

COST ESTIMATE REGULATIONS FOR OIL & GAS OPERATIONS

PUBLIC COMMENT SUMMARY AND RESPONSE

**Public Comment Period:
August 18, 2023 – October 4, 2023**

**Public Comment Hearing:
Virtual – October 3, 2023**

INTRODUCTION

The following comments, objections, and recommendations were made regarding the proposed Cost Estimate Regulations for Oil & Gas Operations rulemaking action during a public comment period beginning August 18, 2023 and ending October 4, 2023. During that public comment period, a virtual public comment hearing was conducted on October 3, 2023. Over the course of the public comment period, the California Geologic Energy Management Division (CalGEM) received a number of public comments via email and public comment hearing. These comments ranged from detailed comments on the proposed requirements to general concerns about impacts of oil and gas operations.

To facilitate the process of reviewing and responding to comments, CalGEM assigned a unique numerical signifier to each comment. This signifier consists of three components: first, a unique code number assigned to each commenter (listed in the table below); second, a separating hyphen; third, a sequential number assigned to each comment from the identified commenter. The chart below lists the code number for each commenter. Within this document, you will find either grouped or individual numerical signifiers, followed by a summary or specific comment, followed by a response (italicized).

COMMENTERS

Number	Name and/or Entity
001	Joseph C. Boone
002A, 002B, 002C	Joseph K. Goldstein
003	Jennifer Valentine

004	Kae Bender
005	Lynn McLeod
006	Millicent Moritz
007	Betsy Cornwell
008	Gillian Healed
009	Constance Lorig
010	Craig Clark
011	Stephen A Johnson
012	Deborah Temple
013	Robynne Limoges
014	Jeanne Blackwell
015	Derek Willshee, Fourstar Resources LLC
016	Mark Ashby
017	John McLoughlin, Hathaway LLC
018	Gary Overby
019	Susan Dunn
020	Bret Cooper, Coffee Petroleum Inc
021	Lucy Redmond, Pacific Gas & Electric Thomas McMahon, SoCalGas
022	Megan Schwartz, Rock Zierman, California Independent Petroleum Association
023	Mark Nechodom, Western States Petroleum Association
024	Jasmine Vazin, Sierra Club Brandon Dawson, Sierra Club California Haley Ehlers, Climate First: Replacing Oil & Gas (CFROG) Chirag Bhakta, Food & Water Watch Meghan Sahli-Wells, Elected Officials to Protect America Bahram Fazeli, Communities for a Better Environment Kyle Ferrar, FracTracker Alliance Ben Smith, Greenpeace USA Jack Eidt, SoCal 350 Climate Action Kevin Hamilton, Central California Asthma Collaborative Haleemah Atobiloye, Breast Cancer Action Emma Silber, Physicians for Social Responsibility – Los Angeles Emma Silber, STAND-LA Woody Hasting, The Climate Center Cesar Aguirre, Central California Environmental Justice Network Maricruz Ramirez, Center on Race Poverty & The Environment
025	Alan B. Adler, ABA Energy Corporation
026	Jasmine Vazin, Sierra Club
027	Emma Silver, Physicians for Social Responsibility, STAND-LA
028	Kyle Ferrar, FracTracker Alliance
029	Stephen Rosenblum
030	Jessica Paquette

ACRONYMS & DEFINITIONS

AACE	Association for the Advancement of Cost Engineering International
ARO	Asset Retirement Obligations
BLM	Bureau of Land Management
CalGEM	California Geologic Energy Management Division, Department of Conservation
CCR	California Code of Regulations
CCST	California Council on Science and Technology
CPUC	California Public Utilities Commission
DOI	US Department of the Interior
EPA	US Environmental Protection Agency
FASB	Financial Accounting Standards Board
GAAP	General Accepted Accounting Principles
GRC	General Rate Case
Legislature	Legislature of the State of California
PRA	Public Records Act
PRC	Public Resources Code
SB 551	Senate Bill 551 (Chapter 774, Statutes of 2019)
SEC	Securities and Exchange Commission
WellSTAR	Well Statewide Tracking & Reporting Database

COMMENTS

Comments in Support of the Regulations

010-1

"The regulations provide requirements and methods for oil and gas operators to submit their cost estimate for plugging and abandonment of wells, decommissioning of facilities, and site remediation on a specified schedule. This is a MUST DO."

Response: *ACCEPTED. Thank you for your support of these regulations.*

016-1

Commenter "strongly supports CalGEM's efforts to develop criteria and a reporting schedule for oil and gas operators to submit cost estimates for well plugging and abandonment, production facilities decommissioning, and any required site remediation. Please finalize and implement the currently proposed rules to protect the health of Californians and our state environment."

Response: ACCEPTED. Thank you for your support of these regulations.

024-1, 027-1

These cost estimates are essential to ensuring that sufficient funds are available to plug and abandon the state's wells. The current bonding requirements are far below the actual costs of plugging and abandoning wells. A range of different studies that examined well closure in California found that onshore well plugging and abandonment can range from \$57,000 to \$300,000. Well plugging and abandonment costs depend on various factors associated with the well, such as well type, depth, age, and location. It is critical that these cost estimates are accurate to ensure that oil well operators are paying for the closure and cleanup of their wells, in accordance with the Polluter Pays Principle.

Response: ACCEPTED IN PART. These proposed regulations implement statutory reporting requirements under PRC section 3205.7 to better understand the full costs associated with end-of-life remediation of operators' assets. The proposed regulations take into account factors affecting the costs of plugging and abandonment. These regulations do not impose bonding requirements.

025-1

There is no one-size-fits-all solution to the subject matter at hand. Each energy company is different, and each property and group of wells are different. Accordingly, the methodologies for each property should be custom designed when feasible. We are therefore appreciative that CalGEM has included "Method 2" as described in the proposed regulations which seems to recognize this reality. In general, companies with a long track record of compliance and responsible operations should be given deference with respect to issues such as the subject matter.

Response: ACCEPTED IN PART. Method 2 is designed to allow operators to forego the assumed costs under Method 1 and develop their own site-specific cost estimates, provided the estimates are persuasively supported by detailed documentation, and that the estimates do not include operator specific savings or efficiencies.

023-9

Meeting the requirements of SB 551 will lead to a much better understanding of oil and gas operations by the general public and can serve to educate policy makers about the costs and complexities associated with oil and gas production. The proposed regulatory language generally meets the requirements of SB 551.

Response: ACCEPTED. These regulations implement statutory reporting requirements under PRC section 3205.7 to better understand the full costs associated with end-of-life remediation of operators' assets.

General Concerns

007-1

Getting realistic figures will be hard to come by and will vary widely depending on the given area.

Response: ACCEPTED IN PART. The costs of plugging and abandonment vary depending upon the well location and that is reflected in the Method 1 methodology. CalGEM has compiled and analyzed more than ten years of abandonment contracting data to develop Method 1 and ensure realistic figures. Where Method 2 is used by operators, CalGEM will review the cost estimate to ensure it is persuasively supported by detailed documentation.

022-1

Commenters strongly object to the assumption that the State's costs to plug and abandon wells should be the standard for what operators must submit for their cost estimates. Commenters' producer member costs for abandoning wells are lower than the provided estimates even when the operators contract with outside services. Commenters provide that if the goal of the regulation is to ensure that operators are responsibly abandoning their own assets over time, then estimate costs should reflect operator's actual historical costs for similar abandonments. The overestimations threatens the viability of oil and gas operators in the state. Commenters strongly advocate that the State revise the proposed regulation to meet the objective of PRC section 3205.7, the Operator Financial Responsibility Program, rather than erroneously assume that the abandonment of all the wells in the State will fall to the responsibility of CalGEM.

