

April 3, 2020

Mr. Uduak-Joe Ntuk State Oil and Gas Supervisor California Geologic Energy Management Division 801 K Street, MS 24-01 Sacramento, CA 95814

Subject: Request for Temporary Emergency Relief

Dear Mr. Ntuk:

The purpose of this letter is to request emergency relief from CalGEM in order to save California jobs and businesses and state and local tax revenue. While every person and every business in California—and the nation—is struggling under the pressures of COVID-19, California's independent oil producers have added challenges. As you may know, worldwide demand is curtailed at the same time that Saudi Arabia and Russia are engaged in a price war that has flooded the global market with cheap crude oil. The glut of crude oil resulting from these market conditions has plunged barrel prices to levels we have not seen in two decades.

Adding insult to injury are the supertankers lined up in California's ports preparing to dump over 12 million barrels of cheap, foreign crude into California's economy. Just days ago, several of our members were informed by a refiner that their contracts are being canceled and these producers may not have any place to sell their product. This directly threatens in-state producers, but also the 55,000 jobs and billions in state tax revenue our members generate.

COVID-19 and global oil wars will subside eventually. What is at stake is much greater than the viability of local production, tens of thousands of well-paid employees, hundreds of service and supply companies, lost state and local tax revenues, but also a destabilizing of California's energy supply.

CalGEM plays a critical role in preventing such destabilizing effects from occurring. What follows are requests and suggestions that if implemented could immediately begin assisting our members to survive these difficult times.

There are two primary ways CalGEM can help oil producers. The first relates to the disposition of idle wells. The second relates to UIC regulations.

### **Temporary Relief Under Idle Well Management Program**

- 1. <u>Idle Wells Testing Compliance Plan:</u> Pause the existing required percent of wells tested and increase the length of the Testing Compliance Work Plan to 10 years, in which we are currently ending year 1 of 6. Much more is known about the cost of compliance for this new regulation. Pressures tests and clean out/tag out cost roughly \$20,000 per well. Many operators will spend millions to comply with this part of the program (in addition to the cost of the Idle Well Management Plans, which is in the millions).
  - <u>Background</u>: The Testing Compliance Work Plan requires that operators test all idle wells by April 1, 2025. The work plan includes annual benchmarks (i.e., targets) that must be met. It should be noted here that idle wells under an idle well management plan or a fee arrangement do not pose a threat to the public or environment.
  - Proposal Details:
    - Hold the existing percentage of wells tested for Testing Year 2.
    - o Increase the work plan to 10 years in total, ending April 1, 2029 and revise the annual testing requirements ramp-up for the last 8 years of the work plan.

Testing Year	Compliance Due Date	(Existing) Cumulative Percentage of Wells Tested	(Proposed) Cumulative Percentage of Wells Tested
1	April 1, 2020	5%	5%
2	April 1, 2021	15%	5%
3	April 1, 2022	30%	10%
4	April 1, 2023	50%	20%
5	April 1, 2024	75%	35%
6	April 1, 2025	100%	45%
7	April 1, 2026		55%
8	April 1, 2027		70%
9	April 1, 2028		85%
10	April 1, 2029		100%

• Benefit to the State: This proposal is in alignment with the State's mission of protecting public health, safety, natural resources, and the environment. The proposal ensures that all idle wells will be tested within a limited amount of time. The extended period and adjusted benchmarks will ensure that operators are more likely to remain financially solvent while meeting regulatory requirements. When an operator is no longer financially solvent and there are no remaining companies or persons responsible for a well it becomes classified as an orphan. There are no testing requirements for orphan wells to ensure that there is no harm to public health, safety, natural resources, and the environment and these wells can become potential hazards over time.

