Decision **PROPOSED DECISION OF CALJ COOKE (Mailed 8/19/2024)**

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company to Initiate Reasonableness Review of Merced Dairy Biomethane Pilot Project Costs.	Application 23-04-005

DECISION ADDRESSING REASONABLENESS OF MERCED DAIRY BIOMETHANE PILOT PROJECT COSTS

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DECISION ADDRESSING REASONABLENESS OF MERCED DAIRY BIOMETHANE PILOT PROJECT COSTS

Summary

This decision finds reasonable and authorizes Pacific Gas and Electric Company to recover in rates and reimburse Maas Energy Works, Inc. (MEW) $4,917,819 above the bid amount of $10,183,855 approved for the Merced Pipeline Dairy Digester Cluster Project. The authorized amount represents approximately 58% of MEW's requested overage of $8,517,000.

This proceeding is closed.

1. Background

1.1. Factual Background

Senate Bill (SB) 1383 (Stats. 2016, ch. 395) requires a comprehensive strategy to reduce statewide emissions of methane by 40 percent below 2013 levels by 2030.[1] Among other things, SB 1383 requires the California Public Utilities Commission (Commission), in consultation with the California Air Resources Board (ARB) and California Department of Food and Agriculture (CDFA), to direct gas corporations to implement not less than five dairy biomethane pilot projects to demonstrate interconnection to the common carrier pipeline system.[2] SB 1383 also permits gas corporations to recover in rates the reasonable cost of pipeline infrastructure developed pursuant to the pilot projects.[3]

On December 14, 2017, the Commission adopted Decision (D.) 17-12-004, which established the necessary framework for gas corporations to implement

[1] Health and Safety Code § 39730.5(a).

[2] Health and Safety Code § 39730.7(d)(2).

[3] Health and Safety Code § 39730.7(d)(2).

the pilot projects required by SB 1383. The decision addressed what project components are eligible for funding; how the solicitation for projects will be developed and deployed; the cost recovery framework; the selection criteria for projects; data gathering to support evaluation of the pilots; and safety considerations. The decision clarified that it is the Selection Committee, made up of the Commission, ARB, and CDFA, that controls the terms of the solicitation and selects the dairy pilots to move forward to contract with utilities.[4] The decision directed that costs for biomethane producer-owned pipeline infrastructure developed pursuant to the pilots be recorded in a balancing account with costs above the bid amount subject to reasonableness review.[5] The decision also directed that costs booked to the balancing account, up to the authorized bid amount, should be reviewed for the utility's prudent administration of the project, but should otherwise be considered per se reasonable.[6]

On June 22, 2018, an application (pilot application) was submitted to the Selection Committee by Merced Pipeline LLC for the Merced Pipeline Dairy Digester Cluster Project (Project). The Project was to be developed by Maas Energy Works, Inc. (MEW), the owner of Merced Pipeline LLC.

On December 3, 2018, the Selection Committee selected the Project as one of two pilot projects located in Pacific Gas and Electric Company (PG&E)'s service territory.[7] The Project included construction of covered lagoon digesters

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[4] D.17-12-004 at 20, Finding of Fact 3.

[5] *Id.* at 22, Conclusion of Law (COL) 11. The Commission directed that costs for utility-owned pipeline infrastructure developed pursuant to the pilots be recorded in a separate memorandum account. (*Id.* at 22, COL 10.)

[6] *Id.* at 22, COL 12.

[7] Exhibit (Ex.) PGE-01 at 1-7.

at 8 participating dairies and a low-pressure pipeline to connect each digester back to the centralized clean-up facility and pipeline injection point.[8] Instead of connecting directly to a public utility, the Project was approved to demonstrate connection to a third-party pipeline owned and operated by California Energy Exchange (CEE), which has an existing interconnection point with PG&E at its Panoche Energy Center in Fresno County.

The total estimated budget approved by the Selection Committee for the Project was $10,183,855.[9] PG&E established Preliminary Statement Part EG - Dairy Biomethane Pilots Balancing Account (DBPBA) to record biomethane producer-owned pipeline infrastructure costs for the selected dairy pilots pursuant to SB 1383.[10] The contract for the Project was approved by the Commission on April 30, 2019, through AL 4065-G, effective March 8, 2019.

Engineering work for the Project commenced in 2019 with construction occurring during 2019 and 2020.[11] The first renewable natural gas flows from the Project occurred in 2021.[12] Development continued through 2021 and into 2022 to build out gathering lines to connect additional dairies with the last eligible interconnection costs attributable to a reimbursable cost category being concluded in September 2022.[13]

The final amount incurred by MEW to design, construct, test, and interconnect to PG&E was $18,700,855.62, which is $8,517,000.62 over (or

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8 *Id.* at 2-1.

9 *Id.* at 2-2.

10 Advice Letter (AL) 4049-G-A, approved February 14, 2019.

11 Ex. PGE-01 at 1-8.

12 *Ibid.*

13 *Ibid.*

approximately 84 percent over) the initial bid of $10,183,855 approved by the Selection Committee.[14]

1.2. Procedural Background

On April 5, 2023, PG&E filed the instant application requesting that the Commission: (1) conduct a reasonableness review of the Project's costs incurred over the bid amount approved by the Commission's dairy biomethane pilot project Selection Committee, and (2) authorize PG&E to reimburse the Project developer for those costs above the approved bid amount determined to be reasonable. PG&E concurrently served supporting prepared testimony to initiate and enable the reasonableness review requested in the application.

On May 12, 2023, the Public Advocates Office at the Commission (Cal Advocates) filed a protest to the application, to which PG&E filed a reply on May 22, 2023.

A prehearing conference (PHC) was held on June 5, 2023. At the PHC, the assigned Administrative Law Judge (ALJ) directed PG&E and Cal Advocates to file a joint statement outlining a proposed process and schedule for review of the Project costs. PG&E and Cal Advocates filed the joint statement on June 16, 2023.

On July 27, 2023, the assigned Commissioner issued the Assigned Commissioner's Scoping Memo and Ruling (Scoping Memo) setting forth the scope and schedule for the proceeding. The Scoping Memo determined that the sole issue to be determined in this proceeding is whether the costs incurred by PG&E in creating the Project were reasonable.[15] At the time of the issuance of the Scoping Memo, no issues of material disputed fact were known, and therefore,

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14 MEW Opening Brief (OB) at 5.

15 Scoping Memo at 2.

the Scoping Memo determined that no evidentiary hearing is needed.[16] The Scoping Memo noted that discovery may lead to the discovery of disputed facts, and therefore, set a deadline of October 24, 2023, for parties to file any motion requesting an evidentiary hearing.[17]

On August 28, 2023, the assigned Commissioner issued an Amended Scoping Memo and Ruling, which corrected the proceeding history but otherwise confirmed the Scoping Memo issued on July 27, 2023.

Cal Advocates served testimony on September 12, 2023, arguing that PG&E failed to present sufficient information to conduct a reasonableness review and recommending disallowance of all Project costs above the initial bid amount approved by the Selection Committee.

On September 22, 2023, MEW filed a motion for party status. MEW concurrently filed a motion for an extension of the proceeding schedule to provide MEW with an additional two weeks to provide rebuttal testimony. On September 27, 2023, the ALJ issued a ruling granting both of MEW's motions.

Consistent with the September 27, 2023 ruling, MEW filed comments on October 24, 2023, providing additional details about the Project. With permission of the ALJ, MEW late-filed Appendix C to its October 24, 2023 comments (MEW Appendix C) on October 27, 2023.[18]

On November 7, 2023, Cal Advocates filed a motion for an order requiring MEW to refile MEW Appendix C to delete duplicative documents and to include an index that links to each of the documents in MEW Appendix C. On the same date, Cal Advocates also filed a motion requesting amendment of the procedural

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16 *Ibid.*

17 *Ibid.*

18 MEW Appendix C was admitted into the record as Exhibit MEW-23.

schedule to provide Cal Advocates with additional time to review MEW's comments and to conduct additional discovery, if necessary. On November 16, 2023, MEW filed a response opposing Cal Advocates' motion to amend the procedural schedule.

On November 17, 2023, the assigned ALJ issued a ruling granting Cal Advocates' motion to require MEW to refile MEW Appendix C and revising the schedule for briefs. The ruling otherwise denied Cal Advocates' motion to amend the procedural schedule, including Cal Advocates' request for an extension of time within which to request hearings.

On December 1, 2023, MEW refiled MEW Appendix C pursuant to the November 17, 2023 ruling.

PG&E, MEW, and Cal Advocates filed opening briefs on January 12, 2024, and reply briefs on January 26, 2024.

Motions to admit evidence into the evidentiary record were filed on January 12, 2024 by PG&E, and on January 30, 2024 by Cal Advocates and MEW. MEW also filed a motion to admit Exhibit MEW-013 under seal because it contains confidential information.

On February 2, 2024, MEW filed a motion to strike portions of Cal Advocates' reply brief, to which Cal Advocates filed a response on February 20, 2024.[19]

On April 29, 2024, the assigned ALJ issued a ruling directing Cal Advocates to take additional actions if it seeks confidential treatment of certain exhibits.

