted for the DRP proceeding for the DIDF, and the Independent Evaluator concluded that PG&E conducted a fair and effective solicitation and evaluation of the offers received.

On December 23, 2019, the California Energy Storage Alliance and Dimension filed responses in support of AL 5707-E.

Protest to AL 5707-E

A protest was timely filed by the Coalition of California Utility Employees (CUE) on December 23, 2019. CUE states that the contracts: (1) are inconsistent with the DIDF objectives; and (2) would result in unjust costs to ratepayers. CUE cites to PG&E's claim that there is significant risk that the Distributed Energy Resources (DERs) will not defer the traditional upgrade projects for the full term of the contracts.

PG&E Reply

PG&E replied to the protest on December 31, 2019, stating that "the upgrades for Huron and Santa Nella facilities are not 'inevitable'" as characterized by CUE. PG&E states only that there is the "risk" of paying for both the DERs and contingency costs if the traditional wires investments are not deferred for the full term of the DER contracts. PG&E also states that it "cannot predict with certainty when new large load customers will come online or when equipment failures will happen."

Discussion

Energy Division agrees with PG&E that the Santa Nella and Huron opportunities are Tier 1. The concerns PG&E raises about the age of Santa Nella and Huron substation equipment and potential for a high-speed electric vehicle charging station request near Santa Nella Substation are speculative. PG&E does not have plans to upgrade the aging substation equipment and a request to install a charging station has not been filed with PG&E. In addition, each of the DERs are slightly oversized, which should give PG&E some flexibility to serve new customer load applications if received. PG&E also has the option to seek additional DER capacity in lieu of a traditional investment if the need should occur (Attachment 1, Data Responses 2a to 2c). Therefore, based on the facts available to Energy Division, we find that the contracts are consistent with the DIDF objectives and the costs are reasonable. The CUE protest does not satisfy any of the six grounds for a protest established by General Order 96-B section 7.4.1.

PG&E Request to Pre-Approve Contingency Plan Cost Recovery

PG&E requested that as a condition of AL 5707-E approval PG&E be authorized "to recover the reasonable costs of the contingency plan, including any traditional distribution upgrades that may be required that are not actually deferred under the contracts" (AL 5707-E at p. 1).

Discussion

The Commission has not delegated authority to Energy Division to grant pre-approval of cost recovery for PG&E's contingency plan. Energy Division cannot bind the Commission to guarantee PG&E cost recovery for its contingency plan. Additionally, the cost and timing of

the contingency plan are both unknown at this time. PG&E may seek cost recovery for reasonable costs incurred through the appropriate cost recovery venue, such as a General Rate Case. Nothing in this letter prejudices the Commission's disposition of any future requests for cost recovery related to PG&E's contingency plan.

Disposition

AL 5707-E is partially approved. The three energy contracts with Dimension Renewable Energy resulting from the 2019 DIDF RFO are approved. PG&E's contingency plan is approved. However, requests in AL 5707-E to pre-approve PG&E's cost recovery for the contingency plan are rejected without prejudice. The protest to AL 5707-E by CUE is dismissed.

Sincerely,



Edward Randolph
Deputy Executive Director for Energy and Climate Policy/
Director, Energy Division

Copied (by e-mail):

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Service lists copied for:

R.14-08-013 and R.14-10-00

Attachment 1
PG&E Data Responses to Energy Division

PG&E Data Request No.:	ED 061-Q01		
PG&E File Name:	Non-CaseDiscovery_DR_ED_061-Q01		
Request Date:	December 19, 2019	Requester DR No.:	061
Date Sent:	December 31, 2019	Requesting Party:	Energy Division
PG&E Witness:		Requester:	Gabriel Petlin, Robert Peterson

SUBJECT: DR #3 FOR AL 5707-E: SANTA NELLA/HURON CONTRACTS

QUESTION 01

- a. On what day did PG&E's DRP team become aware of the age issue regarding banks at Santa Nella and Huron substations?
- b. Given this knowledge, explain why PG&E believes that the Santa Nella DER deferral project is still a Tier 1 project in light of the "significant risk" identified. It was filed as Tier 1 on 11/15/19 in AL 5688-E for DIDF cycle 2019. Quote, "Santa Nella does not have any red flags" (AL 5688-E, p. 7).
- c. Does PG&E have any current plans to replace the transformer banks at either Santa Nella or Huron substations due to their age or any operational issues related to these banks?
- d. Explain the term "Code 4" condition and provide the complete range of associated codes and the criteria used apply a specific code condition to a bank.

ANSWER 01

- a. Upon internal discussion on November 15th (after the AL 5688-E filing), we found Huron Bank 1 to be 73 years of age. A similar determination was made for Santa Nella Bank 1 to be 56 years of age on November 21st.
- b. Santa Nella was included in the Tier 1 projects for solicitation in PG&E's November 15, 2019 DIDF Advice Letter. The Tier 1 ranking was based on the Prioritization Metrics as documented in PG&E's 2019 DDOR and AL 5688-E at the time of the filing (11/15/2019). At the time of that filing, no red flags were identified for Santa Nella. Asset life is not currently evaluated as part of PG&E's Prioritization Metrics. PG&E intends to include asset life as part of the Forecast Certainty Prioritization Metric in future DIDF cycles.
- c. No. There are no current plans to replace the transformer banks at either Santa Nella or Huron substations explicitly due to their age or any operational issues related to these banks; however, asset replacement plans take into consideration whether the assets are already scheduled for replacement for other reasons (e.g., capacity).

d. Substation power transformers are evaluated using dissolved gas analysis (DGA) of the transformer oil, a technique used to diagnose the internal condition of the transformer insulation system. DGA and oil quality have evaluated condition codes that are from 1 to 4, with code 4 being the worst condition. DGA is a standard practice in the industry, and more details can be found via various power engineering sources (e.g., <https://ieeexplore.ieee.org/document/7909238>).

PG&E Data Request No.:	ED 061-Q02		
PG&E File Name:	Non-CaseDiscovery DR ED 061-Q02		
Request Date:	December 19, 2019	Requester DR No.:	061
Date Sent:	December 31, 2019	Requesting Party:	Energy Division
PG&E Witness:		Requester:	Gabriel Petin, Robert Peterson

SUBJECT: DR #3 FOR AL 5707-E: SANTA NELLA/HURON CONTRACTS

QUESTION 02

- a. It is our understanding that Dimension oversized their project for future use and that PG&E is aware of the amount of capacity oversizing (MWs). Provide this amount and discuss this in comparison to the 2 to 5 MW of new customer load applications that PG&E believes are common (AL 5707-E at p. 8). If PG&E intends to respond that it is not aware of the oversize amount, please reach out to the Dimension for the details.
- b. To what extent would availability of the oversized capacity from Dimension mitigate PG&E's concerns about future load increases at Santa Nella or further defer the need for a bank upgrade?
- c. Does the PG&E-Dimension Energy contract contain any contractual provisions that give PG&E any rights or options to procure the excess capacity should it be needed for any reason in the future including but not limited to the contingencies described in the PG&E contingency plan in AL 5707-E, including the provision on procurement of additional DER capacity? Please provide such contractual language if it exists.

ANSWER 02

- a) The DER needs are expressed in both peak MW and MWh, which are based on the duration of the need. The Dimension projects are slightly oversized by the following amounts: Huron Bank 1 (2.67 MW / 1.434 MWh), Ortega Bank 1 (0.68 MW / 0.864 MWh), Canal 1103 (2.82 MW / 3.386 MWh). The projects were slightly oversized by these amounts in order to maintain the contracted amount of energy capacity for each grid need location. Dimension's oversized capacity is minimal compared to the 2 to 5 MW of new customer load applications that are commonly received by PG&E.
- b) The oversized capacity from Dimension would not mitigate PG&E's concerns about future load increases, as the oversized amounts are not substantial and serve the purpose of ensuring that contractual capacity requirements are met. As noted in Section 5 of AL 5707-E, PG&E's contingency plan could involve implementation of an additional RFO or traditional capital investment at locations where DER resources are unable to successfully mitigate the grid needs for the identified candidate deferral opportunities. In the event that an additional RFO is

issued at Santa Nella, Dimension would be free to offer additional capacity to their DER project to serve a new grid need.