Response: NOT ACCEPTED. The proposed regulations implement statutory reporting requirements under PRC section 3205.7 to better understand the full costs associated with end-of-life remediation of operators' assets. Understanding the full costs requires that operator specific savings or efficiencies cannot be used to ensure that the cost estimates provide information on the potential cost to the state for doing such work. While operator specific savings or efficiencies cannot be utilized in estimating the operator's liability, to the extent that the operator has documentation supporting a lower cost estimate than what would otherwise be calculated under Method 1, the operator may submit a Method 2 cost estimate.

022-9, 030-1

Commenter urges CalGEM to “form a joint CalGEM/industry working group to discuss proper analysis methods and to share actual cost data. Industry is effectively and efficiently abandoning a vastly larger number of wells each year than CalGEM and it would behoove CalGEM to work cooperatively and collaborate with Industry on the assumptions built into the models in order to gather more accurate cost data.”

Response: NOT ACCEPTED. In November 2021, CalGEM issued Notice to Operators 2021-09 which requested operators voluntarily share data on the costs associated with decommissioning activities to inform these regulations. CalGEM received insufficient submissions from operators to be included in the data that was used as a basis for Method 1. To establish the base numbers CalGEM conducted a comprehensive review and analysis of past well plugging and abandoning, production facility decommissioning work, and site remediation conducted by the state from 2011 to 2020. CalGEM analyzed all costs incurred by the state to plug and abandon each well, decommission each production facility, and complete site remediation (i.e., equipment rental rates, service charges, and personnel rates) as reported and invoiced by the contractors. In addition, CalGEM reviewed all pertinent technical and status details about each well, production facility, and site at the time the work was performed, including the well history, geologic information, drilling history, subsurface information, surface and location characteristics, and production facility specifications to determine those characteristics that increase the costs of the work.

022-7

Commenter provides that “on many fields, operators have been remediating the surface over time and formerly used equipment is no longer on-site requiring removal.”

Response: ACCEPTED. As provided in proposed section 1753, cost estimate reports must include production facilities decommissioning cost estimates for each production facility that has not been decommissioned, according to CalGEM's records, and a site remediation cost estimate for the site of each well that has not been plugged and abandoned, according to CalGEM's records, and the site of each production facility that has not been decommissioned, according to CalGEM's records. If CalGEM records reflect that the equipment is no longer on site or the surface has been remediated, those costs do not need to be included in the cost estimate. Operators may contact CalGEM to update CalGEM's records, as appropriate.

023-4

"It is important to emphasize for the record that SB 551 is specific to CalGEM and facilities under the regulatory jurisdiction of the Division. SB 551 does not pertain to facilities that are under the jurisdiction of agencies such as the local Air District, Office of State Fire Marshall, etc. Given this statutory context, Commenter believes it is important for the regulations to provide granular clarity in order to avoid confusion and differences in the types of facilities operators include in preparing their reports."

Response: *ACCEPTED IN PART.* These regulations will be found in Title 14, Division 2, Subchapter 2 (Environmental Protection), Article 1 of the CCR. As provided in section 1760, subdivision (r), of title 14, the definition of production facility meaning "any equipment attendant to oil and gas production or injection operations including, but not limited to, tanks, flowlines, headers, gathering lines, wellheads, heater treaters, pumps, valves, compressors, injection equipment, production safety systems, separators, manifolds and pipelines that are not under the jurisdiction of the State Fire Marshal pursuant to section 51010 of the Government Code, excluding fire suppression equipment." Further clarity is unnecessary.

024-8, 026-3

Require affirmative findings by CalGEM. The draft regulations should specify that CalGEM will make an affirmative finding as to the accuracy of the cost estimates submitted by industry, although the finding should be subject to change if new information emerges. Also, while as noted above, the current draft allows generally for CalGEM to request additional information, the regulations should identify a timeframe for such requests as well. By way of example, the regulations could provide that responses to CalGEM requests for information shall be provided within 30 days, and that CalGEM findings regarding the accuracy of cost estimates shall be made within 90 days of submission of complete information.

Response: *ACCEPTED.* Proposed regulation section 1753.1.2, subdivision (a) specifies that CalGEM will issue a written notice of determination as to whether or not the operator has complied with the applicable requirements. Where additional information is needed, CalGEM will allow at least 30 days for the operator to provide additional information to substantiate the operator's cost estimates. Because there may be back necessary.

Availability of Records

024-7, 026-6,

Require that estimates and supporting documentation be made available on CalGEM's website. The public should have full access to all cost estimates and supporting information collected by CalGEM pursuant to the regulations. As is already required now by statute, the information should be submitted by operators electronically. All such information, including supporting documents provided by operators, should be posted on CalGEM's website and made accessible via CalGEM's Well Statewide Tracking & Reporting Database (WellSTAR) tools. We would also like to see WellSTAR include summary cost information for each facility and well, accurate and up to date bonding information, and datasets that are aggregable and queryable by Well API or Facility ID. All findings and requests for additional information should be made available on CalGEM's website via WellSTAR.

Response: *ACCEPTED IN PART. Cost estimates and supporting documentation will be stored in CalGEM's database of record – WellSTAR. CalGEM is currently working to modify WellSTAR to make the operator financial liability section available to the public. No change in regulation is necessary to accomplish this.*

023-2

Commenter "remains concerned that the currently proposed rule language fails to provide explicit protection from disclosure for certain confidential and/or market-sensitive data reported for offshore equipment using Method 2 as required per Section 1753.3. Trade secret and business confidential information are protected from disclosure under the PRA, and the regulations should explicitly reflect this. Moreover, certain information pertaining to petroleum supply and pricing are expressly presumed to be confidential information (Cal. Pub. Res. Code §§ 25354, 25364 and 25366), and are entitled to be withheld from disclosure under the PRA "if public disclosure of the specific information or data . . . would adversely affect market competition" (PRC § 25364(b)). The disclosure of information that could violate or facilitate a violation of applicable antitrust requirements (e.g., contract pricing information) would be manifestly against the public interest and would be prohibited under the PRA. Commenter urges CalGEM to amend the proposed rule language to incorporate provisions consistent with those in PRC sections 25354, 25364 and 25366, clarifying that trade secrets, confidential business information and competitively sensitive information are presumed to be confidential information and shall not be disclosed to the public absent compelling evidence to the contrary."

Response: ACCEPTED. Proposed section 1753.1.1 has been revised to provide operators a procedure by which to request confidential treatment of information within their cost estimate report, and a timeframe to take appropriate action when CalGEM informs the operator records will be made publicly available.

Effect on Business and Bonding

015-1, 20-2, 020-3, 25-2

Commenters believe the proposed regulation have several serious errors that will “close down/force closure/bankruptcy/expose the State to massive additional exposure/costs.” Commenters are already exposed to crippling costs, is paying down debt for existing compliance, and has wells that will not need to be abandoned in the next 25 years, so there is no need for any security.

Simply stated, it is unfair for a company like ours to be saddled with incremental rules and potential financial burdens because of bad actors.

In addition, commenters are concerned that no bond company will put up any bond for financial security for this proposal, and his company will be forced to put up a cash bond of \$500,000-\$600,000, which would bankrupt his company. Commenters are also concerned that many companies will similarly face bankruptcy. Impacts on Kern County including taxes and local businesses would be devastating.

Response: NOT ACCEPTED. PRC section 3205.7 requires that all operators submit cost estimates. These regulations do not impose additional bonding requirements on operators.

022-2

Commenter provides that if the State uses the proposed methodologies to reevaluate bonding requirements, then bond requirements will reflect inflated costs. Smaller operators will be unable to meet the financial obligations and the consequence will be the State's orphan well count will increase rather than decrease. If this happens, the true cost of implementing the regulation is not the cost to fill out the financial analysis, but the State's cost to take on the plugging and abandonment obligations of additional orphan well and loss of income for royalty owners. Commenter states this will exceed \$100-million limit on what a single law can impose. Since state law allows for equally effective means of assurance, CalGEM should construct agreements based upon actual costs. Overestimating the cost of plugging will tie up capital that would otherwise be used to accelerate plugging of idle wells.