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[19] To the extent briefs cite to new evidence that is not in the record, we decline to consider this new evidence per Rule 13.12 of the Commission's Rules of Practice and Procedure.

On May 13, 2024, Cal Advocates served revised exhibits, which were revised to reflect updated confidentiality designations, and filed an amended motion to accept evidence into the evidentiary record and a motion to seal the confidential versions of its exhibits.

On July 3, 2024, the assigned ALJ issued a ruling granting the motions by PG&E, MEW, and Cal Advocates to admit exhibits into evidence and to admit confidential exhibits under seal.

1.3. Submission Date

This matter was submitted on May 13, 2024 upon the filing of the amended motion to admit evidence into the evidentiary record by Cal Advocates.

2. Issues Before the Commission

Pursuant to the Scoping Memo and Amended Scoping Memo, the sole issue to be determined in this proceeding is whether the costs incurred by PG&E in creating the Project were reasonable.[20]

3. Burden of Proof and Evidentiary Standard

Public Utilities Code Section 451 requires that "all charges demanded or received by any public utility … shall be just and reasonable." As the applicant, PG&E bears the burden of establishing the reasonableness of all aspects of its application.[21] In this case, since MEW developed the Project and the application requests recovery of costs incurred by MEW, MEW was in the best position to provide factual evidence and testimony to inform the Commission and help the

[20] The costs at issue in this proceeding are costs recorded in the DBPBA, which record biomethane producer-owned pipeline infrastructure costs for potential recovery by the biomethane producer. Utility-owned infrastructure costs are recorded in a separate memorandum account, the Dairy Biomethane Pilots Memorandum Account (DPBMA), Gas Preliminary Statement EH, and PG&E intends to present the recorded balance of this account in a future rate case. (Ex. PGE-01 at 3-1.)

[21] D.09-03-025 at 8; D.06-05-016 at 7.

applicant, PG&E, establish that the costs requested in the application are reasonable. Therefore, we accept and consider MEW's showing as part of the applicant's showing.

The Commission has held that the standard of proof the applicant must meet in rate cases is that of a preponderance of the evidence.[22] Preponderance of the evidence usually is defined "in terms of probability of truth, *e.g.*, 'such evidence as, when weighed with that opposed to it, has more convincing force and the greater probability of truth.'"[23]

In conducting the reasonableness review required by D.17-12-004, the Commission uses the established prudent manager standard to evaluate whether the requested costs are just and reasonable. The Commission has described this standard as follows:

> The term "reasonable and prudent" means that at a particular time any of the practices, methods, and acts engaged in by a utility follows the exercise of reasonable judgment in light of facts known or which should have been known at the time the decision was made. The act or decision is expected by the utility to accomplish the desired result at the lowest reasonable cost consistent with good utility practices. Good utility practices are based upon cost-effectiveness, reliability, safety, and expedition.[24]

The prudent manager standard is not a standard of perfection.[25] The Commission has explained that:

> A reasonable and prudent act is not limited to the optimum practice, method, or act to the exclusion of all others, but

[22] D.19-05-020 at 7; D.15-11-021 at 8-9; D.14-08-032 at 17.

[23] D.08-12-058 at 19, citing Witkin, Calif. Evidence, 4th Edition, Vol. 1 at 184.

[24] D.17-11-033 at 10 quoting D.87-06-021.

[25] D.14-06-007 at 36.

> rather encompasses a spectrum of possible practices, methods, or acts consistent with the utility system needs, the interest of the ratepayers and the requirements of governmental agencies of competent jurisdiction.[26]

Cal Advocates argues that, in this case, the Commission has added a more stringent criterion to the applicant's general burden of proof by requiring PG&E to show that the costs incurred above the bid amount were unforeseeable as well as reasonable.[27] Cal Advocates points to the following language in D.17-12-004 in support of its position:

> Any expenditure above the authorized amount is subject to a reasonableness review in the appropriate transmission rate case. This allows for some flexibility for unforeseen costs such as [California Environmental Quality Act (CEQA)] permitting process. Any expenditures below the authorized amount will be credited to ratepayers.[28]

D.17-12-004 provides that costs above the authorized amount will be subject to a reasonableness review. D.17-12-004 points out that the reasonableness review will provide some flexibility to consider unforeseen costs such as those arising from the CEQA permitting process. However, it does not necessarily impose the requirement that the costs must have been unforeseen in order to be recoverable. The question of whether the costs were unforeseen may factor into the Commission's reasonableness review. However, it is not necessarily determinative of whether the costs are reasonable and may be recovered from ratepayers.

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[26] D.02-08-064 at 6 quoting D.87-06-021.

[27] Cal Advocates OB at 9.

[28] *Ibid*. quoting D.17-12-004, Appendix A at 12.

4. Reasonableness Review of Requested Costs

For purposes of the SB 1383 dairy biomethane pilot projects, the Commission determined that costs for the following pipeline infrastructure are eligible to be recovered from utility ratepayers: (1) Biogas collection lines and facilities for treatment of biogas before it enters the collection lines; (2) Pipeline lateral that delivers biogas from a biogas conditioning facility to the point of receipt; (3) Pipeline extension that delivers biogas to the utility's existing gas pipeline system; and (4) Point of receipt, where the utility receives gas that has been upgraded at a conditioning facility.[29]

The following table shows the proposed budget for each budget line submitted by MEW and approved by the Selection Committee, the costs recorded for each budget line claimed for reimbursement, and resulting overages:[30]

[29] D.17-12-004, Appendix A at 1 and 9-11.

[30] The totals for the proposed budgets, recorded costs, and overages were provided in Ex. PGE-01 at 2-3, Table 2-1. MEW subsequently explained that the totals set forth in Exhibit PGE-01 mistakenly included $101,177.38 for feed compressors which should not have been included among costs submitted for reimbursement and clarified that the total overage sought for reimbursement was $8,517,000.62. (MEW OB at 5, 33.)

Budget Line	Proposed Budget	Recorded Costs	Overage
2a. Biogas Treatment	$3,123,808.00	$5,543,762.15	$2,419,954.15
2b. Collection Lines	$4,301,587.00	$8,275,390.25	$3,973,803.25
4. Pipeline Lateral and Compression	$1,229,900.00	$1,589,260.00	$359,360.00
5. Pipeline Extension	$1,528,560.00	$3,292,443.06	$1,763,883.06
Total	$10,183,855.00	$18,700,855.46	$8,517,000.46

4.1. Biogas Treatment Costs

MEW's budget for biogas treatment approved by the Selection Committee was $3,123,808. MEW is seeking recovery of recorded costs of $5,543,762, a cost overrun of $2,419,954.[31] According to MEW, the overages occurred for two categories of equipment within Biogas Treatment Budget Line 2a: (1) howitzers, and (2) oxygen injection and biogas blowers.[32]

MEW contends that overruns in both these categories were reasonable as they were necessary to comply with pilot project solicitation requirements to remove Hydrogen Sulfide from the biogas before transporting it off of the dairies and to the centralized cleanup system.[33] According to MEW, the Project employed a never-before-utilized technology, and the costs exceeded the original budget as the design became more certain and other costs (such as steel) rose excessively.[34]

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[31] *Id.* at 22. MEW's total recorded costs were $5,560,849 but MEW is only seeking recovery of $5,543,762 since the remainder was not included in its initial application to the Selection Committee and is ineligible for reimbursement. (*Id.* at 22, fn. 61.)

[32] *Id.* at 22.

[33] *Ibid.*

[34] *Ibid.*

4.1.1. Howitzers

4.1.1.1. Design Changes

MEW states that a new prototype for howitzer gas scrubbing Hydrogen Sulfide removal vessels was developed during the 110-day pilot project solicitation window but required revisions to improve functionality and enhance safety.[35] These changes included better moisture removal, improved (safer) operator access, improved corrosion resistance, and other improvements to the design.[36] According to MEW, the total cost increase due to these design changes was $248,036.[37]

Cal Advocates argues that MEW has failed to explain why design changes to the howitzers were necessary and why the howitzer design proposed in its pilot application was unable to perform the necessary Hydrogen Sulfide removal.[38] Cal Advocates notes that Hydrogen Sulfide removal was a central component of the pilot projects from the outset and that MEW represented to the Selection Committee that it could meet the Hydrogen Sulfide requirements using "highly commercialized" media with "thousands of installations worldwide" due to their "high reliability."[39] In scoring MEW's proposed project, the Selection Committee stated that the technology selected "is proven to be reliable and robust and is currently in use today in nearly all California digester

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[35] *Id.* at 23.

[36] *Ibid.*

[37] Ex. MEW-22 at 16, Table 1. Elsewhere, MEW provides a different figure stating that the total cost increase due to the design changes was $308,211. (*Id*. at 14; MEW OB at 23.) The overall amount of $2,419,954 sought for biogas treatment costs appears to incorporate an overage of $248,036 for howitzer design changes.