- c) No. The PG&E-Dimension Energy contract does not contain any contractual provisions that give PG&E any rights or options to procure excess capacity in the future.

December 3, 2019

Advice 5707-E

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

**Subject: Approval of Contracts Resulting from Competitive Solicitation for the
2019 Distribution Investment Deferral Framework Request for Offers**

I. Purpose

In accordance with the disposition letter approving Advice Letter 5435-E (AL. 5435-E) and pursuant to Decision 18-02-004 (D.18-02-004) within the Distribution Resources Plan (DRP) proceeding,¹ Pacific Gas and Electric Company (PG&E) hereby submits this advice letter to seek review, approval or disapproval from the California Public Utilities Commission (Commission) of 3 contracts for the Huron and Santa Nella Bank 1 & New Feeder projects resulting from PG&E's solicitation for the Distribution Investment Deferral Framework (DIDF) Request for Offers (RFO).

Because PG&E's evaluation of the distribution deferral value of the contracts indicates that there is significant risk that the contracts will not defer for the full term of the contracts the traditional distribution upgrades of the Huron and Santa Nella Bank 1 facilities, including due to end of lifecycle replacement, PG&E is deferring to the guidance of the Commission on whether to proceed with the contracts given these significant risks. PG&E has concluded that there is a high probability that the transformer banks associated with these substations will need to be replaced at costs that will not be deferred by the distribution energy resources (DERs) subject to these contracts. Stakeholders including the Energy Division staff, the Independent Evaluator, and members of the DPAG have all been informed of these risks and expressed no significant objections to moving forward with the contracts given these risks. If the Commission approves these contracts, PG&E requests that the Commission condition the approval on authorization of PG&E to recover the reasonable costs of the contingency plan, including any traditional distribution upgrades that may be required that are not actually deferred under the contracts. For more detail on these risks and considerations, see Section V below.

¹ R.14-08-013

II. Background

On August 14, 2014, the Commission instituted Rulemaking (R.) 14-08-013 to establish policies, procedures, and rules to guide the California investor-owned utilities (IOUs) in developing their DRP proposals. This rulemaking also established new polices to evaluate the IOUs' existing and future electric distribution infrastructure and planning procedures with respect to incorporating distributed energy resources (DERs) into the planning and operations of their electric distribution systems.

In July 2015, California IOUs each submitted their respective DRP proposals to the Commission. The Commission organized the review of the DRP filing content into three tracks: Track 1 – Tools and Methodologies, Track 2 – Field Demonstration Projects, and Track 3 – Policy Issues. Various DRP working group meetings and workshops were held to inform the Commission and stakeholders, which ultimately led to several decisions in R.14-08-013.

In February 2018, the Commission issued D.18-02-004 on Track 3 Policy Issues, subtrack 1 (Growth Scenarios) and sub-track 3 (Distribution Investment and Deferral Process). This decision directed the IOUs to file a Grid Needs Assessment (GNA) by June 1 of each year and a Distribution Deferral Opportunity Report (DDOR) by September 1 of each year.

On February 5, 2019, the Commission issued a disposition letter approving PG&E's AL 5435-E. This advice letter complies with that directive.

III. Overview of Distribution Investment Deferral Framework (DIDF) Request for Offers (RFO)

Due to forecasted overload conditions from peak demand, PG&E selected the following candidate deferral locations, located within PG&E's distribution planning area, for the DIDF RFO: New Lammers Feeder, Huron Bank, and Santa Nella Bank & New Feeder. These were selected due to its timing certainty and potential for cost-effective DER solutions to address thermal overloading on peak days.

After review by the Independent Evaluator (IE) and Energy Division, all documents for the DIDF RFO, including Solicitation Protocol document, the Technology Neutral Pro Forma (TNPF) Agreement, and an Excel offer form with detailed instructions, were posted at www.pge.com/rfo/didf.

Date	Event
February 21, 2019	PG&E issues RFO
February 28, 2019	Participants' Webinar
April 1, 2019	Deadline for PG&E to receive Offers at 1 PM (PPT)
April 2, 2019	Deadline for IE to receive a flash-drive of Offers
May 6, 2019	PG&E notifies selected Participants that their Offer(s) will be included on a list of Offers for which PG&E may seek to enter into or negotiate an Agreement related to that Offer ("Shortlist")
May 10, 2019	Participants notify PG&E whether they accept Shortlist status and acknowledge acceptance of the Confidentiality Agreement
August 27, 2019	90 day extension granted
November 19, 2019	PG&E notifies Procurement Review Group (PRG)
December 3, 2019	Advice Letter Filing

A. RFO Structure

PG&E issued its DIDF RFO on February 21, 2019 to solicit offers for up to 10.6 megawatts (MWs) of DERs to provide distribution capacity by increasing generation, reducing electrical consumption, or shifting load. PG&E also sought resources that could address a particular backfeed issue by increasing electrical consumption during periods of overgeneration. PG&E sought projects located at or on distribution circuits electrically connected downstream of New Lammers Feeder, Huron Bank 1, and Santa Nella Bank 1 & New Feeder. The additional distribution capacity was required to be available by June 1, 2021 for New Lammers Feeder, April 1, 2021 for Huron Bank 1, and May 1, 2022 for Santa Nella Bank 1 & New Feeder and maintained through the end of 2027.

The detailed capacity needs solicited in the RFO are described below.

Candidate Deferral	Grid Name Location	Requirement	Grid Need (MW)	Delivery Months	Delivery Days	Delivery Hours	Hours Duration	Maximum # of Calls per year
New Lammer's Feeder	LAMMERS 1101	1a	0.7	Nov	Mon-Fri	2:00P M-5:00P M	3	21
		1b	1.5	May-Oct	Mon-Fri	1:00P M-11:00P M	10	73
		1c	1	Jun-Oct	Mon-Fri	8:00A M-1:00P M	5	36
Huron Bank 1	HURO N BANK 1	2a	3.7	Jun-Aug	Mon-Sun	12:00P M-10:00P M	10	33
		2b	-1.6	Apr-Jun, Sep-Oct	Mon-Sun	9:00A M-4:00P M	7	131
Santa Nella Bank 1 and New Feeder	CANAL 1102	3a	0.6	Jun-Aug	Mon-Fri	1:00P M-7:00P M	6	82
	CANAL 1103	3b	2.6	Jun-Sep	Mon-Sun	12:00P M-8:00P M	8	82
	ORTIGA BANK 1	3c	2.2	Jun-Aug	Mon-Sun	1:00P M-8:00P M	7	31

B. Participant Outreach

PG&E announced the issuance of the DIDF RFO by email notification on the day of launch (Issuance), to PG&E's mailing list which included approximately 2,700 recipients. The

issuance email gave potential participants information on the location of the solicitation documents, participant webinar information, and important action items.

DIDF RFO documents were finalized for release on February 21, 2019 and remain available on the PG&E website. The documents include the DIDF RFO solicitation protocol which includes information, requirements, and directions to submit a conforming offer. In addition to the DIDF RFO dedicated website, PG&E set up a DIDF RFO mailbox (DIDFRFO@pge.com) for participants and other interested parties to submit questions. PG&E posted questions and corresponding answers that might be useful to all participants in a questions and answers (Q&A) document on the website.

On February 28, 2019, PG&E conducted a participants' conference via webinar to explain the DIDF RFO solicitation protocol, the offer evaluation methodology, and form agreements as well as answer questions from potential participants. About 40 individuals attended the webinar via phone or WebEx. PG&E posted the presentation, an audio file of the presentation, a transcript of the presentation, and the list of attendees to the DIDF RFO website shortly after the webinar.

C. Offers Received

PG&E requested offers for the DIDF RFO by April 1, 2019 and notified participants via email of their status regarding the shortlist on May 6, 2019. Shortlisted participants were notified in their email letter of additional requirements to remain on the shortlist and to be eligible for negotiations. PG&E conducted a phone call with any non-shortlisted participants that requested feedback on their offer.