Response: NOT ACCEPTED. These regulations do not impose additional bonding requirements on operators. The costs associated with complying with these regulations are limited to the cost of complying with completion of the cost estimates. While cost estimates are a factor CalGEM must consider in implementation of CalGEM's bonding authority under PRC section 3205.3, the cost estimate is not determinative of the additional amount of security the operator will be required to file.

Methodology

020-1

Method 1 will cause unreasonably large bonding cost totals for abandonment, decommissioning and remediation. The \$10,000 per day amount for Central Region abandonment rig costs is excessive, and there are reputable companies who charge about half that. The multiplier for shallow wells should be reduced as the abandonment of those wells is an order of magnitude less than the next well depth category and the multiplier for wells less than 1,700 feet should be "1."

Because the amount and multipliers in Method 1 are so unreasonably high, operators will be forced to use Method 2 which will result in much higher costs of creating the estimate, not to mention likely burdening CalGEM with many times more paperwork to process.

Response: NOT ACCEPTED. To establish the base numbers CalGEM conducted a comprehensive review and analysis of past well plugging and abandoning, production facility decommissioning work, and site remediation conducted by the state from 2011 to 2020. CalGEM analyzed all costs incurred by the state to plug and abandon each well, decommission each production facility, and complete site remediation (i.e., equipment rental rates, service charges, and personnel rates) as reported and invoiced by the contractors. In addition, CalGEM reviewed all pertinent technical and status details about each well, production facility, and site at the time the work was performed, including the well history, geologic information, drilling history, subsurface information, surface and location characteristics, and production facility specifications to determine those characteristics that increase the costs of the work.

The base daily cost rate for a well in the Central region is \$7,000 per day, rather than the \$10,000 per day that the commenter reports. As actual costs, they represent what can be expected when the state puts out bids for plugging and abandonment.

A score of "0" is assigned to a well between 0 to 1,000 feet, whereas a score of "4" is assigned to a well between 1,001 to 3,000 feet. These scores were developed by

computing the median days to plug and abandon a well in each region, using state abandonment contract data, for which there were no risk factors. The weighted score of "4" is an appropriate representative weight for a well between 1,001 and 3,000 feet.

While Method 2 may be more costly for operators to comply with, having an option available for those operators who wish to utilize a methodology other than the prescribed methodology is necessary to allow operators the opportunity to forgo the assumed costs under Method 1 and develop their own site-specific cost estimates.

017-1

Commenter states that they strongly support proposed Method 2 allowing operators to generate a cost estimate for the items specified by the proposed regulations. However, Commenter then describes the reasons that they have significantly lower abandonment costs than most of the operators in California and describes that while Method 1 may allow operators to complete reports more expeditiously, Method 2 is the most equitable option. Commenter then goes on to describe how the 30-million-dollar cap can be easily absorbed by major oil companies.

Response: NOT ACCEPTED. While Commenter writes that they support Method 2, Commenter then goes on to describe the unique reasons they have significantly lower abandonment costs than many operators in California. As provided in proposed section 1753.1.1, the estimates are to reflect the estimated contracting cost if the state were to have to pay a contractor to perform the work. Because the state does not typically obtain the benefit of operator specific discounts, operator specific savings or efficiencies cannot be utilized in estimating the operator's liability to ensure that the cost estimates provide information on the potential cost to the state for doing such work. Further, these regulations do not impose any additional bonding requirements on operators. They are simply a requirement to file cost estimates.

017-2

The average plugging and abandonment cost for operators as determined by the cost estimate methodology cited in section two of the Basis of Reasoning for Base Costs is substantially higher than our cost estimates. Reducing actual costs is necessary for the survival of our company, as well as many other small operators, and should not be disregarded.

Response: NOT ACCEPTED. To establish the base numbers CalGEM conducted a comprehensive review and analysis of past well plugging and abandoning, production facility decommissioning work, and site remediation conducted by the state from 2011 to 2020. CalGEM analyzed all costs incurred by the state to plug and abandon each

well, decommission each production facility, and complete site remediation (i.e., equipment rental rates, service charges, and personnel rates) as reported and invoiced by the contractors. In addition, CalGEM reviewed all pertinent technical and status details about each well, production facility, and site at the time the work was performed, including the well history, geologic information, drilling history, subsurface information, surface and location characteristics, and production facility specifications to determine those characteristics that increase the costs of the work. While CalGEM recognizes that small operators appreciate efficiencies that the state does not, operator specific savings or efficiencies cannot be utilized in estimating the operator's liability to ensure that the cost estimates provide information on the potential cost to the state for doing such work. These regulations do not impose any additional bonding requirements on operators. They are simply a requirement to file cost estimates.

020-4

The regulations provide an inadequate description of what specific studies or reports will be acceptable as basis for an operator's cost calculations under Method 2. What types and quantity of documents will be considered sufficient? Can an operator submit bids as sufficient evidence? If so, how many bids are needed? Without any more specific guidance the regulation is likely to lead to unnecessary paperwork and cost and multiple iterations of cost estimates with CalGEM asking for more documentation even though the operator may have submitted a substantial amount already.

Response: *NOT ACCEPTED. The types of documentation that will be acceptable to meet this requirement are outlined in proposed section 1753.1.1, including but not limited to estimates and quotes from contractors and service professionals. The documentation will be used to validate the cost estimate information submitted the by operator and should be sufficient to fulfil this purpose.*

020-5, 22-18

In the case where the operator owns the entire fee simple and has other business, well casings may be converted to water wells and facilities may be repurposed. Commenter leases from the family of its owner, and if the operation ever terminates, the property owner will want to have the opportunity to properly repurpose some of the equipment. Please insert into the regulations provisions enabling operators to submit types of alternative repurposing of facilities as a factor in calculation cost estimates.

It is possible to actually have tanks cut up and removed by scrap vendors at little to no cost. In some instances, the surface owner may want a water tank to remain for future use, especially if they have plans to use the surface for agricultural purposes. Used tubing or flowlines can be turned into fencing which can be stronger and require less

maintenance than wooden fences. Some existing facilities may also have application for future sequestration projects just as some of the wells may. We assume that the state would prefer a policy of reuse of usable materials over the assumption that all production facility materials would be sent to landfills. Therefore, the model should be revised to reflect this very common practice, which also reduces overall cost of abandonment.

Bonding for the entire operation would be unreasonable and impose a much higher bond than necessary.

Section 1753.2.1(a)(4)(A). Additional information should be provided to substantiate the points "awarded" for the various characteristics that are presented in the table. By mandating an arbitrary point system, the estimated costs are unduly driven upwards without basis on actual circumstances.

Response: *ACCEPTED IN PART. For operators using Method 2 to submit their cost estimates, the proposed regulations afford the operator the opportunity to report the repurposing of wells, production facilities, and associated sites and reduce the cost estimate as applicable. The operator will be required to provide documentation supporting the validity of the values used to calculate the reduction and provide signed documentation from the mineral rights or surface rights owner describing the intended repurposing.*

These regulations do not impose any additional bonding requirements on operators. They are simply a requirement to file cost estimates.

The characteristics identified in the risk score table are known to add additional costs to decommissioning, including being located in urban or environmentally sensitive areas, where there may be a limitation on work hours, extra permitting, and use of specialized equipment which extends the duration and cost of decommissioning, or reportable spills or leaks where there is a risk of increased soil contamination due to an unknown amount of fluid that leaked into the soil.