[38] Cal Advocates Reply Brief (RB) at 10-12.

[39] *Id.* at 10-11.

applications" and "is essentially the industry standard at this point."[40] Cal Advocates argues that it is reasonable to conclude that the Selection Committee would have scored the Project differently had MEW proposed the Project utilizing experimental technology.

Applicant, supported by MEW, failed to meet the burden to demonstrate the reasonableness of the howitzer design changes, which resulted in cost increases above the original bid amount. As noted by Cal Advocates, MEW's representation, supporting the applicant and application in this proceeding, was that the howitzers for Hydrogen Sulfide removal were a "new prototype." This is at odds with information MEW presented to the Selection Committee in its pilot project application. In its pilot project application, MEW stated its proposed Hydrogen Sulfide removal systems are "highly commercialized with thousands of installations worldwide."[41] MEW also represented that: "Unlike some systems, the design avoids enclosed spaces for operators, corrosive chemicals, or unstable treatment protocols. We have selected these common media types systems due to their high reliability…."[42]

Applicant and MEW failed to present adequate explanation nor present justifications for why changes to the original design were warranted, especially considering MEW's prior representations regarding the technology in its pilot application. Therefore, the Commission finds that PG&E and MEW have failed to demonstrate that the $248,036 overage attributed to howitzer design changes was reasonable and should be recovered from ratepayers.

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[40] Ex. CalAdv-03, Attachment 4, SB 1383 Dairy Biomethane Pilot Project Selection Committee Score Card Summary, at 42.

[41] Ex. MEW-23 at 26.

[42] *Ibid.*

4.1.1.2. Steel Prices

MEW additionally attributes howitzer cost overages to an increase in steel prices. MEW contends that howitzer scrubbers are made almost entirely of steel and that pandemic-related supply chain shortages and materials inflation caused the price of the howitzers to increase by a total of $208,530.[43]

MEW provides articles supporting that COVID-19 pandemic-related supply chain issues caused increases in the price of steel and that steel prices dramatically increased, in particular during the time period between December 2020 and December 2021.[44] MEW asserts it prudently ordered steel as early as possible and thereby avoided the worst prices.[45] However, MEW does not provide information regarding when it purchased the steel for the howitzers or the actual price paid for the steel.

As noted by Cal Advocates, the invoices MEW provided for the biogas howitzers show MEW invoiced Merced Pipeline LLC and each dairy at which a howitzer was installed, one fixed fee for each howitzer without delineating any material costs.[46] Although the date MEW purchased the steel for the howitzers is not in the record, the invoices for the howitzers are dated December 1, 2020, which suggests MEW's costs for the howitzers would not have been impacted by the dramatic increase in steel prices that occurred between December 2020 and December 2021.

Based on the evidence presented by the applicant and MEW, which does not include evidence on the timing and costs for the purchase of the steel, the

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[43] MEW OB at 24.

[44] Ex. MEW-23 at 1356, 1366.

[45] MEW OB at 23-24.

[46] Cal Advocates RB at 24-25 citing Ex. MEW-23 at 1074-1080.

Commission is unable to discern the extent to which pandemic-related supply chain shortages and materials inflation impacted the cost of the steel used for the howitzers. Therefore, the Commission finds that the $208,530 overage was not reasonable and should not be recovered from ratepayers.

4.1.2. Oxygen Injection and Biogas Blowers

4.1.2.1. Design Changes

MEW calculates a cost overrun of $1,049,600 due to design finalization and improvements for oxygen injection and biogas blower system technology installed at all 8 participating dairies.[47] MEW states it completed a similar project in Tulare County after submitting its pilot project application.[48] MEW contends it incorporated lessons learned from the Tulare County project to make design adjustments to the Project equipment to ensure optimal long-term operation of the equipment to meet the pilot program's goals, which lead to increased costs.[49] These changes included: engineering adjustments to equipment sizing, additional backflow prevention devices, improved supervisory control and data acquisition (SCADA) controls, and additional networking infrastructure.[50] To substantiate these increased costs, MEW presents invoices from Electric Innovations, which designed the biogas treatment facilities for the Merced Pipeline.

Cal Advocates argues that MEW provides little justification for why the design changes to the oxygen injection and biogas blower system were necessary

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[47] MEW OB at 26.

[48] *Id.* at 25.

[49] *Ibid.*

[50] *Ibid.*

or why they were not included in the original design.[51] Cal Advocates also argues that MEW's claim that it incorporated lessons learned from its Tulare County project while finalizing its designs is confusing since MEW informed Cal Advocates that it did not deploy any oxygen injection equipment in the Tulare County project.[52]

With the exception of the backflow prevention devices, applicant and MEW failed to adequately demonstrate the reasonableness of the design changes, which resulted in increased costs and also failed to adequately justify why these design changes or improvements served "to accomplish the desired result at the lowest reasonable cost consistent with good utility practices." With regard to the backflow prevention devices, these costs are adequately substantiated and reasonable to ensure site safety. Therefore, $69,650 associated with installation of the backflow prevention devices are reasonable.[53] PG&E and MEW failed to demonstrate the reasonableness of the remainder of the cost overrun attributed to design changes to the oxygen injection and biogas blower system.

4.1.2.2. Inflation

MEW estimates that pandemic inflation caused costs for biogas and oxygen injection equipment to be $913,788 higher than originally estimated.[54] MEW bases its estimate on the St. Louis Federal Reserve Bank's calculations that

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[51] Cal Advocates RB at 12.

[52] *Id.* at 12 citing Ex. CalAdv-03, MEW Response to Data Request CalAdvocates_001-Q009d (received December 7, 2023).

[53] Ex. MEW-23 at 1133-1134. We approve $9,950 per device installed at De Jager Farms, Five H, Hogendam, Merinho, Red Rock, Rockshar Diary, and Vista Verde. Although the invoice indicates a device was also installed at Vander Woude, the invoice indicates these costs are "ineligible," and the costs were not included by MEW in its itemized costs. (*Id*. at 1133; Ex. MEW-22, Appendix B, line 179.)

[54] Ex. MEW-22 at 18-19.

manufacturing equipment prices rose by 23.7% during the course of the pandemic.[55] MEW argues the additional costs were necessary to complete the Project as intended and were reasonable as MEW paid market prices.[56]

Cal Advocates argues that the invoices related to the oxygen injection and blowers fail to delineate material costs, let alone material cost overruns, and therefore, make it impossible to verify MEW's claims that inflation increased oxygen injection and blower costs.[57] Cal Advocates also argues that to the extent inflation did impact the cost of oxygen injection and blowers, this impact was likely limited to 60% of the invoiced amount since "biogas equipment" costs represent approximately 60% of the overall biogas treatment costs.[58]

Cal Advocates also disputes MEW's claims that the equipment costs would have risen 23.7% due to inflation. Cal Advocates notes that while the Federal Reserve data shows a 25% increase overall between 2020 and 2023, MEW paid for the oxygen injection and biogas blower equipment in installments between June 2020 and March 2021.[59] According to Cal Advocates, the Federal Reserve index shows only a 3.4% price increase between June 2018 and June 2020, and a 5.8 % increase between June 2018 and March 2021.
Cal Advocates further argues that to the extent there was an increase in material costs, the increase should have been covered by MEW's 10% contingency.[60]

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[55] *Id.* at 18 citing https://effifinance.com/how-have-equipment-prices-changed-since-pandemic/.

[56] Ex. MEW-22 at 18-19.

[57] Cal Advocates RB at 24 and 25.

[58] *Id.* at 25.

[59] *Ibid.* Cal Advocates excludes invoices from Electric Innovations for Information Technology (IT) equipment that would not be subject to inflation of materials prices.

[60] *Id.* at 27.

Based on the foregoing evidence, applicant and MEW failed to adequately demonstrate the reasonableness of the estimate of a 23.7% increase in material costs due to inflation. According to the data in the EFFI Finance article cited by MEW, the Producer Price Index (PPI) for manufacturing equipment increased by 23.7% between January 2020 and March 2023.[61] The invoices from Electric Innovations for the oxygen injection and biogas blower equipment are between the time period of July 2020 and March 2021,[62] and therefore, costs for this equipment would not have been impacted by any inflation that occurred after March 2021. Data in the EEFI Finance article shows that between January 2020 and March 2021, the PPI rose less than 5%.[63] To the extent inflation resulted in an increase in equipment costs of less than 5%, we agree with Cal Advocates that this increase should have been covered by the 10% contingency authorized in the original budget. Applicant and MEW fail to adequately justify additional recovery from ratepayers for these costs.

4.2. Collection Line Costs

MEW's budget for collection line costs approved by the Selection Committee was $4,301,587. MEW is seeking recovery of recorded costs of $8,275,390 for the collection lines to the 8 dairies, a cost overrun of $3,973,803.[64]

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[61] https://effifinance.com/how-have-equipment-prices-changed-since-pandemic/ cited at Ex. MEW-22 at 18.