D. Evaluation and Shortlist

PG&E evaluated offers based on the "least-cost, best-fit" (LCBF) principles using quantitative and qualitative criteria. PG&E evaluated the cost of each offer and looked to create the least cost portfolio to defer the distribution investment. PG&E also considered qualitative criteria, such as project viability, and the Participants ability to meet the full area need. No viable bids were received for the New Lammers candidate deferral opportunity. A summary of evaluation of all offers and costs is included as confidential Appendix A.

E. Negotiations

PG&E scheduled introductory calls with all shortlisted counterparties to clarify project details and identify potential project-specific commercial issues. PG&E's TNPF, developed with stakeholder input via the 2018 TNPF Working Group, served as the starting point for negotiation of an executable agreement. Negotiations primarily focused on identification and resolution of details regarding project delivery conditions, termination provisions, and operation parameters, which evolved as the project was finalized. Ultimately, the less cost-effective offers were not able to offer sufficient price reductions or sufficient learning opportunities to be included in the final portfolio. At least

one party withdrew from consideration after determining that the 2021 online date for Huron could not be met. Though PG&E considered the benefits of a portfolio solution consisting of multiple projects as well as the value of potential learnings associated with having multiple counterparties, PG&E selected the cost-effective Dimension projects as the most suitable.

F. Procurement Review Group (PRG)

PG&E provided three detailed notifications to and discussions with its PRG throughout the DIDF RFO process.

On February 26, 2019, PG&E provided an overview of the DIDF RFO to the PRG via WebEx meeting. The meeting materials were distributed on February 22, 2019. On April 29, PG&E sent a presentation to the PRG discussing PG&E's proposed shortlist. On November 19, 2019, PG&E notified the PRG of its intention to execute contracts with Dimension for projects at Huron and Santa Nella via WebEx meeting. A copy of the presentation was sent on November 15, 2019, two business days in advance of the meeting.

On November 19, 2019, PG&E notified PRG of its intention to execute contracts with Dimension for projects at Huron and Santa Nella.

G. Independent Evaluator

PG&E engaged an Independent Evaluator (IE) from the Commission's approved list of IEs for the DIDF RFO. The IE for this solicitation was Sedway Consulting, with Alan Taylor as the IE representative. The IE was involved in the review of RFO documentation before the RFO was issued, review and evaluation of offers received, and in shortlist development. The IE also monitored feedback calls with participants and contract negotiations. The IE also participated in the DIDF RFO-related PRG meetings and correspondences. The IE Report is provided as public Appendix B1, and the supplemental IE Report is provided as confidential Appendix B2.

IV. Project Description

Since the issuance of the DIDF RFO, PG&E has updated the Santa Nella need and finetuned the locations on the Santa Nella bank. The Canal 1103 need increased to 6.7 MW and the Ortega New Feeder increased to 3.8 MW. The increase in Canal 1103 also allowed PG&E to eliminate the need at Canal 1102. As a result of these updates and to address the inherent uncertainty in a load forecast, PG&E has negotiated to procure distribution capacity slightly in excess of the updated need. PG&E has executed 3 contracts with Dimension, attached as confidential Appendix C, D and E, with the following operational parameters.

Candidate Deferral	Grid Name Location	Grid Need (MW)	Delivery Months	Delivery Days	Delivery Hours	Hours Duration	Maximum # of Calls per year	Contract Start Year	Technology
Huron Bank 1	HURO N BANK 1	3.7	Jun-Aug	Mon-Sun	12:00P M-10:00P M	10	33	2021	Lithium Ion
		-1.6	Apr-Jun, Sep-Oct	Mon-Sun	9:00A M-4:00P M	7	131		
Santa Nella Bank 1 and New Feeder	CANAL 1103	6.7	Jun-Sep	Mon-Sun	3:00P M-10:00P M	7	122	2022	Lithium Ion
	ORTIGA BANK 1	3.8	Jun-Sep	Mon-Sun	4:00P M-10:00P M	6	122	2022	Lithium Ion

V. Contingency Plan

PG&E will use the following contingency planning steps for contracted DER solutions that are not able to successfully mitigate the grid needs for the identified candidate deferral opportunity. Specifically, PG&E has considered three different project stages where a DER solution can fail in being able to provide successful distribution services:

A. DER Solicitation and approval stage:

If a contingency such as the Tier 2 Advice Letter not being approved by the requested approval date, or if a change to the forecasted grid need should arise, PG&E will perform a root cause analysis to determine the cause of the failure and the best corrective action. If time and regulatory processes allow, PG&E will consider contracting with alternative bids or administering a revised solicitation. Otherwise, PG&E will move forward with the best alternative wires solution to ensure the safe and reliable provision of distribution services to customers. Specifically, the Santa Nella project has a 2022 online date, which would potentially allow time to consider alternative bids. For this reason, Santa Nella is included in the Tier 1 projects for solicitation in PG&E's November 15, 2019 DIDF Advice Letter. For Huron, PG&E would proceed with the traditional wires solution because the in-service date for the planned investment is too soon for inclusion in next year's DIDF RFO.

B. DER Implementation stage:

If the contracted DER solution fails to meet its implementation milestones and is not expected to achieve operations by the identified grid need date, or if there is a change in forecasted grid need date (e.g. accelerating the need for a solution sooner than originally planned), the contingency plan options available during this stage depends upon when during the DER implementation stage it becomes known that the DER solution will be not available to meet the identified grid need date. If it is earlier in the DER implementation stage, the contingency is to conduct a second RFO, or to implement the planned wires project if possible. For this reason, PG&E has included Santa Nella in the 2020 DIDF as a potential project for solicitation. If it is later in the DER implementation stage and PG&E does not have time to build the wires solution depending upon the loading and system conditions, PG&E will manage the load until capacity upgrades can be installed using field switching where possible, temporary re-rates on various pieces of equipment, and/or installation of temporary and mobile equipment.

C. Commercial Operation stage:

If the contracted DER resource fails to meet performance requirements or simply fails while in service, PG&E will handle this situation in the same manner as with any other failed equipment. The immediate emergency response includes distribution operations personnel implementing load transfers based on current loading profiles, installation of mobile generation, and/or a plan to interrupt power for local customers as a last resort. The contingency plan beyond the initial 24 hours would consider area loading, expected duration of the DER resource failure, potential transfers that may be available because of recent distribution infrastructure additions or improvements, re-rating of distribution facilities, including substation banks, and installation of temporary facilities such as a mobile transformer bank.

D. Other Considerations:

There is significant risk that even with a successful DER project, there may not be a distribution investment deferral for the full term of the DER contracts. As noted in PG&E's approved AL 5435-E², PG&E will implement its contingency plan in such a case, which may include implementation of a traditional capital investment. PG&E will recover those costs pursuant to the approval requested in Section I above.

New customer load applications for demand in the 2-5 MW range are not uncommon. PG&E is aware that there have been expressions of interest with respect to high speed electric vehicle charging at Santa Nella. PG&E cannot predict with absolute certainty where or when large new customer load will happen. If an updated demand forecast is higher than what the DER solution can provide, PG&E would deploy the same contingency strategies identified previously in this section. This means that PG&E could have a successful DER project, and yet the wires upgrade could still be required. PG&E

² PG&E AL 5435-E, p. 17.

also coordinates with customers in providing new service based on the size and timing of the load ramp up schedule. As noted in Section I above, PG&E has requested Commission approval to recover these costs in the event it becomes necessary to implement a traditional capital investment.

It is also important to note that there can be equipment failures that would require a wires solution to be implemented, even with a successful DER project. PG&E notes that the Huron substation bank is more than 70 years old, and both the Huron substation bank and the Santa Nella substation bank have a code 4 condition. Substation power transformers are evaluated using dissolved gas analysis (DGA) of the transformer oil, a technique used to diagnose the internal condition of the transformer insulation system. DGA and oil quality have evaluated condition codes that are from 1 to 4, with code 4 being the worst condition. Although PG&E hopes to defer the bank upgrade for the duration of the DER contract, an equipment failure remains possible. In that case, PG&E would follow its contingency plan, which may include the implementation of a traditional capital investment, while continuing to pay Dimension for performance under the DER contract.