- 2. <u>Idle Wells Testing Exemption:</u> Allow wells scheduled to be reactivated as part of an approved Idle Well Management Plan to be included in the elimination bank and be exempted from idle well testing.
  - <u>Background</u>: Under an Idle Well Management Plan long-term idle wells are eliminated either through plugging and abandonment or reactivation. The regulations, Title 14 CCR section 1772.3, exempts wells from all idle well testing and the 15-Year Engineering Analysis if the well is scheduled for plugging and abandonment on an Idle Well Management Plan. Since an Idle Well Management Plan can extend for up to 5 years at a time, wells can be scheduled for plugging and abandonment up to 5 years in advance which is referred to as the elimination bank. Wells that are scheduled for reactivation are not exempted from any idle well testing even though the operator has committed to investing funds into bringing the well back to active status. The process of reactivating a long-term idle well frequently requires issuance of a permit to rework the well. Such permits require the well be testing for mechanical integrity. In many cases the well will be tested in compliance with the idle well testing requirements before it begins the reactivation process, thus being tested multiple times even though the intent is for the well to no longer remain idle.

# Proposal Details:

- Allow wells scheduled for reactivation on an Idle Well Management Plan to be included in the elimination bank and exempt from casing pressure tests, cleanout tags, and the 15-Year Engineering Analysis.
- Wells scheduled for reactivation on an Idle Well Management Plan will still be subject to biennial fluid level surveys.
- Benefit to the State: Reactivating long-term idle wells pays into the fund used by the State for the abandonment of orphan wells, thus assisting the State's ability to manage the orphan well inventory. Additionally, these wells will remain subject to fluid level surveys which ensures the wells are monitored prior to being reactivated. Wells for which the fluid level survey indicates there may be fluid migration into the wellbore are subject to a casing pressure test within 90 days to ensure the wellbore has mechanical integrity. (CCR section 1772.1 subdivision (a)(1)).
- 3. <u>Idle Wells Credit Retention:</u> Allow credits earned from the elimination of long-term idle wells on Idle Well Management Plans to be honored if the operator remains in compliance with Public Resources Code section 3206.
  - Background: An operator has two options for complying with PRC section 3206: filing annual idle well fees or submitting a plan for the management and elimination of long-term idle wells (Idle Well Management Plan). Under an Idle Well Management Plan, operators are required to eliminate a minimum number of long-term idle wells annually. Any long-term idle wells eliminated in excess of the minimum become credit that can be applied to a later year's plan and is valid for up to two years. As written, Public Resources Code section 3206 subdivision (a)(2)(B)(iii) does not specify that earned elimination credits remain with the operator regardless of whether the operator is paying fees or participating in an Idle Well Management Plan.
  - Proposal Details:

- Specify that credits earned under an Idle Well Management Plan stay assigned to the operator if the operator elects to file idle well fees.
- Benefit to the State: This allows operators to maintain the incentives associated with having an Idle Well Management Plan in years when it is not financially feasible to commit to a plan. In many cases it is more cost effective for operators to file idle well fees rather than eliminating long-term idle wells. Many operators have submitted and complied with Idle Well Management Plans in a good-faith effort to work with the State towards reduction of the idle well inventory, even when the cost to do so exceeds the annual fee amount. It is in the best interest of the State to promote the elimination of long-term idle wells as it reduces the liability to the State associated with wells that may become orphan at a later date. Long-term idle wells are defined as wells that have been idle for 8 or more years, many of which have been idle for 20 years or more. These wells can be costly to abandon and far exceed the funds available to the State. By further incentivizing the use of Idle Well Management Plans, industry will continue to eliminate wells that have been idle for extended periods of time, which benefits the State and achieves the ultimate goal of the statute. Additionally, idle well fees are deposited in the Hazardous and Idle-Deserted Well Abatement Fund, which is used by the State to mitigate a hazardous or potentially hazardous condition associated with a well, production facilities, or both.
- **4.** <u>Idle Wells 2020 Compliance Relief:</u> Extend the compliance due date for 2020 Idle Well Management Plans to July 1, 2021.
  - Background: Idle Well Management Plans are defined in Public Resources Code section 3206 subdivision (a)(2) and may be filed in lieu of annual idle well fees. Statute specifies that the fees are based on the calendar year and due annually; however, it does not specify the timeframe over which Idle Well Management Plans operates on an annual basis nor does it specify when the annual review occurs. The State currently implements Idle Well Management Plans on the calendar year in order to align with idle well fee calculations. Both Idle Well Management Plans and idle well fees are due to the State by May 1 of each year. It has historically taken the State up to two months to approve submitted Idle Well Management Plans resulting in operators not starting work towards compliance until July of each year. Since the Idle Well Management Plan is held to compliance within the calendar year, operators may only have 6 months to comply after approval of the plan.
  - Proposal Details:
    - Allow compliance with the 2020 Idle Well Management Plan to be achieved by July 1, 2021.
  - Benefit to the State: If an operator fails to comply with their Idle Well Management Plan, the plan is revoked and a new plan cannot be submitted for five years. This is a disservice to operators that want to comply with their plan and are committed to reducing the idle well inventory yet are unable to do so within the limited timeframe. Extending the compliance due date to July 1 will allow operators a full year from plan approval to meet their elimination commitments. Additionally, an operator can appeal the Notice of Revocation which increases demands on the Department of Conservation Legal