[62] Ex. MEW-23 at 1051-1059, 1073, 1112-1144, 1253-1265. Additional invoices from Electric Innovations after this time period related to biogas treatment are for SCADA and IT Network equipment, which would not have been impacted by inflation for manufacturing equipment, and for automated valves (as discussed above, the actual recorded costs for the automated valves are authorized for recovery).

[63] https://effifinance.com/how-have-equipment-prices-changed-since-pandemic/ cited at Ex. MEW-22 at 18.

[64] MEW OB at 27-28. MEW also built collection lines to a ninth dairy, the Double Diamond Dairy, which agreed to participate in the dairy cluster after MEW had already submitted its

According to MEW, four primary factors led to MEW's cost overages for collection lines: design finalizations and improvements, CEQA and other agency requirements, project labor agreement/prevailing wage impacts, and pandemic inflation.[65]

4.2.1. Route Changes

MEW states it attempted to mitigate costs by utilizing private easements in planning the route for collection lines.[66] After the budget was approved by the Selection Committee, MEW learned that a few private easements could not be obtained and that rerouting the pipeline would be necessary.[67] MEW calculates the rerouting resulted in the installation of an additional 7,756 feet of pipeline, which at $57.50 per linear foot, resulted in additional costs of $445,970.[68] MEW argues this additional pipeline was reasonable given that the final pipeline route was installed 90% within the original proposed route, and the length was 92% accurate to the original proposed route.[69] MEW argues these accuracy rates are very good given the information available at the time of the application, the complicated technical and permitting design, and the uncertainties of construction.

budget to the Selection Committee. (Ex. MEW-22 at 20.) MEW understands that costs associated with the ninth dairy are not eligible for reimbursement under the pilot program, and therefore, calculated and excluded these costs (approximately 30.3% of the total costs) from its reimbursement request. (*Id.* at 20-21.)

[65] MEW OB at 28.

[66] *Ibid.*

[67] *Ibid.*

[68] *Ibid.*

[69] *Ibid.* MEW installed a total of 97,654 feet of collection pipeline to the first 8 dairies. (Ex. MEW-22 at 23.)

Cal Advocates notes that in its pilot application, MEW represented that it had control of the pipeline route, stating that: "[a]ll of the necessary land is controlled by dairy farms and so no third party or public easements are required to complete the pipeline, except where crossing county roads."[70] Cal Advocates argues that MEW knew about local landowners' opposition and/or resistance but did not inform the Selection Committee.[71] Cal Advocates argues it was foreseeable that the project route proposed to the Selection Committee was infeasible and did not meet the threshold for reasonableness.[72]

The phrasing of MEW's statement[73] implies, but does not state, that because the land is controlled by dairy farms, easements were already in hand. It is clear that communications, which took place prior to when the pilot application was submitted, demonstrate that MEW employees were aware that the proposed route would go through private land and that the landowners' consent would still be required to complete the route as proposed.[74] However, we do not find it likely that this information would have materially impacted the scoring and selection of this project by the Selection Committee.[75] We also do not

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[70] Cal Advocates RB at 13 citing Ex. MEW-23 at 25.

[71] Cal Advocates RB at 13-14.

[72] *Id.* at 14.

[73] Ex. MEW-23 at 25.

[74] *See* Ex. MEW-23 at 25; Ex. CalAdv-02C-R, Appendix F Revised, PG&E Response to Data Request CalAdvocates_001_Q011 Atch01CONF.

[75] *See* Ex. CalAdv-03, Attachment 4, SB 1383 Dairy Biomethane Pilot Project Selection Committee Score Card Summary, at 9 and 52-53. The proposed pilot projects were scored on various criteria with a possible total score of 100 points. The Project scored 14 out of a possible 15 points for the criterion of project readiness and implementation and there were factors other than the easements that accounted for this score. The Project's overall score was 9 points higher than the next highest scoring project and even if the Project had scored slightly lower on project readiness and implementation, this likely would not have impacted the overall ranking of the projects.

find the rerouting that occurred materially impacted the scope of the project or was unreasonable. The record reflects MEW made concerted efforts to obtain landowners' consent and made reasonable adjustments to the route when landowners did not agree to the easements over their private property.[76]

Although the decision to reroute was reasonable, MEW's request to recover all of $445,970 for this rerouting is unreasonable. MEW calculates that the cost to install the additional pipeline was $57.50 per linear foot. However, this cost takes into account the installation of larger diameter pipe compared to the pipes originally included in MEW's pilot application.[77] As discussed further below, we do not find that the reasonableness of using larger pipeline diameter sizes for the project has been demonstrated and find that costs associated with use of the larger pipeline should not be recovered from ratepayers. MEW estimates that the use of larger diameter pipeline materials resulted in additional costs of $4.50 per linear foot.[78] We deduct this additional cost to find costs of $411,068 (7,756 feet of pipeline at $53 per linear foot) for the reroute to be reasonable.

4.2.2. Pipeline Diameter Changes

MEW's budget approved by the Selection Committee included budgets for 4-inch, 6-inch, 8-inch, and 10-inch pipes. Ultimately, MEW built the project using 4-inch, 8-inch, 12-inch, and 18-inch pipes. MEW contends that after engineering was completed, the larger pipe sizes were necessary to ensure the pipeline would be operated in the 3-15 pounds per square inch gauge pressure range, in order to

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[76] *See* Ex. CalAdv-02C-R, Appendix F, PG&E Response to Data Request CalAdvocates_001_Q011 Atch01CONF.

[77] Ex. MEW-22 at 23 and 25.

[78] *Id.* at 25.

ensure the highest level of safety, operational efficiency, and project longevity.[79] According to MEW, larger pipelines help keep pressure loss down, enabling operation of blower equipment at lower outlet pressures, thus reducing energy usage and risk of summertime overheats, and also provide project flexibility to allow other dairies to participate in future expansions.[80] MEW estimates $404,000 in overages due to the larger pipeline materials.[81]

Cal Advocates notes that MEW represented to the Selection Committee that its original design had more than sufficient capacity to support the original eight diaries, as well as expansion capacity to support additional dairy participation.[82] Cal Advocates argues that MEW failed to provide a credible explanation for its decision to significantly increase the project's pipe sizes and that ratepayers should not be held responsible for a decision that will financially benefit MEW with no corresponding benefit to ratepayers.[83]

MEW's claims regarding the need for larger pipe sizes are inadequately substantiated. Although MEW claims that the need for the larger pipes was based on engineering analysis, MEW did not provide this engineering analysis or further explanation.[84] MEW did not provide any analysis explaining why the originally budgeted pipes were inadequate, especially in light of MEW's representations in its pilot application that the originally budgeted pipe sizes

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79 *Id.* at 24.

80 *Ibid.*

81 *Id.* at 25.

82 Cal Advocates RB at 8-9 citing Ex. MEW-23 at 40.

83 Cal Advocates RB at 9-10.

84 *See* PG&E Response to Data Request CalAdvocates_003_Q002, PG&E Response to Data Request CalAdvocates_003_Q007 in Ex. CalAdv-02-R, Appendix C and PG&E Response to Data Request CalAdvocates_001_Q014 in Ex. CalAdv-02-R, Appendix F Revised.

would provide more than sufficient capacity to support the original eight diaries, as well as expansion capacity.[85] There is insufficient information in the record to support a finding that the decision to use larger pipe sizes was prudent, and therefore, the Commission does not find that it is reasonable for ratepayers to pay for the additional costs associated with the use of the larger pipe sizes.

4.2.3. Labor Agreement and Prevailing Wage

Based on MEW's prior experience building digesters with non-union labor, coupled with the solicitation's lack of any prevailing wage requirement, MEW's original budget assumed that the project would be built with non-union labor using standard wages. MEW contends that after submitting the pilot project application, law firms associated with a consortium of unions proposed a Project Labor Agreement (PLA), and ultimately, union cooperation became necessary in order to proceed with and complete the Project.[86] MEW estimates the Project experienced approximately 23% higher costs due to the need to pay prevailing wage rates for total increased costs of $1,059,325.[87] MEW argues there were significant benefits to constructing under the PLA, including more training leading to an increase in a qualified workforce in the California Central Valley to work on these projects, increased construction safety procedures, more

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[85] Ex. MEW-23 at 40 and 225.

[86] Ex. MEW-22 at 26-27.