VI. Cost Effectiveness Cap

PG&E is requesting to procure DERs extending up to the cost approval of DER contracts that are less than the cost effectiveness cap, as specified in Order 18 of Resolution E-4956.³ Confidential Appendix F provides the updated cost cap details that include updates to input assumptions including changes in tax rates and updates to the deferral value that reflect the non-deferrable engineering and design costs of the planned investment that occur prior to Contract Approval.

VII. Cost Recovery

Pursuant to D.18-02-004⁴, which adopted the ratemaking treatment adopted in D.16-12-036, PG&E shall track DER contract payments in the existing Integrated Distributed Energy Resources Incentives Pilot balancing accounts—which shall be repurposed as Distribution Deferral balancing accounts—for recovery in the General Rate Case (GRC). Neither DER payments nor the avoided costs of traditional investments shall be reduced from the previously adopted revenue requirement.

Pursuant to PG&E's approved AL 5435-E⁵, the incremental administrative costs are considered pre-approved for recording and recovery and will be reviewed by the Commission in PG&E's 2023 GRC. PG&E will track all incremental administrative costs of the solicitation, including unavoidable expenditures for commissioning and ongoing testing and verification of the Contract and Contract administrative costs in PG&E's DER Distribution Deferral Account (Electric Preliminary Statement Part GZ). Any administrative costs exceeding the forecast approved in this advice letter are subject to a

³ Resolution E-4956, p 30

⁴ D.18-02.004, p. 88

⁵ PG&E AL 5435-E, p 18.

reasonableness review. The annual DER contract costs, having been pre-approved, will be recovered over the life of the contract. For the reasons stated in its comments on the utility regulatory incentive pilot in R.14-10-003 and on D.16-12-036, PG&E is not requesting to apply a four percent (4%) pre-tax incentive to the annual payment for the DER.

Pursuant to PG&E's contingency plan as specified in Section V above and the May 7, 2019, Administrative Law Judge (ALJ) Ruling modifying the DIDF, contingency costs, including unavoidable expenditures on any wires-related investments, also will be tracked and recorded in the DER Distribution Deferral Account for recovery as requested above under Section I.

VIII. Appendices

Appendix A: Summary of Evaluation of all Offers and Costs **(Confidential)**

Appendix B1: IE Report **(Public)**

Appendix B2: Supplemental IE Report **(Confidential)**

Appendix C: Dimension Contract **(Confidential)**

Appendix D: Dimension Contract **(Confidential)**

Appendix E: Dimension Contract **(Confidential)**

Appendix F: Updated Estimate of Cost Effectiveness Cap **(Confidential)**

IX. Protests

Anyone wishing to protest this submittal may do so by letter sent via U.S. mail, facsimile or E-mail, no later than December 23, 2019, which is 20 days after the date of this submittal. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to PG&E either via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

Erik Jacobson
Director, Regulatory Relations
c/o Megan Lawson
Pacific Gas and Electric Company
77 Beale Street, Mail Code B13U
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-3582
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

X. Effective Date

PG&E requests that this Tier 2 advice submittal become effective on regular notice, January 2, 2020 which is 30 calendar days after the date of submittal

XI. Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service list for R.14-10-003. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter submittals can also be accessed electronically at: <http://www.pge.com/tariffs/>.

/S/

Erik Jacobson
Director, Regulatory Relations

Attachments

cc: Service List R.14-10-003



ADVICE LETTER SUMMARY

ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Pacific Gas and Electric Company (ID U39E)

Utility type:

- ELC GAS WATER
 PLC HEAT

Contact Person: Kimberly Loo

Phone #: (415)973-4587

E-mail: PGETariffs@pge.com

E-mail Disposition Notice to: KELM@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas WATER = Water
 PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 5707-E

Tier Designation: 2

Subject of AL: Approval of Contracts Resulting from Competitive Solicitation for the 2019 Distribution Investment Deferral Framework Request for Offers

Keywords (choose from CPUC listing): Compliance

AL Type: Monthly Quarterly Annual One-Time Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #: D.18-02-004

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL:

Confidential treatment requested? Yes No

If yes, specification of confidential information: See confidentiality declaration
 Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information: Marino Monardi, M3Mt@pge.com, (415)973-8573

Resolution required? Yes No

Requested effective date: 1/2/20

No. of tariff sheets: 0

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed¹: N/A

Pending advice letters that revise the same tariff sheets: N/A

¹Discuss in AL if more space is needed.

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102
Email: EDTariffUnit@cpuc.ca.gov

Name: Erik Jacobson, c/o Megan Lawson
Title: Director, Regulatory Relations
Utility Name: Pacific Gas and Electric Company
Address: 77 Beale Street, Mail Code B13U
City: San Francisco, CA 94177
State: California Zip: 94177
Telephone (xxx) xxx-xxxx: (415)973-2093
Facsimile (xxx) xxx-xxxx: (415)973-3582
Email: PGETariffs@pge.com

Name:
Title:
Utility Name:
Address:
City:
State: District of Columbia Zip:
Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email:

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

**DECLARATION SUPPORTING CONFIDENTIAL DESIGNATION
ON BEHALF OF
PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)**

1. I, Marino Monardi, am the Director of Structured Energy Transactions at Pacific Gas and Electric Company (“PG&E”), a California corporation. Fong Wan, the Senior Vice President of Energy Policy and Procurement at PG&E, delegated authority to me to sign this declaration. My business office is located at:

Pacific Gas and Electric Company
77 Beale Street, Mail Code xxx
San Francisco, CA 94105

2. PG&E will produce the information identified in paragraph 3 of this Declaration to the California Public Utilities Commission (“CPUC”) or departments within or contractors retained by the CPUC in response to a CPUC audit, data request, proceeding, or other CPUC request.

Name or Docket No. of CPUC Proceeding (if applicable): R.14-10-003

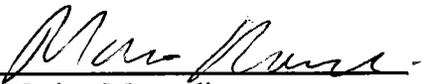
3. Title and description of document(s): Appendices to Advice Letter for Approval of Contracts Resulting from Competitive Solicitation for the 2019 Distribution Investment Deferral Framework Request for Offers – Appendix A: Summary of Evaluation of all Offers and Costs (Confidential), Appendix B2: Supplemental IE Report (Confidential), Appendix C: Dimension Contract (Confidential), Appendix D: Dimension Contract (Confidential), Appendix E: Dimension Contract (Confidential), and Appendix F: Updated Estimate of Cost Effectiveness Cap (Confidential)

4. These documents contain confidential information that, based on my information and belief, has not been publicly disclosed. These documents have been marked as confidential, and the basis for confidential treatment and where the confidential information is located on the documents are identified on the following chart:

Check	Basis for Confidential Treatment	Where Confidential Information is located on the documents
<input type="checkbox"/>	<p>Customer-specific data, which may include demand, loads, names, addresses, and billing data</p> <p>(Protected under PUC § 8380; Civ. Code §§ 1798 <i>et seq.</i>; Govt. Code § 6254; Public Util. Code § 8380; Decisions (D.) 14-05-016, 04-08-055, 06-12-029)</p>	
<input type="checkbox"/>	<p>Personal information that identifies or describes an individual (including employees), which may include home address or phone number; SSN, driver’s license, or passport numbers; education; financial matters; medical or employment history (not including PG&E job titles); and statements attributed to the individual</p> <p>(Protected under Civ. Code §§ 1798 <i>et seq.</i>; Govt. Code § 6254; 42 U.S.C. § 1320d-6; and General Order (G.O.) 77-M)</p>	
<input type="checkbox"/>	<p>Physical facility, cyber-security sensitive, or critical energy infrastructure data, including without limitation critical energy infrastructure information (CEII) as defined by the regulations of the Federal Energy Regulatory Commission at 18 C.F.R. § 388.113</p> <p>(Protected under Govt. Code § 6254(k), (ab); 6 U.S.C. § 131; 6 CFR § 29.2)</p>	
<input checked="" type="checkbox"/>	<p>Proprietary and trade secret information or other intellectual property and protected market sensitive/competitive data</p> <p>(Protected under Civ. Code §§3426 <i>et seq.</i>; Govt. Code §§ 6254, <i>et seq.</i>, e.g., 6254(e), 6254(k), 6254.15; Govt. Code § 6276.44; Evid. Code §1060; D.11-01-036)</p>	<p>Entirety of Appendices: A, B2, C, D, E, and F as referenced above in Paragraph 3 of this Declaration.</p>

-
- Corporate financial records
(Protected under Govt. Code §§ 6254(k), 6254.15)
-
- Third-Party information subject to non-disclosure or confidentiality agreements or obligations
(Protected under Govt. Code § 6254(k); see, e.g., CPUC D.11-01-036)
-
- Other categories where disclosure would be against the public interest (Govt. Code § 6255(a))
-

5. The importance of maintaining the confidentiality of this information outweighs any public interest in disclosure of this information. This information should be exempt from the public disclosure requirements under the Public Records Act and should be withheld from disclosure.
6. I declare under penalty of perjury that the foregoing is true, correct, and complete to the best of my knowledge.
7. Executed on this 3rd day of December, 2019 at San Francisco, California.