Department which could be avoided if operators were provided additional time to comply.

5. <u>Idle Wells – Temperature and Casing:</u> Allow Temperature Surveys to Confirm Casing Integrity Background: CCR 1772.1 (a) (2) requires operators to perform a casing pressure test on idle wells at the specified frequency to ensure casing integrity and confinement of fluids. Casing pressure tests have been identified as destructive testing by both operators and the Division, as they expose the wellbore (idle wellbores in this case) to pressures that are in excess of operating and shut-in conditions. Prior to the new regulations, a temperature survey showing no fluid movement throughout the well complied with the idle well MIT testing requirements. A temperature survey will show any temperature anomalies and then use either spinners or RA tracer to confirm no fluid movement in the wellbore. This process has long been used to ensure wellbores are competent and fluids are isolated. The typical cost of a temperature survey is between \$2000 and \$3000. Alternatively, a casing pressure test on an idle well requires rig intervention, pulling any downhole equipment, scraping the wellbore, running a bridge plug or test packer, performing a CalGEM witnessed pressure test (scheduled at least 24 hours in advance), pulling the bridge plug or test packer, and then rerunning downhole equipment. This process takes 3-5 days of rig time and increases the cost of the idle well casing MIT to approximately \$35,000-\$55,000. Eliminating the need for a rig would significantly decrease these costs, maintain the same environmental protections, and ensure operators can complete MIT tests on all the idle wells in their idle well testing compliance plan as required by CCR 1772.1.4 (b).

<u>Proposal Details:</u> Allow usage of temperature surveys to satisfy the casing MIT requirement for idle wells (CCR 1772.1 (a) (2)).

<u>Benefit to the State</u>: The State had previously allowed temperature surveys to confirm casing integrity in idle wells. Acceptance of temperature surveys would provide the same protections to USDWs and hydrocarbon zones by ensuring there is no migration of fluids and no unexplained temperature anomalies. Further, the usage of temperature surveys would ensure that operators are able to comply with the minimum testing requirements of their idle well compliance plan detailed in CCR 1772.1.4 (b).

- **6.** <u>Idle Wells Plugging and Abandonment Standards:</u> Ensure consistent plugging and abandonment requirements across all districts that are appropriate for the condition of the wellbore and proximity to receptors.
  - Background: Existing plugging and abandonment regulations establish minimum requirements for the isolation of oil and gas zones from freshwater zones and the surface in order to protect public health, safety, natural resources, and the environment. These are referred to as conditions of approval on the permit to conduct plugging and abandonment work issued by CalGEM. These minimum requirements are not being implemented consistently across all four CalGEM districts resulting in more restrictive requirements in some districts. This is being done without consideration for the condition of the wellbore, the known geologic conditions, or the proximity of the well to receptors and environmental features (i.e., rivers, roads, etc.). Operators that are complying with Idle Well Management Plans and Testing Waiver Plans to reduce the idle well inventory are forced to pay higher costs to plug and abandon these wells.