[87] To arrive at this estimate, MEW: (1) started with what it contends is its reimbursable pipeline construction recorded costs of $5,637,882; (2) subtracted $1,034,732 for materials, leaving $4,603,150 of non-material costs; (3) assumed that about two-thirds of the $4,603,150 was for labor costs such that the final labor costs were $3,086,741; and (4) assumed that union wage prices were 52.5% higher than non-union wages, and therefore, divided $3,086,741 by 1.525 to arrive at $2,024,093 as the non-prevailing wage portion and $1,059,325 as the increase due to prevailing wage. (Ex. MEW-20 at 3.)

experienced staff following the environmental mitigation procedures, and higher paying jobs for the local workforce.[88]

Cal Advocates argues that MEW failed to provide any documentation to show that local unions, or law firms representing the local unions, contacted MEW and demanded that MEW sign the PLA, or that MEW tried to alleviate the situation.[89] Cal Advocates further argues that MEW failed to demonstrate that its decision to execute the PLA was reasonable and that ratepayers should be burdened with the alleged extra costs.[90] Cal Advocates also contends that MEW failed to track and verify its PLA-related costs, as required by the Cost Recovery Framework adopted in D.17-12-004, which requires: "[w]ithin each component, costs should be itemized such that the CPUC can understand the exact breakdown of labor, Operations and Maintenance, and capital expenditures for each job activity and each installed piece of equipment."[91]

MEW's decision to use standard wages in its pilot application was reasonable. MEW had previously used non-union labor for similar projects, and there is no evidence that in 2018 when it submitted its pilot application, MEW was aware that union labor may be required.[92] The record reflects that MEW

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[88] Ex. PGE-01 at 2-6.

[89] Cal Advocates RB at 15-16.

[90] *Id*. at 16.

[91] *Id*. at 17 quoting D.17-12-004, Appendix A, at 11-12.

[92] Cal Advocates argues it is unclear how MEW can attest to its experience doing California construction with union and-non-union labor in a data request response when it also claimed that it had never previously worked with or been contacted by unions during its prior work in the industry. (Cal Advocates RB at 17.) However, the data request response in question is dated December 7, 2023, which is after MEW's work on the Project with union labor, and therefore, does not demonstrate that MEW worked with union labor prior to its submission of the pilot application. (Ex. CalAdv-03, Attachment 1, MEW Response to Data Request Cal Advocates_001-Q003b.)

was made aware of the potential need for the use of union labor in February 2019, when the principal environmental consultant retained by MEW for another pipeline project emailed MEW of the potential significant delays that may result to the project if a PLA is not signed.[93] Given the circumstances described by MEW, MEW's decision to use union contractors for the Project was reasonable.

We also find that the use of union labor at prevailing wage rates would have resulted in an increase in costs compared to the use of non-union labor at standard wage rates.[94] MEW explains that the union contractors did not provide a breakdown of labor versus equipment costs, and therefore, MEW estimated the increase in labor costs based on a study conducted by researchers from the University of California, Berkeley.[95] Given that the contractors did not itemize this information, the use of an estimate was reasonable.[96]

However, MEW's methodology for calculating the increase due to the use of union labor is not adequately substantiated. For example, the reasonableness of the recorded costs has not been demonstrated, and therefore, the use of the actual recorded costs as a starting point for estimating the increase was

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[93] Ex. CalAdv-02-R, Appendix F Revised, PG&E Responses to Data Request CalAdvocates_001_Q013 Atch04.

[94] *See* Ex. CalAdv-02C-R, Appendix F Revised, PG&E Responses to Data Request CalAdvocates_001_Q013 Atch01; Ex. CalAdv-02-R, Appendix F Revised, PG&E Responses to Data Request CalAdvocates_001_Q013 Atch02; Ex. MEW-23 at 1373.

[95] Ex. MEW-20 at 2-3; Ex. MEW-22 at 27.

[96] Contrary to Cal Advocates' assertion, we do not find such an approach to be inconsistent with the Cost Recovery Framework adopted in D.17-12-004. The excerpt from D.17-12-004 cited by Cal Advocates regarding itemization of costs relates to requirements for the pilot application.

unreasonable. Further, MEW's assumption that labor costs accounted for two-thirds of non-material costs is also not adequately explained.

The study cited by MEW indicates that in California cities other than major cities (such as Bakersfield, Fresno, etc.), the average labor share of construction costs is 43.3% and average prevailing wage differential is 53.0%.[97] Given that the Project did not occur in a major city, the use of these estimates was reasonable. Applying these estimates to the original collection line budget of $4,301,587 results in a labor share of $1,862,587. Applying a prevailing wage differential of 53.0% to the labor share results in increased labor costs of $987,171.[98] This is a reasonable estimate of the increase in project costs attributable to the use of union labor.

4.2.4. Surveys

Based on the single biogas pipeline project MEW had partially completed in 2018, MEW estimated in 2018 that only $24,000 would need to be spent on surveys. However, MEW was required to provide substantially more in-depth surveys by banks and federal agencies in order to obtain financing resulting in an overage of $54,763.[99]

Cal Advocates notes that MEW told the Selection Committee that the Project would be fully funded through an equity partnership with Generate Capital.[100] Cal Advocates contends that MEW subsequently decided to change its financing plan to secure the financing that was the most economical to MEW,

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[97] Ex. MEW-23 at 1373.

[98] This is also in line with the estimate in the study that the average increase in project cost in cities other than major cities due to prevailing wage requirements is approximately 23%. (*Ibid.*) A 23% increase to the original collection line budget yields an increase of $989,365.

[99] Ex. MEW-22 at 28.

[100] Cal Advocates RB at 21-22 citing Ex. MEW-23 at 38.

not ratepayers.[101] Cal Advocates argues ratepayers should not be required to subsidize a business decision that MEW made to benefit itself and that departs from the financing agreement represented to the Selection Committee.[102]

MEW ultimately determined that Live Oak Bank's financing was a better fit for its project goals and accordingly changed the financing plan from the one presented in its pilot application.[103] However, MEW does not provide any further details regarding why the change in financing plan was more beneficial.

Based on the foregoing evidence, applicant and MEW failed to adequately demonstrate the reasonableness of the decision to change the financing plan or that the costs for the additional surveys required for the changed financing plan, such that those costs should be recovered from ratepayers.

4.2.5. Engineering

Although MEW performed engineering for all 9 digesters that were constructed, only 8 of those digesters were eligible for reimbursement under the pilot program. MEW therefore reduced the amount of reimbursement requested for engineering costs by 30.3% to remove the ninth dairy, resulting in a reduction of $78,873 in requested reimbursement.[104]

We agree that costs related to the ninth dairy should not be included in the reimbursement request.

4.2.6. Potholing

On MEW's previous projects using non-union contractors, potholing was almost entirely handled by the pipeline installation contractor and MEW

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[101] Cal Advocates RB at 22.

[102] *Id.* at 23.

[103] Ex. MEW-21 at 6.

[104] Ex. MEW-22 at 29.

originally budgeted $34,000 for unexpected potholing that might be required outside of the installation contractor's scope.[105] However, MEW found that the union contractors working under the PLA had different expectations as to their scope of work. In situations where it was necessary to locate potential existing utility lines and privately owned underground irrigation lines, the union contractor refused to proceed with construction unless the line was first located by potholing and required the project to pay additional time and materials costs to perform the work, often requiring a different set of employees and equipment to do so. MEW estimates it incurred cost overruns of $441,051 for this item.[106] MEW contends it had no choice but to pay this amount in order to proceed with construction and comply with the PLA and all relevant engineer and safety standards.

We agree potholing would have been necessary to ensure safe construction of the Project. As discussed above, MEW's decision to use union contractors was reasonable. However, MEW's estimate of the cost overrun was not adequately justified. MEW states the actual cost of potholing was $642,098 and claims $475,051 (or 74%) of the actual cost as reimbursable.[107] Although invoices from the contractor substantiate the total cost for potholing was $642,098,[108] MEW does not explain why it would be appropriate to bill 74% of the potholing cost to the Project. Elsewhere, evidence in the record indicates 70% of the contractor's

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[105] *Id.* at 29. Potholing is the process of performing investigative digs or excavations to ensure no utility lines or privately owned lines are damaged during construction.

[106] *Id.* at 30 and 37, Table 4.

[107] Ex. MEW-22 at 37, Table 4.

[108] *See, e.g.,* Ex. MEW-23 at 1251.

invoices were billable to the Project.[109] Unlike the 74% estimate, there is justification for allocating approximately 70% of this cost to the Project since this is consistent with MEW's explanation that costs for the ninth dairy, which were approximately 30.3% of costs, are not eligible for reimbursement under the pilot program.[110] Based on the above, it reasonable to allocate 69.7% of the total potholing costs (or $ 447,542) to the Project. Subtracting the original budget of $34,000 results in an approved overage of $413,542.

4.2.7. Canal Crossing

For its original budget, MEW estimated four total canal crossings at $25,000 per crossing. MEW states that seven canal crossings were ultimately required in order to implement the final route that was approved by the private landowners and Merced County.[111] MEW also states that the cost for each canal crossing came out to $27,450 on average due to a Merced County requirement to bore under some of the crossings rather than using less expensive open-cutting as MEW had proposed to the Selection Committee.[112] According to MEW, the above resulted in a total budget increase of $84,359 for this item.[113]

The record evidence substantiates that there were 7 canal crossings on the segment of pipeline for the dairies included in the Project and that the jack and bore method was used for most of the canal crossings.[114] As discussed above,

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[109] Ex. PGE-02 at WP 2-2-2.

[110] Ex. MEW-22 at 20-21.

[111] *Id.* at 30.