Marino Monardi
Director, Structured Energy Transactions
Pacific Gas and Electric Company

PACIFIC GAS AND ELECTRIC COMPANY

Appendix A

**Summary of Evaluation of all
Offers and Costs
(Confidential)**

PACIFIC GAS AND ELECTRIC COMPANY

ATTACHMENT B1

**IE Report
(Public)**

Sedway Consulting, Inc.

**INDEPENDENT EVALUATION REPORT
FOR PACIFIC GAS & ELECTRIC'S
2019 DISTRIBUTION INVESTMENT
DEFERRAL FRAMEWORK
REQUEST FOR OFFERS**

Submitted by:

*Alan S. Taylor
Sedway Consulting, Inc.
Boulder, Colorado*

December 3, 2019

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Introduction and Background

On February 21, 2019, Pacific Gas & Electric (PG&E) issued its 2019 Distribution Investment Deferral Framework (DIDF) Request for Offers (RFO) to demonstrate the efficacy of distributed energy resources (DERs) in providing cost-effective deferral of distribution system upgrades, as required by California Public Utilities Commission (“CPUC”) Decision (“D.”)18-02-004 and approval of PG&E’s Advice Letter 5435-E (which was approved on February 5, 2019).

Specifically, DERs were sought that could defer upgrades to any one of three locations/projects while still maintaining system reliability and safety:

1. New Lammers Substation
2. Huron Substation
3. Santa Nella Substation.

Each deferral opportunity had independent needs and requirements; thus the DIDF RFO essentially consisted of three separate, independent solicitations.

PG&E’s 2019 DIDF RFO Protocol sought “distribution capacity and load” that would allow the deferral of distribution system improvement projects. In order to defer the distribution system upgrades, PG&E solicited products that, either individually or in combination, would address the complete substation need at each location. Any final selected DER or package of DERs would have to address the following needs for each of the substations:

New Lammers Feeder requirements, starting May 1, 2021:

- 1a: 0.7 MW of increased generation, load reduction, or load shifting on weekdays from 2:00 pm to 5:00 pm in November with a maximum of 21 calls per year. On days that requirement 1a was called, net loading could not be increased between the hours of 10:00 am to 6:00 pm.
- 1b: 1.5 MW of increased generation, load reduction, or load shifting on weekdays from 1:00 pm to 11:00 pm from May-October with a maximum of 73 calls per year. On days that requirement 1b was called, net loading could not be increased between the hours of 7:00 am to 12:00 am. Offers could be submitted for either meeting specific 5-hour “halves” of the need or the total 10 hours of need.
- 1c: 1 MW of increased generation, load reduction, or load shifting on weekdays from 8:00 am to 1:00 pm in June-October with a maximum of 36 calls per year. On days that requirement 1c was called, net loading could not be increased between the hours of 7:00 am to 12:00 am.

Huron Bank 1 requirements, with an April 1, 2021 online date:

- 2a: 3.7 MW of increased generation, load reduction, or load shifting every day of the week from 12:00 pm to 10:00 pm in June-August with a maximum of 33 calls per year. Offers could be submitted for 1 MW, 2 MW, or 3.7 MW and for either meeting specific 5-hour halves of the need or the total 10 hours. On days that requirement 2a was called, net loading could not be increased between the hours of 10:00 am to 11:00 pm.
- 2b: 1.6 MW of decreased generation, load increase, or load shifting every day of the week from 9:00 am to 4:00 pm from April-June and September-October with a maximum of 131 calls per year.

Santa Nella Bank 1 and New Feeder requirements, with a June 1, 2022 online date:

- 3a: 0.6 MW of increased generation, load reduction, or load shifting at Canal 1102 on weekdays from 1:00 pm to 7:00 pm in June-August with a maximum of 82 calls per year. On days that requirement 3a was called, net loading could not be increased between the hours of 12:00 pm to 8:00 pm.
- 3b: 2.6 MW of increased generation, load reduction, or load shifting at Canal 1103 every day of the week from 12:00 pm to 8:00 pm from June-September with a maximum of 82 calls per year. Offers could be submitted for 1.3 MW or 2.6 MW and for either meeting specific 4-hour halves of the need or the total 8 hours. On days that requirement 3b was called, net loading could not be increased between the hours of 10:00 am to 10:00 pm.
- 3c: 2.2 MW of increased generation, load reduction, or load shifting every day of the week from 1:00 pm to 8:00 pm in June-August with a maximum of 31 calls per year. On days that requirement 3c was called, net loading could not be increased between the hours of 11:00 am to 9:00 pm.

Offers could be for projects that would be located either in-front-of-the-meter (IFOM) or behind-the-meter (BTM). The RFO sought cost-effective offers that either (a) met the entire need or (b) met a portion of the need (whereby portfolios of offers might be assembled that would meet the entire need).

Eligible product types included the following:

- Energy Efficiency (“EE”),
- Demand Response (“DR”),
- Energy Storage (“ES”),
- Renewable Distributed Generation (“DG”),

- Non-Renewable Distributed Generation that would reduce GHG emissions reductions over the resource’s lifecycle,
- Permanent Load Shift, and
- Electric Vehicles.

For dispatchable Offers, counterparties would be expected to deliver the capacity after receiving a day-ahead signal. If the counterparty did not meet the delivery requirements, the fixed payments would be reduced by a certain percentage based upon the product’s availability (with significant under-delivery or failure to deliver resulting in the potential termination of the contract).

Participants were asked to provide the capacity offered, a capacity price (in \$/kW-mo), and/or a variable price (in \$/kWh) for each month of operation.

In addition, PG&E gave all Participants an option to use the utility’s Customer Relationship Manager (CRM) team for customer engagement and lead generation support. The purpose of this option was to aid Participants in acquiring customers for their projects. Therefore, for each offer, Participants were also asked to specify what kind of support (Co-branding, Marketing and Outreach Support, and/or Data Access) was assumed in the offer pricing. For each offer that included Customer Engagement Support, Participants were also required to include an offer assuming no Customer Engagement Support.

Participants also were required to provide information about and go through a review of incrementality of their offered projects. Only DERs that were categorized as wholly incremental or partially incremental (i.e., not already sourced through another program, tariff, or solicitation) were considered eligible.

EE Participants had the option of having their offers evaluated for incrementality on a project-specific basis or with a pre-specified overlap factor of 15% to reflect the overlap between an offer’s measures and energy efficiency resources that are projected to be deployed in the local area in the absence of the offer.

Independent Evaluator Involvement

The CPUC has issued several decisions that require California’s investor-owned utilities to retain an Independent Evaluator (IE) in resource solicitations.¹ In early 2019, in compliance with these CPUC decisions, PG&E retained Sedway Consulting, Inc. (Sedway Consulting) as an IE to monitor PG&E’s 2019 DIDF RFO, provide an independent evaluation of PG&E’s process and the offers it may receive, and help the

¹ D.04-12-048 (Findings of Fact 94-95, Ordering Paragraph 28) and D.06-05-039 (Finding of Fact 20, Conclusion of Law 3, Ordering Paragraph 8).

CPUC and PG&E’s Cost Allocation Mechanism (CAM) Procurement Review Group (PRG) participants by providing them with information and assessments to ensure that the solicitation was conducted fairly and that the best resources, if reasonably cost-effective, were acquired. This IE report provides an assessment of PG&E’s 2019 DIDF solicitation from the initial phase of the solicitation (i.e., preparing for the issuance of the RFO documents) through contract execution and filing of the Advice Letter for CPUC approval of the contract(s). Table 1 provides the timeline that the RFO followed.