025-4

Operators might not be able to feasibly obtain incremental bonding instruments. This is due to the severe degradation of the California insurance/surety climate over the past 2 years and could ostensibly cause commenter, with a long track record of operating responsibly, to be in a position where it could not be allowed to operate its assets. We therefore again urge that CalGEM consider an economic feasibility limitation on the bonding/surety requirements if same are enacted as failing this, CalGEM and many

operators like commenter will have the grim job of mutually addressing a host of needless idle well situations and the loss of valuable resources. Commenter provides a copy of a letter which was prepared by Stockdale Insurance Agency. This letter affirms that new/incremental oil and gas bonds cannot feasibly be obtained by commenter in today's market. It should be understood that responsible small Operators would prefer, and can best afford, to use their cash to fund operations, including abandonment and restoration work, rather than tie its working capital up in to bonds in the unlikely event they can be obtained, especially when responsible alternatives exist.

Response: NOT ACCEPTED. *These proposed regulations implement statutory reporting requirements, under PRC section 3205.7, to better understand full costs associated with end-of-life remediation of operators' assets and do not impose additional bonding requirements.*

022-8

Commenter provides that "permitting should be part of the downhole cost estimate and not the costs for site cleanup."

Response: NOT ACCEPTED. *The costs to obtain required permits must be included in both the well abandonment cost estimate and the site remediation cost estimate because permitting is applicable to both.*

023-1

SB 551 specifies that CalGEM shall develop calculations of estimated costs in "accordance with generally accepted accounting principles issued by the Financial Accounting Standards Board [FASB]." (Sec. 3205.7(b)(3)). Pursuant to this requirement, Commenter requests that CalGEM describe in detail the basis of the Well Score Multipliers specified in the Table at section 1753.2(a)(2)(A). Commenter further requests that the CalGEM provide detailed descriptions of the processes it proposes to use to update those multipliers, should accounting standards change over the course of the effectiveness of this statute and regulation.

Response: ACCEPTED. *These regulations implement the requirements of PRC section 3205.7, which provides that CalGEM is to develop criteria for operators to estimate costs associated with plugging and abandonment, decommissioning facilities, and remediating the associated sites. The FASB generally accepted accounting principles (GAAP) does not speak to cost estimates. In general, the GAAP issued by FASB ensure that standards are consistently applied when preparing financial statements. The regulations meet this objective by providing a consistent approach for calculating operator cost estimates.*

The multipliers were developed using ten years of abandonment contract data. As CalGEM receives more data regarding costs, those multipliers will be updated via rulemaking, as appropriate.

023-3

Commenter "recommends modifying proposed section 1753(d)(2) to allow offshore well operators to use Method 1 and to develop a table that captures estimated costs for offshore asset retirement. While we appreciate that offshore facilities have certain unique characteristics that can make it challenging to develop default values for decommissioning cost estimates, we believe developing such default estimates is not impossible. Offshore well operators can assist in providing information concerning typical decommissioning costs that may enable CalGEM to develop reasonable estimates of offshore asset retirement, allowing offshore operators to utilize Method 1 and help streamline the provision of these decommissioning costs to CalGEM."

Response: *NOT ACCEPTED. CalGEM considered the addition of a Method 1 approach for offshore operators. However, given the limited data CalGEM has for the costs for the state to perform such work and complexity of offshore installations, CalGEM rejected that alternative. Further, all offshore wells have been evaluated pursuant to PRC section 3205.6 and operators may omit their offshore wells until 2027.*

024-6, 027-4, 028-1

For both site remediation methods listed in this draft- what definition for remediation is being used as the basis of these estimates? Details on how prices for remediation were determined and the level of remediation these methods estimate are essential to define in this rulemaking. In addition, we urge CalGEM to require the highest level of remediation possible for sites within 3200 ft of sensitive receptors.

CalGEM should publish all documents used to calculate the remediation and plugging costs.

Response: *NOT ACCEPTED. Current site remediation standards are set by CCR, title 14, section 1776, as referenced in the Method 2 site remediation requirements and incorporated into the Method 1 approach. This rulemaking does not change or set these standards, but simply requires cost estimates based on current remediation requirements. Thus, no definitions of site remediation are included here, and no changes to existing site remediation standards are made as a result of this regulatory package.*

To establish the base numbers CalGEM conducted a comprehensive review and analysis of past well plugging and abandoning, production facility decommissioning work, and site remediation conducted by the state from 2011 to 2020. CalGEM analyzed all costs incurred by the state to plug and abandon each well, decommission each production facility, and complete site remediation (i.e., equipment rental rates, service charges, and personnel rates) as reported and invoiced by the contractors. In addition, CalGEM reviewed all pertinent technical and status details about each well, production facility, and site at the time the work was performed, including the well history, geologic information, drilling history, subsurface information, surface and location characteristics, and production facility specifications to determine those characteristics that increase the costs of the work.

026-8

Apply site-specific information to adjust Method 1 results. As currently formulated, Method 1 allows cost estimation based solely on the operator's reporting concerning the specified criteria. Unlike Method 2, Method 1 requires neither a contractor's site-specific analysis of remediation costs, nor provision to CalGEM of documentation concerning such analysis and site conditions. Given that Method 1 is based on general rather than site-specific criteria, we believe it is important to frame its result as a cost floor, from which the estimate should depart upward if there is site-specific information indicating that costs will exceed the Method 1 result. To the extent any site-specific cost estimation has been conducted, the operator should be required to provide that information to CalGEM when using Method 1, and to adjust its estimate upward if necessary based on that information or any other site-specific information that may be available.

Response: *NOT ACCEPTED. Method 1 already incorporates a mechanism for operators to adjust for site-specific characteristics using the Aggregated Well Score Table and including site specific costs attributing to production facilities and surface remediation. Based on the site-specific analysis, operators will calculate the well score for each well. The well score is then converted into a multiplier, which adds to the base cost for each site-specific characteristic known to increase cost. CalGEM can assess the reliability of operator provided site specific information and has other site-specific information and inspection data for comparison and decision on acceptability of the submitted Method 1 cost estimate.*

026-10

Articulate Method 1 risk criteria with more specificity. While some of the articulated risk criteria involve no element of discretion – e.g., age of the well, depth, and number of casing strings – others are less cut and dried. For example, the Method 1 well

abandonment risk score involves a determination whether the well is within an “[a]rea of known geologic hazard,” and whether it is characterized by “[i]nadequate casing or inadequate tubing integrity.” Similarly, the production facility decommissioning aggregated risk score (§ 1753.2.1 (a)(4)) is grounded in “[a]ny other conditions that potentially pose a threat to life, health, property, or natural resources.” These types of terms should be defined using non-exclusive objective criteria and/or concrete examples to the extent possible.

Response: *NOT ACCEPTED. These characteristics utilized by CalGEM to develop Method 1 are known to affect the cost of well plugging and abandonment and decommissioning of production facilities and the meaning of these characteristics are commonly understood.*

026-11

Define more clearly the information that must be submitted in support of Method 2. We believe CalGEM (and the public) should be provided all data in the operator's possession that may bear on estimating costs, whether it supports the operator's estimate or not. The regulation should specify that operators using Method 2 shall submit all of the data in the list in subsection (a)(2) they are in possession of, whether or not it supports their estimate. With respect to documents from third parties such as vendor price lists and quotes from contractors, or cost factors that are presumptively based on third party estimates (e.g., “cost for the project management and engineering” or “cost to develop safety, environmental, and emergency response plans,” § 1753.3.1 (a)), operators should be required to affirmatively document that they have attempted in good faith and failed to procure this type of information if they do not provide it.

Response: *NOT ACCEPTED. All data in the operator's possession may not be relevant and is it may contain operator specific cost efficiencies. Where Method 2 is used by operators, CalGEM will review the cost estimate to be sure that the estimate is persuasively supported by detailed documentation.*

023-8

“Publicly traded companies already disclose their Asset Retirement Obligations (ARO) under federal reporting requirements for the Securities and Exchange Commission (SEC). Many of the same data requirements in the proposed rule may be fulfilled by the SEC's ARO reporting standard. Commenter encourages CalGEM to consider adding rule language that allows operators the option to report under a separate methodology that would align with the SEC's ARO reporting requirements. This option would reduce potential conflicts in definitions and methods and reduce unnecessary burdens on publicly traded operators.”