[112] *Ibid.*

[113] *Ibid.*

[114] A map of the final route with location of the canal crossings can be found at Ex. CalAdv-02-R, Appendix F Revised, PG&E Responses to Data Request CalAdvocates_001_Q011 Atch03. The map also depicts additional canal crossings that go beyond the segment of pipeline

the route changes are reasonable. Therefore, we also find the additional canal crossings required to implement the final route, as well as the associated costs, including the costs to comply with requirements of Merced County, to be reasonable.

4.2.8. Street Crossing

For its original budget, MEW estimated nine total street crossings at $18,000 per crossing. MEW states it ultimately conducted ten additional street crossings for a total of 19 street crossings to implement the final route due to route changes and the fact that the Merced County CEQA process identified numerous swales and sensitive wetland areas that needed to be avoided during pipeline construction.[115] MEW further states that the average cost per crossing was $27,430 due to requirements by Merced County for several of the crossings to be bored under instead of the open cut crossings, which were the basis of MEW's original budget.[116] MEW contends the additional crossings required and increase in average cost resulted in a budget overage of $359,589 for street crossings.[117]

MEW fails to adequately substantiate the 19 street crossings. For example, MEW did not provide a map showing where the 19 street crossings are located. A map of the final route MEW provided indicates there were 15 total street

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for the dairies included in the Project chosen by the Selection Committee, the costs for which are not included in MEW's reimbursement request.

115 Ex. MEW-22 at 31.

116 *Ibid.*

117 *Id.* at 32. MEW also states that the budget overage was $359,859 but this appears to be a typo as the sum of the overages MEW attributes to the County requirements ($239,726) and design finalization changes ($119,863) totals $359,589. (*Ibid.; see also Id.* at 37, Table 4.)

crossings.[118] Furthermore, 6 of these street crossings (the crossings between Double Diamond Dairy and Vista Verde Dairy) go beyond the segment of pipeline for the dairies included in the Project chosen by the Selection Committee. Therefore, the record in this proceeding confirms that there were a total of 9 street crossings on the segment of pipeline for the dairies included in the Project.

The provided map and an invoice from the contractor substantiate that the jack and bore method was used for two crossings at Highway 59 at a cost of $50,000 per crossing.[119] However, the use of the jack and bore method at the other 7 crossings has not been substantiated. Based on the foregoing, the applicant and MEW failed to demonstrate the reasonableness of the claimed budget overage for the street crossings, with the exception of the two crossings at Highway 59. Based on the original budgeted amount of $18,000 per crossing, the overage for these two crossings totals $64,000, and this amount is reasonable for recovery from ratepayers.

In comments on the Proposed Decision, MEW argues that our finding on prevailing wages should be applied to our calculation regarding overages for crossings. However, because our calculation of the reasonable overage was based on actual invoiced costs of $50,000 per crossing, which should reflect the affect of

[118] A map of the final route with location of the road crossings can be found at Ex. CalAdv-02-R, Appendix F Revised, PG&E Responses to Data Request CalAdvocates_001_Q011 Atch03. This map was provided in a data request response to document the actual crossing locations and methods. (Ex. CalAdv-02-R, Appendix F Revised, PG&E Responses to Data Request CalAdvocates_001_Q011, Response to Question 011.e.2.) The data request response itself states there were 14 county road crossings. (*Ibid*.)

[119] Ex. CalAdv-02-R, Appendix F Revised, PG&E Responses to Data Request CalAdvocates_001_Q011 Atch03; Ex. MEW-23 at 1249.

prevailing wages, it is not clear why an additional prevailing wage adder would be warranted so we make no changes to our calculation.

4.2.9. Line Crossings

According to MEW, in all of MEW's prior pipeline installations, the contractor's fixed bid included installation of the biogas line over any other lines they might cross, unless the crossed line directly interfered with MEW's intended pipeline route. Based on this past experience, MEW's original budget did not include any costs for line crossings.[120]

MEW found that when the project switched to union contractors due to the PLA, there were extensive requirements every time any minor unexpected event occurred. MEW also found that the Merced County roadways were considerably more crowded with underground lines than the Tulare County project MEW had previously worked on. MEW contends these factors led to a total of $439,282 in costs for line crossings, which were all new costs that had not been previously budgeted.[121] MEW attributes $175,713 of this cost to design improvement and finalization (as the situation underground became known) and $263,569 to the PLA.[122]

The amount of preexisting underground lines in the project area was not under MEW's control and it was necessary for line crossing work to be conducted safely whenever these lines were found. Therefore, it is reasonable to authorize recovery for the costs associated with this work. However, MEW's claimed reimbursement for 74% of the total contractor cost of $593,750 for this

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[120] Ex. MEW-22 at 32.

[121] *Id.* at 32-33 and 37, Table 4.

[122] *Id.* at 33.

work was not adequately justified.[123] For the reasons discussed above with respect to potholing, it is reasonable to authorize 69.7% of these costs for a total of $413,844.

4.2.10. Traffic Control

Based on MEW's experience in Tulare County, MEW did not include traffic control costs in its original budget. However, nearly 2 years into project development, Merced County issued an Encroachment Agreement for building on county roads and levied a traffic control requirement on the Project. Furthermore, since the PLA stipulates that specialty contracts must do each type of work, a separate company was required to provide the traffic control. According to MEW, the above factors resulted in a total of $463,443 in additional costs for traffic control.[124] MEW estimates that 50% of the overrun was due to Merced County requirements and 50% was due to the impact of the PLA.[125]

It was necessary for MEW to comply with the traffic control requirements of Merced County to complete the Project. We also find MEW's use of a separate contractor for this work, as required by the PLA, reasonable. However, MEW's claimed reimbursement for 74% of the total contractor cost of $626,408 for this work was not adequately justified.[126] For the reasons discussed above with respect to potholing, it is reasonable to authorize 69.7% of these costs for a total of $436,606.

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[123] *Id.* at 37, Table 4, Ex. MEW-23 at 1251.

[124] Ex. MEW-22 at 34 and 37, Table 4.

[125] *Id.* at 35.

[126] *Id.* at 37, Table 4, Ex. MEW-23 at 1251.

4.2.11. Dust Control

Based on MEW's experience in Tulare County, MEW did not include dust control costs in its original budget. However, when the Project received its final Encroachment Agreement with Merced County, dust control was a requirement. As with the traffic control costs, the PLA required a dedicated contractor to perform the dust control work. This separate contractor resulted in $300,894 in additional costs being charged to the Project, which MEW allocates 50% due to Merced County requirements and 50% due to the PLA.[127]

As with traffic control requirements, it was necessary for MEW to comply with the dust control requirements of Merced County to complete the Project. We also find MEW's use of a separate contractor for this work, as required by the PLA, reasonable. However, MEW's claimed reimbursement for 74% of the total contractor cost of $406,700 for this work was not adequately justified.[128] For the reasons discussed above with respect to potholing, it reasonable to authorize 69.7% of these costs for a total of $283,470.

4.3. Pipeline Lateral and Compression Costs

MEW's budget approved by the Selection Committee estimated $1,229,900 for pipeline lateral and compression costs. MEW seeks reimbursement for total costs of $1,589,260, which is $359,360 over its initial budget. MEW states there were overages in the costs to install the compressor due to the following: $88,191 overage was due to the additional scope determined after the design was

[127] Ex. MEW-22 at 35 and 37, Table 4.

[128] *Id.* at 37, Table 4, Ex. MEW-23 at 1251.

finalized; $135,955 overage was due to pandemic-related inflation; and $148,146 overage was due to the PLA and increased labor costs.[129]

Cal Advocates argues that it is impossible to verify that the compressor installation overruns are actually for the compressor installation. Cal Advocate notes that MEW paid contractor TNT Industrial both to install the compressor, which is eligible for reimbursement, and to build its biogas conditioning plant, which is not eligible for reimbursement.[130] Cal Advocates notes that MEW estimates that 14% of the money paid to TNT Industrial, or $642,000, was for the compressor installation but does not provide any further explanation.[131] Cal Advocates argues that MEW's other arguments regarding additional scope, pandemic-related inflation, and increased labor costs are also unsubstantiated.[132]

MEW's claimed overage for the compressor installation is not adequately substantiated. MEW does not explain why it is appropriate to allocate 14% of the costs paid to TNT Industrial to the Project. However, based on the approved labor share and prevailing wage differential adopted in Section 4.2.3., it is appropriate to allocate a 53.0% prevailing wage differential to 43.3% of WEM's initial estimate for compressor installation. Applicant and MEW have demonstrated the reasonableness of allowing collection of $69,099 of the claimed overage from ratepayers.

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[129] Ex. MEW-22 at 38-39. The total overage of $359,360 includes offsetting credits to account for underspend for the purchase of the compressor itself and for electrical install of the compressor. (*Id.* at 40, Table 6.)

[130] Cal Advocates RB at 28.

[131] *Id.* at 29.

[132] *Id.* at 29-30.