Table 1 PG&E 2019 DIDF RFO Schedule	
PG&E issues RFO	February 21, 2019
Participants’ webinar	February 28, 2019
Offer deadline for uploading to PG&E	April 1, 2019
Deadline for IE to receive offer files	April 2, 2019
Notification to Participants of shortlisted status	May 6, 2019
Contract Negotiations	May – November, 2019
Advice Letter filing with the CPUC ²	December 3, 2019

Sedway Consulting concluded that PG&E conducted a fair solicitation in its 2019 DIDF RFO and made reasonable selection/rejection decisions. Outreach activities conducted by PG&E generated a reasonably robust market response and the RFO process was fairly designed and administered, with no bidder or technology being advantaged or disadvantaged relative to other bidders or technologies. Sedway Consulting believes that PG&E treated all interested counterparties consistently and fairly.

This report includes a confidential appendix that provides Sedway Consulting’s evaluation results and confidential assessments of specific areas of the RFO process. The material in the confidential appendix is being afforded confidential treatment for the following reasons. First, it is important to protect counterparties from having their product pricing provided to competitors. Second, this material is being afforded confidential treatment in line with the CPUC’s Decision 06-06-066 (issued on June 29, 2006) which included guidelines for defining what constitutes confidential versus public information in California utility electricity procurement and related activities. Pursuant to Public Utilities Code Section 583 and the above decision, score sheets, analyses, and evaluations of proposed transactions are deemed confidential.³

² The CPUC granted a 90-day extension of the original September 3, 2019 Advice Letter due date.

³ “Interim Opinion Implementing Senate Bill No. 1488, Relating to Confidentiality of Electric Procurement Data Submitted to the Commission”, June 29, 2006, Appendix 1, page 17.

The remainder of this report follows the template that was issued by the CPUC as part of R.06-02-013 (Attachment A: CPUC Independent Evaluator Template [Short Form], and as has been subsequently updated) to organize and structure Independent Evaluation reports regarding solicitations for power supplies undertaken by California utilities. That template includes question/topic areas that are depicted in boxes in this report.

Role of the Independent Evaluator

1. Describe in detail the role of the IE throughout the solicitation and negotiation process.

Sedway Consulting was provided access to all appropriate materials and was able to parallel PG&E's process with its own receipt and evaluation of all offers. Sedway Consulting reviewed PG&E's RFO documents, outreach efforts, evaluation processes, modeling methodologies, communications with bidders, and evaluation and selection results.

Members of the IE team:

- reviewed and commented on the RFO Protocol prior to its issuance,
- participated in PG&E's February 28, 2019 Participants' webinar,
- reviewed email exchanges of questions from potential Participants and answers from PG&E,
- discussed evaluation methods and processes with PG&E and reviewed the utility's evaluation methodology documents,
- reviewed estimated revenue requirements and deferral values for the targeted distribution system upgrades,
- received all offers directly from Participants,⁴
- performed an independent review and evaluation of all offers,
- conferred with PG&E on seeking clarified and/or revised offers from Participants,
- discussed offer evaluation issues with PG&E and cross-checked PG&E's evaluation results,

⁴ Bidders were instructed to provide physical delivery of a USB thumb drive with their offer materials to Sedway Consulting for receipt no later than one business day following the deadline for uploading such materials to PG&E's web-platform. This ensured that the IE had materials directly from each bidder without any possibility of interference or corruption of information through PG&E's web-platform process and allowed Sedway Consulting to ensure that what had been uploaded to PG&E was indeed what each bidder had intended to submit.

- conferred with PG&E regarding shortlisting and final contract decisions,
- participated in virtually all negotiation calls and monitored all email communications with shortlisted Participants, and
- participated in CAM PRG and follow-up Energy Division calls in which the DIDF RFO launch, process, offers, and selection results were discussed.

Sedway Consulting requested PG&E to provide all evaluation protocols and parameters prior to the receipt of offers. This, in essence, allowed Sedway Consulting to review, lock down, and archive the basic evaluation parameters for the process. Such information included PG&E's discount rate, distribution project deferral value assumptions, administrative costs, Customer Engagement Support costs, and dispatch assumptions.

Sedway Consulting's activities are described in more detail in relevant sections of this report and confidential appendix.

PG&E's Outreach Activities

2. How did the IOU conduct outreach to bidders, and was the solicitation robust?

Sedway Consulting believes that PG&E pursued reasonable and adequate procedures for notifying potential interested parties. Specifically, PG&E dedicated a section of its company website to the solicitation, providing a means for interested parties to download the RFO Protocol/Instructions and related materials. On the RFO launch date of February 21, 2019, PG&E notified over 2,600 market participants and CPUC service list contacts from the utility's RFO Distribution List that the RFO had been released and invited them to participate.

Sedway Consulting reviewed the RFO solicitation package prior to the launch of the RFO and the website and webinar presentation after the RFO launch and believes PG&E's RFO solicitation materials included adequate information. The materials included information about the geographic area and customer composition. PG&E also offered three levels of post-contract customer acquisition support to Participants (particularly applicable to BTM products):

- Co-branding
- Marketing and Outreach Support
- Data Access

and clearly stated what each included and what data privacy and security requirements Participants would need to meet in order to access specific customer data.

In addition, the capital costs of the wires alternatives for each area (New Lammers, Huron, and Santa Nella) and their associated LNBA values were published on the DIDF RFO website per the Decision 18-02-004 Ordering Paragraph 2q.

On February 28, 2019, PG&E held a Participants' webinar to provide an overview of the DIDF solicitation. The webinar provided potential counterparties an opportunity to learn more about the solicitation, hear presentations, and ask questions. Sedway Consulting participated in this webinar. There were additional opportunities to ask questions via email following the webinar, with Sedway Consulting included on those email exchanges.

Sedway Consulting concluded that PG&E did an adequate job of publicizing the 2019 DIDF solicitation, as ultimately evidenced by the reasonably robust response that it received from the bidding community.

Receipt and Evaluation of Offers

On April 1, 2019, PG&E received a reasonable number of offers (via the Power Advocate web-platform), with Sedway Consulting receiving offers directly from Participants via flash-drive after that deadline, as requested in the RFO Protocol.

Both PG&E and Sedway Consulting performed their quantitative and qualitative analyses during the weeks after offers were received. Where necessary, a number of clarifying questions were emailed to Participants during the evaluation period, with Sedway Consulting copied on all email exchanges.

Sedway Consulting performed a parallel evaluation of the offers and participated in discussions with PG&E that culminated with PG&E's decision to shortlist Participants for the Huron and Santa Nella locations and to not shortlist any offers for New Lammers. PG&E's distribution planners determined that there was not sufficient capacity for off-peak charging of energy storage resources on the substation's circuits. Thus, only load reduction or generation DERs could have addressed the need, and no such offer types were proposed there.

IE Recommendation #1: In future RFOs, PG&E should research this issue for all new locations and highlight this constraint in those instances where energy storage offers will not be acceptable. This could save energy storage Participants from unnecessary effort and costs in preparing offers for such locations.

The shortlisted Participants' offers at Huron and Santa Nella had cost/benefit ratios that were reasonably attractive (e.g., under or not excessively above a value of one).

As further addressed in this report's Confidential Appendix A, Sedway Consulting concluded that the degree of RFO participation was reasonably robust and that the shortlisted Participants/offers were the appropriate ones with which to move forward.

Least Cost Best Fit Methodology

3. Describe the IOU's Least Cost Best Fit (LCBF) methodology. Evaluate the strengths and weaknesses of the IOU's LCBF methodology. (This should include a thorough analysis of the RFO results.)

Description of Evaluation Process

The initial stage of PG&E's evaluation process entailed screening the offers for compliance with and general responsiveness to the RFO Protocol. All offers passed the screening stage and after a few clarifying questions, were candidates for evaluation. The evaluation results for all offers are provided in this report's Confidential Appendix A.