Response: ACCEPTED IN PART. The proposed regulations require operators to submit their cost estimates in current dollars and reflect if the state were to have to pay a contractor to perform the work if the operator fails to do so, so that CalGEM may determine if the cost estimate accurately reflects the operator's costs consistent with the mandates of PRC section 3205.7, subdivisions (a) and (b). Provided the ARO does not reflect specific savings or efficiencies unique to those operators, those filings may be appropriate to support a Method 2 cost estimate. It is to be expected that cost estimates submitted to comply with these requirements may differ from those submitted in an ARO, because of the different reporting requirements.

021-2

Commenters, as utilities, are subject to the U.S. Generally Accepted Accounting Principles which set specific accounting methods applicable to the cost estimates related to the decommissioning and retirement of assets. Cost estimates for the retirement of utility owned assets and related cost recovery are already established and provided in General Rate Cases. The draft regulations should be consistent with existing cost estimates set by Asset Retirement Obligations in accordance with Financial Accounting Standards Board, Accounting Standards Codification Statement No. 410-20 or the regulations should allow for the filing of utilities Federal Energy Regulatory Commission Form 2, which includes the total costs to retire.

Additional requirements to develop and provide cost estimates outside of the General Rate Case process may lead to inconsistency and, thus, potentially inaccurate cost estimates that may be misinterpreted given their disparate uses.

Response: NOT ACCEPTED. The proposed regulations require operators to submit their cost estimates in current dollars and reflect the cost if the state were to have to pay a contractor to perform the work if the operator fails to do so, so that CalGEM may determine if the cost estimate accurately reflects the operator's current total liability consistent with the mandates of PRC section 3205.7, subdivisions (a) and (b). Provided the filings identified by the commenters do not reflect specific savings or efficiencies unique to those operators but instead reflect the costs that the state would have to pay a contractor to perform the work, those filings may be appropriate to support a Method 2 cost estimate. It is to be expected that cost estimates submitted to comply with these requirements may differ from those submitted in a General Rate Case, because of the different reporting requirements.

022-3

After reviewing CalGEM's Basis of Reasoning document, commenter gathered data from producer members on the costs of plugging and abandoning wells over the past three years. Based on this review, commenter found that the CalGEM dataset used to establish the cost estimates is too small to be representative of the active and idle wells in each region. Furthermore, the CalGEM dataset has large data gaps for abandonment costs of wells at common well depths in each region. In several cases, CalGEM has no well abandonment cost data representing wells at the common depth, particularly in the regions that contain the largest number of active and idle wells. These large data gaps are the primary reason why the CalGEM cost estimates and model assumptions differ greatly when compared to actual data from our producer members.

Response: *NOT ACCEPTED. Commenter's dataset is focused on its members while CalGEM's dataset is based on ten years of state abandonment contracts. The ten years of data used by CalGEM is a better predictor of what the state costs are likely to be; it is not intended to be representative of operator costs for all active and idle wells in a region. While operator specific savings or efficiencies cannot be utilized in estimating the operator's liability, to the extent that an operator has documentation supporting a lower cost estimate than what would otherwise be calculated under Method 1, the operator may submit a Method 2 cost estimate. Please see the document, Basis of Reasoning for Base Costs, section 2, that was released with the rulemaking, for a discussion on the testing of the cost estimate methodology.*

022-4

The largest factor that impacts the abandonment costs is the number of days it takes to complete the abandonment process, which is greatly affected by the well characteristics. However, in considering these factors we find that CalGEM's assumptions on the length of time it would take to complete an abandonment are inaccurate (especially in the Central district). Our dataset found that the median days was four days in contrast to the 10 days that is reflected in the basis of reasoning document and that costs are significantly less than those estimated using the CalGEM Method 1. We urge CalGEM to revise its model to replace the arbitrary multipliers and points assigned to each attribute with a model that allows operators to insert the well characteristics and correct number of days for abandonment. All factors used in the Aggregated Well Score Table need further evaluation and transparency.

Response: *ACCEPTED IN PART. One of the largest factors is the number of days it takes to complete the abandonment process, which is directly reflected by any challenges associated with abandoning a specific well. However, Commenter's dataset is focused on its members while CalGEM's dataset is based on ten years of state abandonment*

contracts. The ten years of data used by CalGEM is a better predictor of what the state costs are likely to be. While operator specific savings or efficiencies cannot be utilized in estimating the operator's costs, to the extent that an operator has documentation supporting a lower cost estimate than what would otherwise be calculated under Method 1, the operator may submit a Method 2 cost estimate.

022-5, 022-6

Commenter finds that many of their producer members' costs, including for site cleanup, equipment removal, wellhead removal, and mobilization and demobilization, are lower than that calculated by CalGEM across the board. It is likely that the costs included in the CalGEM estimate include other factors that producers are not including, therefore the Basis of Reasoning should describe what costs CalGEM included in this number and how this could vary.

The use of contingency and mobilization and demobilization costs for each individual well causes the site estimates to increase well above producers' actual costs. The basis for determining the cost of mobilization and demobilization should be presented and supported by substantial evidence. It is atypical for industry to pay mobilization or demobilization costs for plugging and abandonment work, therefore, inclusion of this factor in the overall cost is arbitrary.

Response: NOT ACCEPTED. Commenter's dataset is focused on its members and may contain efficiencies unique to those operators. CalGEM's site remediation calculations are based upon ten years of state abandonment contract data and information provided from waste management facilities regarding disposal rates. Please see the Basis of Reasoning for Base Costs document that was released with the rulemaking, sections 8 and 9 for a discussion on how the Other Project Components and contingency percentages were developed. Production facility decommissioning and site remediation cost estimates include costs for other project components including permitting and regulatory compliance activities, mobilization and demobilization costs, and project management and engineering. These project components are added to the production facility decommissioning and site remediation cost estimates given that there are more unknown variables and complexity compared to well plugging and abandonment operations. The percentages assigned to each project component were referenced from the US Environmental Protection Agency (EPA) cost estimating guide and the US Department of the Interior (DOI) handbook. The EPA cost estimating guide provides guidelines and concepts to generate cost estimates for environmental cleanup projects including facility and brownfield cleanups. The DOI handbook provides standard engineering cost estimating procedures for reclamation projects. The contingency range used in Method 1 is consistent with the Association for the

Advancement of Cost Engineering's Class 3 cost estimate given the expected end usage of the estimate, accuracy range and estimating methodology.

024-10, 026-5

Commenters note that the discussion draft does not provide any information as to the basis for the risk scores and costs associated with various well conditions and geographic locations. We request that prior to moving forward, you provide to the public on your website all of the documentation and modeling used to develop these assumptions.

Response: *NOT ACCEPTED. The basis for all regional base numbers and aggregated risk scores was published in the Basis of Reasoning for Base Costs document.*

Public Utilities

021-1

Commenters interpret the regulations as applying only to oil and gas production wells and facilities, not assets regulated by the California Public Utilities Commission (CPUC). Commenters further provide that the proposed rules are incompatible with existing obligations and mandates under the CPUC's purview. Commenters indicate that it is their understanding that the CPUC and CalGEM established an agreement that their respective responsibilities would be split at the wellhead, giving CPUC general regulatory jurisdiction over utility lines, plants, or systems. Cost estimate reports appear to be beyond the agreed responsibilities for CalGEM and merge into jurisdictional areas held by the CPUC.