4.4. Pipeline Extension Costs

MEW's budget approved by the Selection Committee estimated $1,528,560 for the pipeline extension portion of the Project. MEW's actual costs for the pipeline extension were $3,703,188.[133] MEW seeks reimbursement of $3,292,443 for pipeline extension costs, which is $1,763,883 over MEW's original budget.[134]

MEW's pilot application had proposed two options for interconnection: one location was a direct connection to a PG&E gas pipeline and the other location would connect to a privately-owned mid-market pipeline owned by CEE.[135] In selecting MEW's Project, the Selection Committee specified that the Project must interconnect through the CEE location. MEW subsequently reached out to Commission staff and the Selection Committee requesting flexibility to connect at whichever point was optimal based on lessons learned in the design phase but were instructed that connection had to occur at the CEE location.[136]

In developing its initial budget, MEW relied on information provided by CEE. Based on its experience with prior projects, CEE had provided a cost estimate of $400,000 per mile (approximately 3.8 miles at $400,000 per mile for a total budget of $1,528,540).[137] MEW did not anticipate there would be additional costs based, in part, on CEE's representations that the applicable PG&E rules

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133 Ex. MEW-22 at 41; MEW-23 at 1252.

134 Ex. MEW-22 at 50, Table 8. MEW also states it is seeking reimbursement of $3,325,934, or an amount $1,797,374 over the original budget. (*Id.* at 41.) However, there is no explanation provided for this alternative reimbursement request and adding this amount to the reimbursement requests for the other budget line items would not add up to a total budget overage of $8,517,000, which is the total overage sought for reimbursement in this proceeding. (MEW OB at 5.)

135 Ex. MEW-22 at 41.

136 *See* Ex. MEW-20 at 4-6 and Attachment 1.

137 Ex. MEW-22 at 43-44; Ex. MEW-23 at 1398.

made it possible to use the "existing PG&E interconnection(s) to accommodate Maas' biomethane development."[138] MEW and CEE conveyed to the Selection Committee that PG&E had determined that CEE's pipeline "can easily be converted into a biomethane delivery point."[139]

According to MEW, there are two primary reasons for the increased pipeline extension costs. First, PG&E ultimately required CEE to install substantial upgrades to the CEE-PG&E interconnection at Panoche Station. These upgrades included a new gas monitoring system and safety systems for introducing biomethane into the PG&E pipeline.[140] MEW estimates that approximately $621,805 of the budget overage was due to these PG&E requirements.[141] Second, CEE was ultimately not able to build the Project for the $400,000 per mile estimate. CEE encountered numerous obstacles due to supply chain issues created by the COVID-19 pandemic and associated increase in timelines, which resulted in higher engineering, project management, and installation costs.[142] MEW estimates CEE's construction costs increased by $1,142,078 (from $1,528,560 to $2,670,638).[143] MEW states that pursuant to its contract with CEE, it had no choice but to pay the costs CEE had incurred in the furtherance of the Project's interconnection to PG&E's pipeline.[144] MEW argues that while it made every effort to negotiate with CEE to contain costs, its

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138 Ex. MEW-22 at 48.

139 *Id.* at 43 citing Ex. MEW-23 at 6.

140 Ex. MEW-22 at 45-46.

141 *Id.* at 48. Invoices from CEE also list costs totaling $621,805 for the biomethane skid. (Ex. MEW-23 at 1106-1111.)

142 Ex. MEW-22 at 48-49; Ex. MEW-23 at 1424-1426.

143 Ex. MEW-22 at 49.

144 *Ibid*.

negotiating leverage was limited due to the Selection Committee's determination that the Project must interconnect with CEE, and therefore, MEW was unable to get CEE to accept some of the project risks or costs.[145]

Cal Advocates argues that ratepayers should not bear the costs of MEW's decisions related to pursuing the CEE option for the following reasons: (1) the Selection Committee did not force MEW to include the CEE option in its pilot application; (2) MEW failed to execute an agreement with CEE before it presented its pilot application to the Selection Committee, thereby placing itself in an inferior negotiating position; and (3) MEW had no obligation to accept the award from the Selection Committee.[146]

The Selection Committee selected the Merced-CEE project option because it viewed this option as providing potential benefits and added value to the pilot project process. In scoring the project, the Selection Committee stated that the project presented: "Good innovative thinking looking into a mid-market pipeline as an interconnection point opportunity. This will be new information to contribute to this pilot project process."[147] The Selection Committee noted that this innovative approach presents an interesting opportunity for scaling to future projects and also noted that this approach might be beneficial to the long-term viability of the project.[148]

The Selection Committee selected the Merced-CEE project based, in part, on its unique potential benefits and did not give MEW the flexibility to pursue a

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145 *Id.* at 46, 49.

146 Cal Advocates RB at 18-20.

147 Ex. CalAdv-03, Attachment 4, SB 1383 Dairy Biomethane Pilot Project Selection Committee Score Card Summary, at 45.

148 *Id.* at 44 and 45.

different interconnection point. We do not fault MEW for implementing the selected project. It is reasonable that MEW relied on CEE's cost estimate to develop its initial budget, which in turn was based on CEE's experience with past projects. Furthermore, the additional costs incurred by CEE are substantiated by invoices in the record[149] and were not controllable by MEW. Under these circumstances, the pipeline extension costs incurred to effectuate the selected interconnection point and to ensure the safe introduction of biomethane into PG&E's pipeline are reasonable.

5. Summary of Public Comment

Rule 1.18 of the Commission's Rules of Practice and Procedure allows any member of the public to submit written comment in any Commission proceeding using the "Public Comment" tab of the online Docket Card for that proceeding on the Commission's website. Rule 1.18(b) requires that relevant written comment submitted in a proceeding be summarized in the final decision issued in that proceeding.

As of the date the proceeding was submitted, 59 written comments were received. The comments universally oppose the Project and ratepayer funding for the Project. Commenters oppose the Project raising concerns regarding impacts on the animals, local communities, and the environment. Many commenters contend that the developer or PG&E shareholders should be responsible for the additional costs.

6. Comments on Proposed Decision

The proposed decision of ALJ Michelle Cooke in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and

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[149] Ex. MEW-23 at 1050, 1106-1111, 1252.

comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed by Cal Advocates, MEW, and PG&E on September 9, 2024, and reply comments were filed on September 16, 2024 by the same three parties. We make minor changes throughout to ensure consistency and clarity.

7. Assignment of Proceeding

Darcie L. Houck is the assigned Commissioner and Michelle Cooke is the assigned ALJ in this proceeding.

Findings of Fact

1. SB 1383 requires the Commission, in consultation with ARB and CDFA, to direct gas corporations to implement not less than five dairy biomethane pilot projects to demonstrate interconnection to the common carrier pipeline system.
2. SB 1383 permits gas corporations to recover in rates the reasonable cost of pipeline infrastructure developed pursuant to the SB 1383-required pilot projects.
3. In D.17-12-004, the Commission established the necessary framework for gas corporations to implement the pilot projects required by SB 1383.
4. Pursuant to D.17-12-004, costs for biomethane producer-owned pipeline infrastructure developed pursuant to the pilots are recorded in a balancing account with costs above the bid amount subject to reasonableness review.
5. Pursuant to D.17-12-004, costs booked to the balancing account up to the authorized bid amount, are to be reviewed for the utility's prudent administration of the project, but are otherwise considered per se reasonable.
6. On December 3, 2018, the Selection Committee selected the Project as a SB 1383 pilot project in PG&E's service territory.
7. The total estimated budget approved by the Selection Committee for the Project was $10,183,855.

8. The final amount incurred by MEW to design, construct, test, and interconnect to PG&E was $18,700,855.62, which is $8,517,000.62 over (or approximately 84 percent over) the initial bid of $10,183,855 approved by the Selection Committee.

9. Applicant and MEW claim an overage of $248,036 due to design changes to the howitzer gas scrubbing Hydrogen Sulfide removal vessels.

10. Applicant and MEW failed to adequately justify why changes to the original howitzer design were warranted.

11. MEW contends that howitzer scrubbers are made almost entirely of steel and that pandemic-related supply chain shortages and materials inflation caused the price of the howitzers to increase by a total of $208,530.

12. Applicant and MEW failed to present adequate evidence regarding when it purchased the steel for the howitzers or the actual price paid for the steel.

13. MEW provided articles supporting that the price of steel increased dramatically, particularly between December 2020 and December 2021.

14. The invoices for the howitzers are dated December 1, 2020, and would not have been impacted by the dramatic increase in steel prices that occurred between December 2020 and December 2021.

15. MEW's claim that pandemic-related supply chain shortages and materials inflation impacted the cost of the steel used for the howitzers is not adequately substantiated.

16. MEW calculates a cost overrun of $1,049,600 due to design finalization and improvements for oxygen injection and biogas blower system technology installed at all 8 participating dairies.

17. With the exception of the backflow prevention devices, applicant and MEW failed to adequately justify why design changes or improvements to the oxygen injection and biogas blower system technology were warranted.

18. Costs of $69,650 associated with the installation of the backflow prevention devices are adequately substantiated and were reasonable to ensure site safety.