Because PG&E only requires distribution deferral capacity in order to defer the distribution investments at each area, the quantitative evaluation primarily entailed comparing the net present value of an offer's monthly costs with the net present value of the savings associated with deferring the relevant distribution upgrade project. The difference of these two values represented the offer's net value (called the portfolio adjusted value, PAV), whereas the ratio could be used to depict a cost/benefit ratio.

The monthly costs included an offer's fixed and variable pricing, contract administrative costs, Customer Engagement Support costs (if applicable),⁵ and debt equivalency costs. The savings included the distribution deferral value. Although the focus of the quantitative evaluation was on determining the offers with the best net value or lowest cost/benefit ratio, additional factors such as project viability and fit were considered.

Sedway Consulting believes that PG&E's evaluation process complied with the CPUC's "Least Cost Best Fit" (LCBF) criteria. All offers and portfolios of offers that would defer the wires investment were evaluated.

⁵ Customer Engagement Support costs are project-specific and would be determined on a case-by-case basis.

Sedway Consulting believes that the evaluation process was fairly designed and reasonably administered such that all counterparties and product types were treated consistently and fairly and had equal opportunity to be shortlisted and selected by PG&E for contract negotiation.

Incrementality

PG&E provided guidance to Participants regarding incrementality in their RFO documents and webinar, including descriptions and examples of what PG&E considered to be fully incremental, partially incremental and non-incremental. Sedway Consulting believes that PG&E provided adequate information in their solicitation materials and appropriately considered incrementality issues in its DIDF shortlisting and final selection decisions.

More discussion about incrementality of individual offers is included in Confidential Appendix A.

Description of Selection Process

As described above, PG&E was willing to consider any offer or combination of offers that could defer physical upgrades at each of the New Lammers, Huron, and Santa Nella Substations and had costs that were less than (or close to) the value of deferral. Sedway Consulting completed its own quantitative evaluation and confirmed the PAV and cost/benefit ratio results of all offers and the best portfolio(s) of offers that would meet the needs of the RFO. As noted above, no feasible offers were available to defer the New Lammers need. However, there were offers that addressed the Huron and Santa Nella needs that had cost/benefit ratios that were reasonably attractive (e.g., below or not excessively above a value of one). Sedway Consulting's evaluation results for all offers are presented in the confidential appendix.

Sedway Consulting and PG&E agreed that it would make sense to shortlist a few top-ranked Participants at the Huron and Santa Nella locations, not just the one with the best cost/benefit ratio, given the potential for viability concerns or lack of agreement that might arise during the negotiation process. Even though that meant shortlisting lower-ranked Participants/offers with less attractive cost/benefit ratios and offers, it was recognized that negotiations with the top-ranked Participant might not be successful and the other shortlisted Participants might be able to improve their offers' pricing. Thus, PG&E shortlisted and commenced negotiations with a few Participants. Sedway Consulting concurred with the short list selection decision and confirms that PG&E employed a Least Cost Best Fit methodology in that selection decision. The PRG CAM was provided (via email) an update presentation on April 29, 2019, and participants were notified of their status on May 6, 2019.

Fairness of Bidding and Selection Process

4. Please evaluate the fairness of the IOU's bidding and selection process (i.e., quantitative and qualitative methodology used to evaluate the bids, consistency of evaluation methods with criteria specified in the bid documents, etc.).

Sedway Consulting concluded that PG&E's evaluation design and administration was unbiased and fair. In evaluating the fairness of PG&E's process, Sedway Consulting employed the following principles:

1. Did the design and/or administration of the RFO inappropriately favor one participant or product over another?
2. Were the selection criteria flexible enough or structured in a way to facilitate PG&E acquiring sufficient capacity to meet distribution system needs as specified in the RFO?
3. Were all components of an offer's quantified metric calculated consistently so as to avoid introducing discontinuities that might distort the results and lead to incorrect offer selection?

Sedway Consulting concluded that PG&E's evaluation process was designed to treat all participants fairly, employing a consistent methodology that did not favor or disadvantage any Participant or product. Sedway Consulting's parallel evaluation allowed the IE to confirm and cross-check PG&E's evaluation results and ensure that all participants' proposals were being evaluated fairly and consistently with the evaluation criteria specified in the RFO evaluation documents (and/or anchored with the IE prior to the receipt of offers).

Sedway Consulting was copied on all email communications with participants and ensured that consistent information was being provided to all.

Description of Sedway Consulting's Parallel Evaluation Process

Sedway Consulting conducted a parallel review and evaluation of the offers. Sedway Consulting reviewed and discussed RFO compliance issues with PG&E, calculated the net present value of each offer's costs, and compared those to the net present value of deferring the distribution system upgrades.

Sedway Consulting concluded that PG&E administered its evaluation and selection process fairly. The fact that Sedway Consulting conducted a parallel, independent bid receipt and evaluation process allowed it to confirm PG&E's results and verify that the utility fairly and appropriately evaluated all offers and employed an appropriate and fair selection process. Sedway Consulting concurred with PG&E's ranking, economic results, and shortlisting and final selection decisions.

Additional confidential evaluation-related issues are addressed in this report's Confidential Appendix A.

Additional Issues

5. Describe project-specific negotiations. Highlight any areas of concern including unique terms and conditions.

Need Changes During Negotiation Phase

On August 16, 2019, PG&E notified Sedway Consulting that the anticipated need was changing at Santa Nella, increasing the required DER capacity. Specifically, the aggregate 5.4 MW need at Canal 1102, Canal 1103 and Ortiga Bank 1 in the RFO documents was changed to an aggregated need of 9.3 MW at Canal Bank 1, Canal 1103, Ortiga Bank 1, and Santa Nella 1104 in the 2019 Distribution Deferral Opportunity Report (filed on August 15, 2019).

Because of this significant increase in anticipated need, PG&E conferred with Sedway Consulting about two possible paths forward:

1. Ask shortlisted counterparties if they could submit new offers that would meet the new needs. This option would take advantage of project work already in progress but would be difficult for participants as it would require projects to be interconnected at different points than originally designed. This would likely require the acquisition of new sites and the submission of new interconnection requests.
2. Inform counterparties that no offers would be contracted in the 2019 DIDF RFO and PG&E would include Santa Nella with the new requirements in the 2020 DIDF RFO. Because of the significant change in need, this option would give participants more time to develop new projects but would also reduce the time to complete awarded projects to meet the COD date by about one year.

Given the revised needs at Santa Nella and the timing of interconnection reports associated with Huron, PG&E made a request to the CPUC for a 90-day extension for filing the DIDF contracts and Advice Letter. PG&E and Sedway Consulting agreed that, unless the request for the 90-day extension was granted, the second option seemed to be the more reasonable approach. On August 27, 2019, Sedway Consulting was notified that the extension request was granted; the shortlisted Santa Nella Participants were notified as well.

On September 17, 2019, PG&E notified Sedway Consulting that they had found a way to consolidate locations with the revised needs at Santa Nella, thereby eliminating the requirement for Participants to acquire new sites. On September 20, 2019, PG&E notified the shortlisted Santa Nella Participants about the final revised needs (no need at Canal 1102, 6.7 MW at Canal 1103 for 3:00 pm to 10:00 pm, and 3.8 MW at Ortiga for 4:00 pm to 10:00 pm – for a total of 10.5 MW – with both needs spanning the months of June-September with a maximum of 122 calls/year). The Participants were given the opportunity to revise their offers to meet these new needs.

Sedway Consulting team members closely monitored project-specific negotiations by teleconference. Numerous such calls were monitored by Sedway Consulting, supplemented by the review of email communications (frequently with the transmittal of redlined contracts) between PG&E and shortlisted counterparties.

Overall, Sedway Consulting affirms that PG&E provided consistent information throughout the negotiation process. Sedway Consulting believes that PG&E conducted the 2019 DIDF solicitation negotiations in a fair and appropriate manner. Negotiations details are confidential and described in this report's Confidential Appendix.

6. If applicable, describe safeguards and methodologies employed by the IOU to compare affiliate bids or UOG ownership proposals. If a utility selected a bid from an affiliate or a bid that would result in utility asset ownerships, explain and analyze whether the IOU's selection of such bid(s) was appropriate.