Response: *NOT ACCEPTED. PRC section 3205.7 requires "...each operator of an oil or gas well to submit a report that demonstrates the operator's total liability to plug and abandon all wells and to decommission all attendant production facilities, including any needed site remediation..." There is no exception for underground gas storage projects or public utilities. CalGEM retains jurisdiction even where that jurisdiction is joint with the CPUC.*

021-3

Commenters question content in the Initial Statement of Reasons regarding characterization of wells in underground gas storage fields and the claim that these wells will only be useful for 10 to 20 years. Integrity Management Practices are designed to demonstrate wells of any vintage, make, or depth have the integrity to provide a reliable service until the CPUC determines storage services are no longer needed and useful. There is no evidence that the wells would not be useable in the next 10 to 20

years. Evidence shows that intervention activity to perform CalGEM required well inspection may drive the wells to a reduced useful life.

There is an unlikely risk CalGEM would be required to fund plugging and abandonment of storage wells because the storage fields are under a Certificate of Public Convenience issued by the CPUC.

Response: NOT ACCEPTED. Commenters provided specific comments on the Initial Statement of Reasons but did not provide comment on the associated proposed regulation. Namely, Commenters did not provide suggested changes to the due dates for cost estimates identified in proposed section 1753.1. However, CalGEM recognizes that current underground gas storage regulations require all wells penetrating the reservoir to be constructed with dual barriers, and that completion of this work extends the usable life of the well, adding layers of safety to well operations. Ongoing rigorous testing is necessary to ensure the safety of these wells.

These regulations implement statutory reporting requirements, under PRC section 3205.7, and do not provide exceptions based upon an operator's risk of desertion.

Responsibility

026-1

These cost estimates are essential to ensuring that sufficient funds are available to plug and abandon the state's wells. Estimates of average well cleanup costs by the California Council on Science and Technology (CCST), showing that those costs far outpace available bonding amounts, underscore the urgency of granular and accurate well remediation costs as an underpinning to any needed bonding reform.

Response: ACCEPTED. The purpose of these regulations is to provide information to the California State Legislature and other decision makers so that they can plan to effectively manage the resource needs for well plugging and abandonment, production facility decommissioning, and site remediation.

014-1

Oil companies have profits and instead of imposing fines for failure to plug wells "we are looking to subsidize and bail out the offending and violating oil companies that have refused to plug and seal abandoned wells." You are asking taxpayers to donate our hard-earned tax dollars towards capping and sealing oil companies willful neglect, careless and deliberate safety code violations. "This is a frivolous display of action and

waste of our precious time and resources. The issue at stake here is not about getting cost estimates but about the execution of satisfying the plugging and sealing of decommissioned wells by the responsible party upon order to do so.”

Response: NOT ACCEPTED. *These regulations implement statutory reporting requirements, under PRC section 3205.7, to better understand the full costs associated with end-of-life remediation of operators' assets.*

Timing

024-2, 027-2, 026-7

Given the ongoing risk of marginal and idle wells becoming orphaned in the near future as described by the California Council on Science and Technology and CalGEM, it is important that the regulations be issued as promptly as possible. While the draft sets the initial compliance deadline of January 1, 2025, we encourage you to move up that deadline to the earliest feasible date, given that industry is already well aware of the requirements of SB 551 and could be preparing now for compliance. Carbon Tracker's recent report shows the looming fiscal risk to taxpayers if operators are not accurately assessing and funding decommissioning and remediation of their well stock in California, and any delay in the application of this rulemaking process only will accrue increasing clean up liabilities.

Response: NOT ACCEPTED. *CalGEM anticipates that the regulations will be effective October 1, 2024. Operators will need to time complete their cost estimates in accordance with the finalized regulations, making January 1, 2025 the earliest feasible date for submission.*

024-3, 026-4, 027-3

The current draft also only prioritizes low production wells in the first round of compliance, and we urge CalGEM to include any operators with wells within 3200 feet of sensitive receptors to be under the earliest compliance deadline as well.

Response: NOT ACCEPTED. *The categories ensure that the operators at highest risk of deserting their wells report first.*

Worksheets

022-10

Commenters provide “the worksheets posted with the draft regulation are locked and restricted from editing, which restricts operator's abilities to compare their prior actual

costs with the state's estimated costs. Commenters request to receive an unlocked copy of the model with worksheets that clearly indicate all of the model assumptions. We also request that the sheets be reformatted to allow for easy printing and hard copy review."

Response: NOT ACCEPTED. Operators are not required to use the provided worksheets. The worksheets provided are designed to walk the operator through Method 1 calculations and do not need to be unlocked to be used effectively. The worksheets are locked to prevent the formulas from being mistakenly changed during use of the spreadsheet.

Comments Specific to a Regulatory Section

022-11

Commenters provide that "Section 1753(b). The regulation should specifically exempt those wells and facilities that are already covered by the U.S. Bureau of Land Management (BLM) bonding requirement from the regulation. These wells pose no financial threat to the state."

Response: NOT ACCEPTED. PRC section 3205.7 requires cost estimates from each operator of an oil and gas well in California and does not afford an exception based on whether or not the well is a financial threat to the state or located on land managed by the BLM.

022-12

Commenters provide that "Section 1753(c). The site remediation cost estimate should calculate remediation based on the landowner's requirements for the intended, subsequent land use."

Response: ACCEPTED. For operators using Method 2 to submit their cost estimates, the proposed regulations afford the operator the opportunity to report the repurposing of wells, production facilities, and associated sites and reduce the cost estimate as applicable. The operator will be required to provide documentation supporting the validity of the values used to calculate the reduction and provided signed documentation from the mineral rights or surface rights owner describing the intended repurposing.

022-13, 026-9

Commenters provide "1753(f)... The regulation should be amended to require [CalGEM] to provide substantial evidence of underestimation prior to requiring an operator to

submit a report using Method 2, and it should also include a process by which operators may challenge [CalGEM]'s underestimation determination."

1753(f). Clarify circumstances where Method 2 will be required. Criteria identified in subsection 1753(f) for determining that operators must use Method 2 rather than Method 1, such as "unique geologic hazards" and "extreme access issues," should be more clearly defined, with concrete parameters where possible. Also, in addition to the listed criteria, Method 2 should be required in situations where the well is in sufficient proximity to sensitive receptors that additional protective measures will be necessary in the remediation process.

Response: NOT ACCEPTED. *The text referenced by Commenters whereby CalGEM could require an operator who had already submitted cost estimates using Method 1 to submit new cost estimates using Method 2 was removed in response to comments received on the Discussion Draft of the regulations. It does not appear in the proposed regulations in formal rulemaking. Proposed section 1753(f) now describes the Cost Estimate Summary.*

Currently Method 2 is the only method available to offshore operators. For onshore operators, under Method 1 if the estimate does not take into account all the hazards of the well, CalGEM will follow the process outlined in proposed regulation section 1753.1.2.

022-14

Commenters provide "Section 1753.1.1(a)(1). Operators should be able to provide costs that can be supported without the burden of procuring third-party estimates. This language promotes significantly inflated costs. Operator costs should at the very least be accepted along-side third party estimates so that the state may accurately understand the value of continued company operations."

Response: NOT ACCEPTED. *While operator specific savings or efficiencies cannot be utilized in estimating the operator's liability, to the extent that an operator has documentation supporting vendor price lists, rig rate reports, and end of well reports, or any other verifiable documentation of applicable costs, those may be used to support a Method 2 filing.*

022-15

Section 1753.1.1(b). The information required is duplicative of the information that CalGEM already has at its fingertips in the WellSTAR program. There is absolutely no

reason that operators should be required to resubmit information that CalGEM can find with a quick search of its own database.

Response: NOT ACCEPTED. Operators will not be required to submit data that is already available in CalGEM's records. The regulation defines the process by which CalGEM will request operators submit documentation supporting the reported condition of the well, production facility, or site if those conditions differ from what is available in CalGEM's records. CalGEM must have the ability to request additional information to verify which data are correct in the event the cost estimate submitted by the operator is not supported by CalGEM's records.