19. MEW estimates that pandemic inflation caused costs for biogas and oxygen injection equipment to be $913,788 higher than originally estimated.

20. MEW's estimate of a 23.7% increase in material costs for biogas and oxygen injection equipment due to inflation is not adequately justified.

21. The PPI for manufacturing equipment increased by 23.7% between January 2020 and March 2023.

22. The relevant invoices for the oxygen injection and biogas equipment are dated between July 2020 and March 2021, and therefore, would not have been impacted by any inflation that occurred after March 2021.

23. The PPI rose less than 5% between January 2020 and March 2021.

24. To the extent inflation resulted in an increase in oxygen injection and biogas equipment costs of less than 5%, this increase would have been covered by the 10% contingency included in the original budget.

25. MEW calculates that rerouting caused by the inability to obtain a few private easements resulted in the installation of an additional 7,756 feet of pipeline, which, at $57.50 per linear foot, resulted in additional costs of $445,970.

26. The final pipeline route was installed 90% within the original proposed route and the length was 92% accurate to the original proposed route.

27. All landowner consent required to complete the Project had not been obtained at the time the pilot application was submitted.

28. MEW made concerted efforts to obtain landowners' consent.

29. The pipeline rerouting that occurred did not materially impact the scope of the Project and was reasonable.

30. Applicant's and MEW's request to recover costs of $445,970 for the pipeline reroute is not adequately justified because it includes costs to install larger pipeline diameter sizes than had been included in MEW's pilot application.

31. MEW's claims regarding the need for larger pipe sizes are inadequately substantiated.

32. Costs of $411,068 for the pipeline reroute, which includes deduction of costs associated with the use of larger diameter pipeline materials, are reasonable.

33. It was reasonable for MEW to use standard wages in its pilot application because MEW had previously used non-union labor for similar projects and there is no evidence that when MEW submitted its pilot application in 2018, MEW was aware that union labor may be required.

34. After the Project had been selected, MEW was made aware that the Project may be significantly delayed if a PLA was not signed.

35. MEW's decision to use union contractors for the Project was reasonable.

36. The use of union labor at prevailing wage rates resulted in an increase in costs compared to the use of non-union labor at standard wage rates.

37. Given that the contractors' invoices did not itemize labor costs, the use of an estimate is reasonable.

38. MEW's methodology for calculating the increase in labor costs due to the use of union labor is not adequately substantiated.

39. According to a study, in California cities other than major cities, the average labor share of construction costs is estimated to be 43.3% and average prevailing wage differential is estimated to be 53.0%.

40. Based on the study, $987,171 is a reasonable estimate of the increase in collection line costs attributable to the use of union labor.

41. MEW estimates that more in-depth surveys required by banks and federal agencies in order to obtain financing resulted in an overage of $54,763.

42. MEW changed its financing plan from the one presented in its pilot application but did not provide details regarding why the change in financing plan was beneficial.

43. There is insufficient evidence to find that the decision to change the financing plan was reasonable or that the costs for the additional surveys required for the changed financing plan are reasonable.

44. The selected Project included eight participating dairies.

45. After MEW submitted its budget to the Selection Committee, a ninth dairy agreed to participate in the dairy cluster.

46. Costs associated with the ninth dairy (approximately 30.3% of relevant costs) are not eligible for reimbursement under the pilot program.

47. It is reasonable to reduce the reimbursement requested for engineering costs by 30.3% (or $78,873) to remove costs related to the ninth dairy.

48. Potholing was necessary to ensure safe construction of the Project.

49. The amount of preexisting underground lines in the project area was not under MEW's control and it was necessary for line crossing work to be conducted safely whenever these lines were found.

50. It was necessary for MEW to comply with the traffic and dust control requirements of Merced County to complete the Project.

51. Applicant and MEW failed to adequately justify allocating approximately 74% of the potholing, line crossings, traffic control, and dust control costs to the Project.

52. Based on removal of costs for the ninth dairy, it is reasonable to allocate 69.7% of the potholing, line crossings, traffic control, and dust control costs to the Project.

53. MEW's original budget estimated four total canal crossings, but seven canal crossings were ultimately required in order to implement the final route that was approved by the private landowners and Merced County.

54. Costs for the canal crossings also increased because Merced County required MEW to bore under some of the crossings rather than using less expensive open-cutting as MEW had proposed to the Selection Committee.

55. MEW's estimate of a total budget of increase of $84,359 for the additional canal crossings is reasonable.

56. Applicant and MEW failed to adequately substantiate there were 19 street crossings for the Project.

57. The record evidence indicates there were a total of nine street crossings on the segment of pipeline for the dairies included in the Project.

58. The record evidence substantiates the jack and bore method was used for two of the street crossings at a cost of $50,000 per crossing but this method is not substantiated for the remaining seven crossings.

59. Based on the original budgeted amount of $18,000 per street crossing, an overage of $64,000 attributable to use of the jack and bore method at two of the street crossings is adequately substantiated and reasonable.

60. MEW's claimed overage for the compressor installation only substantiated for the amount of $69,099 based on the average labor share and prevailing wage allocations determined in Finding of Fact 39.

61. The Selection Committee selected the Merced-CEE project option because it viewed this option as providing potentially unique benefits and added value to the pilot project process.

62. The Selection Committee did not give MEW the flexibility to pursue a different interconnection point as part of the pilot.

63. The additional pipeline extension costs are substantiated by invoices in the record and were not controllable by MEW.

64. The pipeline extension costs incurred to effectuate the interconnection point selected by the Selection Committee and to ensure the safe introduction of biomethane into PG&E's pipeline are reasonable.

Conclusions of Law

1. PG&E bears the burden of establishing the reasonableness of all aspects of its application.

2. Since MEW developed the Project and the application requests recovery of costs incurred by MEW, the Commission should consider MEW's showing as part of the applicant's showing.

3. The standard of proof the applicant must meet in rate cases is that of a preponderance of the evidence.

4. Pursuant to Public Utilities Code Section 451, all charges demanded or received by any public utility must be just and reasonable.

5. The Commission uses the prudent manager standard to evaluate whether cost recovery requests are just and reasonable.

6. Although the question of whether costs were unforeseen may factor into the Commission's reasonableness review required by D.17-12-004, D.17-12-004 does not impose the requirement that costs must have been unforeseen to be recoverable.

7. The requested $248,036 overage attributed to howitzer design changes is unreasonable and should not be recovered from ratepayers.

8. The requested $208,530 overage attributed to increased steel prices for the howitzers is unreasonable and should not be recovered from ratepayers.

9. Other than the costs associated with the installation of the backflow prevention devices, the cost overruns attributed to the oxygen injection and biogas blower system are unreasonable and should not be recovered from ratepayers.

10. The requested $69,650 overage associated with the installation of the backflow prevention devices for the oxygen injection and biogas blower system is reasonable and should be recovered from ratepayers.

11. The use of larger pipeline diameter sizes for the Project is unreasonable, and therefore, the costs associated with use of the larger pipeline should not be recovered from ratepayers.

12. Costs of $411,068 for the pipeline reroute are reasonable and should be recovered from ratepayers.

13. Costs of $987,171 for the increase in labor costs for construction of the collection lines due to the use of union labor are reasonable and should be recovered from ratepayers.

14. The requested $54,763 overage for more in-depth surveys is unreasonable and should not be recovered from ratepayers.

15. The requested reimbursement to MEW should be reduced by $78,873 to remove engineering costs related to the ninth dairy.

16. Costs of $413,542 for the additional potholing activities are reasonable and should be recovered from ratepayers.

17. Costs of $84,359 for the additional work related to canal crossings are reasonable and should be recovered from ratepayers.

18. Costs of $64,000 for use of the jack and bore method at two street crossings are reasonable and should be recovered from ratepayers.

19. Costs of $413,844 associated with work for line crossings are reasonable and should be recovered from ratepayers.

20. Costs of $436,606 incurred to comply with the traffic control requirements of Merced County are reasonable and should be recovered from ratepayers.

21. Costs of $283,470 incurred to comply with the dust control requirements of Merced County are reasonable and should be recovered from ratepayers.

22. Of the requested $359,360 overage attributed to compressor installation, only $69,099 is found to be reasonable and should be recovered from ratepayers.

23. Total additional pipeline extension costs of $1,763,883 are reasonable and should be approved for recovery from ratepayers.

24. All rulings made by the ALJ and assigned Commissioner in this proceeding should be affirmed.

25. All motions not expressly ruled on should be deemed denied.

26. This proceeding should be closed.

O R D E R

IT IS ORDERED that:

1. Pacific Gas and Electric Company is authorized to recover in rates and reimburse Maas Energy Works, Inc. costs of $4,917,819 found to be reasonable in this decision.
2. All rulings made by the Administrative Law Judge and assigned Commissioner in this proceeding are affirmed.
3. All motions not expressly ruled on are deemed denied.
4. Application 23-04-005 is closed.

This order is effective today.

Dated _____________________________, at San Francisco, California