There were no affiliate bids or UOG (utility owned generation) DER proposals submitted in PG&E's 2019 DIDF RFO. That said, the distribution investments represented the utility-owned alternative to the DER proposals. The deferral value the investments were calculated and submitted to the CPUC and Sedway Consulting prior to the receipt of DER offers and formed the basis for developing the PAV and cost/benefit ratios used in the shortlisting selection decisions.

7. Based on the complete bid process, is (are) the IOU contract(s) the best overall offer(s) received by the IOU?

Huron Substation

PG&E’s 2019 DIDF RFO has resulted in the execution of one contract with Dimension Renewable Energy for the development of a new IFOM ES facility in Huron, California that will address the stated needs at Huron Bank 1. The contract is for 3.7 MW of capacity and 1.6 MW of load, with deliveries commencing on April 1, 2021.

Sedway Consulting believes that the contract for the Huron Substation submitted with this Advice Letter represents the best overall offer received in PG&E’s 2019 DIDF RFO for the Huron Substation. The contract is with one counterparty (Dimension Renewable Energy) to use one project to meet the entire need to defer the wires investment at the Huron Substation for 7 years. The contract is cost effective relative to the cost of deferral, and the project will utilize a proven technology.

Santa Nella Substation

For addressing the need at Santa Nella, PG&E’s 2019 DIDF RFO has resulted in the execution of two linked contracts with Dimension Renewable Energy for the development of two IFOM ES facilities in Los Banos, California. One contract is for 6.7 MW of capacity at Canal 1103 and the other contract is for 3.8 MW of capacity at Ortiga Bank 1, with an expected Initial Delivery Date of May 1, 2022 and deliveries commencing on June 1, 2022.

Sedway Consulting believes that the two Santa Nella contracts submitted with this Advice Letter represent the best overall offers received in PG&E’s 2019 DIDF RFO for addressing the Santa Nella need. The contracts are with one counterparty (Dimension Renewable Energy) to use two projects to meet the entire need to defer the wires investment at the Santa Nella Substation for 6 years. The contracts are cost effective relative to the cost of deferral, and the projects will utilize a proven technology.

8. If the contract does not directly reflect a product solicited and bid in an RFO, is the contract superior to the bids received on the products solicited in the RFO? Explain.

The contracts being submitted with PG&E’s Advice Letter directly reflect the products solicited and bid in the utility’s 2019 DIDF RFO.

9. Is the contract a reasonable way of achieving the need identified in the RFO?

Yes, Sedway Consulting believes that the contracts are reasonable ways of meeting the need for both the Huron Substation and Santa Nella Substation. The needs will be addressed from three IFOM ES facilities with sufficient inverter capacity, battery storage capacity, and interconnection arrangements to address the current needs for both the Huron and Santa Nella Substations.

As a lesson learned from PG&E’s 2019 DIDF experience, it became clear that interconnection procedures and time frames associated with the deployment of IFOM DERs may complicate or inhibit the procurement of cost-effective DERs in time to address future DIDF needs. While such was not the case in this PG&E 2019 DIDF process, it may make sense for PG&E to explore options in future DIDF RFOs. Specifically, Sedway Consulting noted that Southern California Edison’s (SCE) 2019 DIDF RFO Instructions included a bid deposit and procedural agreement that would allow the utility to best manage the interconnection queue process.

IE Recommendation #2: As is discussed more in this report’s Confidential Appendix A, Sedway Consulting recommends that PG&E consider adopting similar procedures to SCE’s 2019 DIDF IFOM interconnection management approach in future DIDF RFOs.

Conclusion

10. Based on your analysis of the RFO bids, the bid process, and the overall market, does the contract merit Commission approval? Explain.

Sedway Consulting believes that PG&E conducted a fair and effective solicitation and evaluation of the offers that it received in response to its 2019 DIDF RFO. All offers were evaluated consistently, appropriately, and without bias.

Sedway Consulting was provided access to all necessary materials and meetings and was able to parallel PG&E's process with its own evaluation of the proposals. Sedway Consulting reviewed PG&E's results and did not find any bias for or against any proposals in PG&E's selection decisions.

In addition, Sedway Consulting reviewed the requirements stipulated in Decision 18-02-004 and approved Advice Letter 5435-E. Since PG&E's DIDF solicitation was to conform to the guidance in D.16-12-036 and Resolutions E-4889 and to the requirements in the IDER Competitive Solicitation Framework,⁶ Sedway Consulting also reviewed requirements in Decision 16-12-036, Resolution E-4889, and Resolution E-4956 as applicable to the 2019 DIDF solicitation and followed progress in the IDER proceeding. Sedway Consulting believes that PG&E's 2019 DIDF RFO met the requirements of the orders and resolutions.

Sedway Consulting monitored the back-and-forth email traffic between PG&E and the Participants and believes that PG&E treated all Participants consistently and fairly. Sedway Consulting concludes that PG&E made appropriate decisions in its 2019 DIDF RFO and that the three contracts submitted for approval to the CPUC represent the best DER solutions for deferring distribution upgrades at the Huron and Santa Nella Substations.

⁶ Advice Letter 5435-E, p. 13

PACIFIC GAS AND ELECTRIC COMPANY

Appendix B2

**Supplemental IE Report
(Confidential)**

PACIFIC GAS AND ELECTRIC COMPANY

Appendix C

**Dimension Contract
(Confidential)**

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Appendix D

**Dimension Contract
(Confidential)**

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Appendix E

**Dimension Contract
(Confidential)**

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Appendix F

**Updated Estimate of Cost Effectiveness Cap
(Confidential)**

**PG&E Gas and Electric
Advice Submittal List
General Order 96-B, Section IV**

AT&T	Downey & Brand	Pioneer Community Energy
Albion Power Company	East Bay Community Energy	Praxair
Alcantar & Kahl LLP	Ellison Schneider & Harris LLP	
	Energy Management Service	
Alta Power Group, LLC	Engineers and Scientists of California	Redwood Coast Energy Authority
Anderson & Poole	Evaluation + Strategy for Social Innovation	Regulatory & Cogeneration Service, Inc.
	GenOn Energy, Inc.	SCD Energy Solutions
Atlas ReFuel	Goodin, MacBride, Squeri, Schlotz & Ritchie	SCE
BART	Green Charge Networks	SDG&E and SoCalGas
	Green Power Institute	
Barkovich & Yap, Inc.	Hanna & Morton	SPURR
P.C. CalCom Solar	ICF	San Francisco Water Power and Sewer
California Cotton Ginners & Growers Assn	International Power Technology	Seattle City Light
California Energy Commission	Intestate Gas Services, Inc.	Sempra Utilities
California Public Utilities Commission	Kelly Group	Southern California Edison Company
California State Association of Counties	Ken Bohn Consulting	Southern California Gas Company
Calpine	Keyes & Fox LLP	Spark Energy
	Leviton Manufacturing Co., Inc. Linde	Sun Light & Power
Cameron-Daniel, P.C.	Los Angeles County Integrated Waste Management Task Force	Sunshine Design
Casner, Steve	Los Angeles Dept of Water & Power	Tecogen, Inc.
Cenergy Power	MRW & Associates	TerraVerde Renewable Partners
Center for Biological Diversity	Manatt Phelps Phillips	Tiger Natural Gas, Inc.
	Marin Energy Authority	
Chevron Pipeline and Power	McKenzie & Associates	TransCanada
City of Palo Alto	Modesto Irrigation District	Troutman Sanders LLP
	Morgan Stanley	Utility Cost Management
City of San Jose	NLine Energy, Inc.	Utility Power Solutions
Clean Power Research	NRG Solar	Utility Specialists
Clean Power Research		
Coast Economic Consulting	Office of Ratepayer Advocates	Verizon
Commercial Energy	OnGrid Solar	Water and Energy Consulting Wellhead Electric Company
County of Tehama - Department of Public Works	Pacific Gas and Electric Company	Western Manufactured Housing Communities Association (WMA)
Crossborder Energy	Peninsula Clean Energy	Yep Energy
Crown Road Energy, LLC		
Davis Wright Tremaine LLP		
Day Carter Murphy		
Dept of General Services		
Don Pickett & Associates, Inc.		
Douglass & Liddell		