022-16, 025-3

Section 1753.1.1(c). Commenters strongly advocate that salvage value should be considered in these calculations. It is common for plugging and abandonment bids to include the value of salvageable equipment to greatly reduce or eliminate entirely the cash portion of the cost. Salvaging is a regular and normal part of abandonment and decommissioning procedures, and even under the scenario that the state is doing the plugging and abandonment we would assume that the state would opt for salvaging/recycling and reuse of materials that have a remaining useful life as opposed to unnecessarily filling our landfills.

Response: NOT ACCEPTED. These regulations implement statutory reporting requirements, under PRC section 3205.7, to be better understand the full costs associated with end-of-life remediation of operators' assets. Salvage values or scrap are highly speculative and cannot be guaranteed in any specific instance, as such they are not included.

022-17

Section 1753.2.1(a)(3)(C). The basis for determining the cost of project management should be presented and supported by substantial evidence.

Response: NOT ACCEPTED. The Basis of Reasoning for Base Costs document, released with the rulemaking, provides a full discussion of how the cost of project management was developed. The project management costs are informed by EPA guidance. Project management and engineering includes costs for such things as project management, engineering design, planning and reporting. Depending upon the cost of the project, EPA recommends the costs for project management will run between 5-10 percent. Based upon the average state abandonment costing approximately \$500,000 per contract, EPA guidance recommends that project management accounts for eight

percent of the total costs of plugging and abandonment, decommissioning, and site remediation.

022-19

Section 1753.2.1(a)(5)(B)(ii). "The basis for determining the contingency percentage should be presented and supported by substantial evidence."

Response: NOT ACCEPTED. The Basis of Reasoning for Base Costs document, section 9, describes how the contingency percentage was developed based on the Association for the Advancement of Cost Engineering International's (AACE) Guidelines. The contingency range used in Method 1 is consistent with the AACE's Class 3 cost estimate given the expected end usage of the estimate, accuracy range and estimating methodology. The other cost estimate classes were considered but not chosen. Class 2 and Class 1 estimates require additional time, resources, and money to prepare and are typically done closer to the actual project commencing, and their value is valid for a shorter period of time due to the everchanging market conditions. Class 4 and Class 5 estimates have a higher contingency range given the shorter preparation time and wider accuracy range.

023-5

Section 1753.2. Facilities and buried pipe: It is Commenter's assumption that legacy lines that have been abandoned in place in compliance with regulatory standards appropriate at the time of abandonment would not need to be factored into an operator's report. Confirmation of this assumption through enhanced clarity in the regulation, however, would benefit all stakeholders given the mature nature of California's oil and gas fields, and the regular occurrence of previously abandoned legacy facilities.

Response: ACCEPTED. As provided by proposed section 1753, subdivision (b)(2), a cost estimate must be provided for every production facility, including pipelines, that has not been decommissioned according to CalGEM's records. Where there are legacy pipelines that have been decommissioned, but not according to CalGEM's records, documentation of this fact should be provided so that CalGEM's records may be updated appropriately and in those instances the cost estimate may also be adjusted as appropriate.

023-6

Section 1753.2.2(a)(1)(A). Debris: A specific line item for "refuse, trash, [and] debris" in a field may be more difficult to quantify and report than the proposed language of the Site Remediation Costs Table in Section 1753.2.2(a)(1)(A) implies. CalGEM should clarify

standards for quantifying and reporting materials that it intends to include in the “refuse, trash, [and] debris” category.

Response: NOT ACCEPTED. Refuse, trash, and debris are commonly understood terms as items of no value, including such things as containers for fluid or mud associated with drilling operations. Removal of oilfield wastes and refuse is a requirement already found in regulation at CCR title 14, section 1775. As described in the Basis of Reasoning for Base Costs document an assumed amount of trash associated with a production facility is already included in the base numbers, however to the extent that there is additional trash, operators may estimate that removal and multiply by the removal unit cost to calculate a removal cost.

023-7

Section 1753.1.1(c)(2). Documentation of sites: Proposed section 1753.1.1(c)(2) is vague and subject to wide interpretation by CalGEM. CalGEM should clarify the purpose of this section, and how this section would provide useful information that is distinct from maps, casing diagrams, and other documentation that is currently provided by operators as routine supplementary information in other permitting and reporting procedures.

Response: NOT ACCEPTED. Proposed section 1753.1.1 provides a list of documentation that an operator may submit to support the validity of the values used to calculate their cost estimate, including but not limited to data supporting the reported condition of the well, production facility, or stie, well status report, documented costs, and published vendor price lists. Not all of these are not records typically provided to CalGEM. To prevent operators from being overly burdened by submitting documents CalGEM already has available, operators are only required to submit documents not otherwise available in CalGEM's records. For example, if the operator's reported condition of the well differs from what is available in CalGEM's records, while CalGEM may have records available about the condition of the well, the operator will need to provide records supporting that difference.

024-4, 026-2

Section 1753.1.1(c)(2). Require documentation for both well cost estimation methods. As written, the draft only requires operators to provide information listed in section 1753.1.1(c)(2) for estimates using Method 2 (section 1753.3). CalGEM has the ability to request additional information per Method 1 (section 1753.2.) submissions, and this should be required to validate how calculations were made and how categories in Method 1 were determined for CalGEM to ensure accuracy of all estimates supplied.

Response: NOT ACCEPTED. One of the purposes of Method 1 is to reduce the amount of time it will take for the operator to comply by providing base formulas which are already assumed to be based in good data. Thus, Method 1 provides its own documentation within the formulaic process. Where the well characteristics or facility counts are needed to determine multipliers, this these data already exists in WellSTAR and will be accessed by CalGEM during review of the cost estimates. Thus, documentation of Method 1 numbers is not required. When using Method 2, operators are required to provide all of the information identified in proposed section 1753.2, which would include the characteristics of the well, so that information may be checked against CalGEM's records for accuracy.

024-5, 028-2

1753.2. Offshore wells are currently the only wells required to use Method 2 (section 1753.2.). Given that Method 2 uses the same calculations as Method 1, but requires more documentation to be submitted to evidence the accuracy of the estimates made, what is the reasoning to only require offshore wells to use Method 2? Any wells within 3200 feet of sensitive receptors, high risk wells, and other factors could contribute to wells requiring the fullest documentation possible when submitting these estimates, and only requiring Method 2 for offshore wells may limit the accuracy of assessing onshore cost estimates.

Response: NOT ACCEPTED. Method 2 does not require the same calculations as Method 1. Method 1 is a prescriptive methodology, based in onshore data, where the operators input specific well and production facility characteristics into the formula, which outputs the calculated cost estimate. There is no need to document these calculations because the values are prescribed. In contrast, Method 2 allows for the operator to forego the assumed costs under Method 1 and develop their own site-specific cost estimates, providing the estimates are persuasively supported by detailed documentation. Offshore operators are limited to Method 2 because sufficient data does not exist for CalGEM to provide base costs for an offshore Method 1.

Out of Scope Comments: The following comments are not specifically directed at action, but the Department provides a brief summary and response.

002A-1, 002B-1, 002-C1

Commenter communicates concerns about the need for shut-off valves at the Aliso Canyon facility and is "concerned that sufficient effort be put into re-evaluation of SoCalGasCo safety report S-POS 002... ". Commenter further requested CalGEM consider including a "line item in budget for further evaluation of SoCalGas Study S-POS.002." Commenter included a copy of a letter from the California Public Utilities

Commission rejecting Commenter's complaint and an additional comment requesting CalGEM review an evaluation of the SoCalGasCo Safety report S-POS 002 that Commenter drafted.

Response: *The Aliso Canyon facility is subject to these decommissioning cost estimate requirements. However, shut-off valves at the facility, and the safety reports identified by commenter are not relevant to the issue of decommissioning costs.*

001-1, 003-1, 004-1, 006-1, 008-1, 009-1, 011-1, 11-2, 11-3, 012-1, 012-2, 013-1, 029-2
Commenters provided that "in Los Angeles where I was born & raised I remember feeling ill when I breathed the smokey air. I wanted to breath normally and get away from fossil fuels fatal touch" and "it is a moral responsibility to decommission and remediate oil wells that are no longer serving the public good.

Commenters provide that fossil fuel companies must clean up the messes they made, have profited by the billions and must pay their fair share to remediate these wells, return the environment to a sustainable state, be regulated to hopefully prevent more environmental disasters, and cap and decommission abandoned wells to prevent any further harm to the environment, no matter the cost.

Commenters encouraged the end of fossil fuels, billing the fossil fuel industries, and to stop drilling, fracking, flaring methane, and mining coal.

No more destruction of our public lands, ancient cultures and wildlife. We've already subsidized these polluting industries for far too long.

Reduce dependence on fossil fuels, no matter the cost. Health impacts from smokey air and escaping gases are a concern. Get smart, get inventive, get safe, get healthy.

One commenter advises that "the only way to avoid the state having to end up paying for the decommissioning, plugging, and site remediation costs is to require the future costs to be held in a reserve funded by the initiating company but held BY THE STATE. Then if the state actually ends up paying the costs, as is too often the case, the funds will have been paid by the creator of the necessary cost."

Response: *These proposed regulations implement statutory reporting requirements, under PRC section 3205.7, to better understand full costs associated with end-of-life remediation of operators' assets. The end of fossil fuels and the idea of reserve funding is outside the scope of this rulemaking.*

005-1

"Do oil and gas companies intend to pass these costs on to customers or are there regulations to ensure that does not happen?"

Response: *These proposed regulations implement statutory reporting requirements, under PRC section 3205.7, to better understand full costs associated with end-of-life remediation of operators' assets*

007-2

It would be wise to sample competitive bids for similar work and to have a schedule of commodity and equipment prices, and to prepare to negotiate stringently for quantity discounts. The government must make decisions on what it will fund and when. Government funded work must ensure fair competitive wages – a living wage, and that every contractor is insured for worker injuries and general health care.

Response: *These proposed regulations implement statutory reporting requirements, under PRC section 3205.7, to understand the full costs associated with end-of-life remediation of operator's assets. The proposed regulations are not applicable to the funding or contract provisions for State Abandonment contracts. Comments received regarding funding and provisions of these contracts have been forwarded to the CalGEM State Abandonment team for consideration*

014-2

Commenter is concerned that "CalGEM delivered an order to all drilling operations with abandoned wells, Feb. 15, 2017, to seal them immediately or else. And the or else was a shutdown of the operations and a \$25,000 a day, per well penalty until the offending wells were rendered capped sealed and certified safe" and that CalGEM "renege" on the order. Commenter encourages CalGEM to "enforce the original agreement with the operators," enforce a fine of \$25,000 per day, and "give the order to plug the delinquent wells now."

Response: *The issuance and enforcement of orders is outside the scope of these regulations.*

015-2

"Everyone agrees that the state has a problem over the next 10-50 years with idle/orphan/abandoned wells. May I suggest that CalGEM from 2024 charge \$25-\$35 dollars per well to generate a cash float for the state to close down/plug the Orphan wells. I have 12 wells so I would pay between \$300 - \$600 dollars a year/every year. An operator that has 500 wells would pay \$35 x 500=\$17500. Everyone pays in proportion to

the number of wells they own. This will give the state/CalGEM a cash float to increase the plugging program, every operator is playing their part to clean up the Orphan/ Abandoned well problems. This will minimize the exposure to every operator and keep them in business generating income for the local community, giving CalGEM another 5-10 years to do business modeling/assessment of the problems."

Response: *Funding of orphan well abandonments is outside the scope of these regulations.*

018-1, 013-2

"The gases are escaping into the environment." As methane is a very strong greenhouse gas, we MUST treat it as such. Capturing methane is a win/win, as the captured gas can be used to produce energy.

Response: *Capture of methane is outside the scope of these regulations. This comment has been forwarded to the Methane Task Force as support for their efforts.*

019-1

Commenter suggests that CalGEM could modify its requirements to substantially reduce the cost of plugging and abandonment without compromising health, safety, and environmental standards. This would reduce the incentive for operators to abandon their wells and reduce the costs borne by taxpayers to plug and abandon orphan wells. First, CalGEM should not require a CalGEM representative to come to each well site four times to witness stages of plugging and abandonment. Digital photographs or real-time video is recommended, as these methods of oversight are far more economical and convenient. Second, CalGEM should be more flexible about cement plug dimensions. Changes such as these would help to mitigate concerns about liabilities, and reduce the social cost of unnecessarily conservative remedies.

Response: *This rulemaking implement statutory reporting requirements related to cost estimates, not plugging and abandonment standards or CalGEM inspection and witnessing procedures. This comment has been forwarded to CalGEM Management for further consideration.*

020-2, 020-3

The Notice refers to a "sinking fund" method of meeting any bonding requirements arising out of regulation compliance, in order to ease the financial burden of a one-time large bond creation. However, we do not see any mention of that sinking fund option in the proposed regulation. Those deficiencies should be remedied in the regulation, because the sinking fund option will be critical for small operators to

manage the possible large added bonding costs. In addition, there is no guidance as to what criteria would generate a demand by CalGEM to any specific operator to bond based on the operator's cost estimates.

Response: *NOT ACCEPTED. Commenter appears to have confused the information provided in Notice to Operators 2023-08 regarding PRC section 3205.3 with this rulemaking. Including a sinking fund option in the proposed regulations is not necessary because the scope of this rulemaking is limited to the filing of cost estimates. Similarly, including guidance for when CalGEM will require additional bonding is not necessary because the scope of this rulemaking is limited to the filing of cost estimates, not bonding.*

025-6

California consumption is rising, production is falling. Toxic chemicals from barge exhaust will increase accordingly. Remember it's the burning of these barge fuels, and exhaust from cars and trucks affecting our air quality, not California production, which is the cleanest in the world. The SB 4 Environmental Impact Report made the same conclusion – that it is about pollutants from cars and trucks and barges.

Response: *These regulations implement statutory reporting requirements under PRC section 3205.7. Pollution from barges, cars, and trucks is outside the scope of this rulemaking.*

029-1

Consumption in California is not increasing, its levels are going down. If refinery output is going up it has been exported out of state.

Response: *These regulations implement statutory reporting requirements, under PRC section 3205.7. Consumption and exports are not the subject of this rulemaking.*

028-4

Commenter just published a set of case studies on specific operators in California that have transferred wells to smaller operators and it is a concern for us here in California. We call it the big oil likely insolvent operator orphan well pipeline.

Response: *These regulations implement statutory reporting requirements, under PRC section 3205.7. Well transfers are not the subject of this rulemaking.*

024-9, 028-3

Publish an aggregable dataset of well ownership histories. Additional data is important to determine what factors influence the cost of well plugging and remediation. One that is entirely overlooked by the discussion draft is the original operator who drilled the well and the subsequent owner operators of the well throughout the history of the well. These data are important for a number of reasons. The regulations should require that well ownership histories are documented and published in an aggregable dataset (.csv format preferred) for all CalGEM regulated unplugged wells in the state.

Response: *These regulations implement statutory reporting requirements, under PRC section 3205.7 Well ownership histories are outside the scope of this rulemaking.*

025-5

Our detractors use a narrative that the taxpayers are on the hook for these unfunded liabilities. Most stakeholders should know by now that due to the regulations, oil and gas is one of the only industries that funds all the costs of CalGEM, including abandonments and idle well expenses, etc. Commenter would hope that this notion that the taxpayers are having costs rain down on their head can be disemboweled by that fact.

Response: *These regulations implement statutory reporting requirements, under PRC section 3205.7. Funding of CalGEM and abandonments is outside the scope of this rulemaking.*