# Proposal Details:

- Ensure that all plugging and abandonment permits meet the minimum requirements established in California Code of Regulations, Title 14, Chapter 4, Subchapter 1, Article 3, section 1723 through 1723.8.
- Clarify of 1723.1 Plugging of Oil or Gas Zones. Does this pertain to each oil and gas zone encountered in the wellbore or only the uppermost hydrocarbon zone (particularly in fields where oil and gas zones are commingled)?
- Require that any additional or special requirements be approved by the CalGEM Supervisor.
- Require CalGEM to provide justification to the operator for the additional or special requirements based on the condition of the wellbore and whether the well meets the definition of critical well, is in an urban area, or has an environmentally sensitive wellhead.
- Benefit to the State: The purpose of the existing plugging and abandonment regulations is to ensure protection of public health, safety, natural resources, and the environment. These regulations, at their minimum standards, have proven their ability to achieve this purpose. Restricting additional requirements to wells near receptors ensures an extra layer of precaution in environmentally sensitive and urban areas. In this, operators may continue to plug and abandon wells in the most cost-effective way possible to ensure compliance with existing regulations while mandating additional costs as appropriate in areas that warrant such protections. Continued, and potentially accelerated, plugging and abandonment associated with lower costs enables operators to reduce the liability to the State.

#### **7.** Testing New Idle Wells § 1772.1.(2) & § 1772.1.(3)

Background: A significant number of new idle wells that were not incorporated in a company's Compliance Work Plan are coming due for the 24-month pressure testing requirement. Additionally, in the current environment, a significant number of wells could potentially be shut in due low crude prices. Those shut in wells would be reclassified as idle, thereby enrolling even more into the idle well testing program. Roughly 3 years after these wells are shut in, significant additional idle well testing on top of the existing compliance work plan testing will be required in order to meet the current regulations. Operators are to conduct casing pressure tests within 24 months of a well becoming idle as well as clean out tag on the well within 8 years to determine the ability to reach approved depth using either open-ended tubing or a gauge ring.

<u>Proposal Details:</u> Extend the due date for required idle well pressure testing from 24 months to 6 or 10 years. A 6-year pressure testing compliance window would match the existing compliance work plan schedule stated in CalGEM regulations; the 10-year timeframe coincides with our accompanying request for idle well compliance. This would allow testing of new and existing idle wells under the Compliance Work Plan in uniformity with other regulations.

<u>Benefit to the State:</u> This proposal aligns with the State's mission of protecting public health, safety, natural resources, and the environment. The proposal ensures that all idle wells will be tested within a given time frame. The extended period and adjusted benchmarks will increase the likelihood of financial solvency for operators while meeting regulatory

requirements. And financially sound operators who sustain responsibility for their assets are the preferred state of affairs for California businesses.

The next section relates to options related to Underground Injection Control.

## **Temporary Relief Related to UIC Regulations**

- 1. <u>Mechanical Integrity Testing II Compliance Period Request</u>: Provide MIT II Testing Compliance Periods for existing Cyclic Steam and Steam flood Injection Wells as of 4/1/2019.
  - Background: Effective April 1, 2019, California Code of Regulations Title 14 section 1724.10.2 changed the testing frequency methodology and pressure limits for steam flood wells and added testing for cyclic steam wells. This is an inadequate compliance period for the number of wells that require testing, service providers with limited resources to conduct the test, and the cost associated with conducting the test. Regulations do not allow a sufficient period for operators to conduct these tests. All steam flood and cyclic steam wells must be tested to these new standards by April 1, 2021. Cyclic steam wells represent approximately 90% of all UIC well types in the CalGEM Inland District, totaling tens of thousands of wells in the State. MIT II testing frequency changed from every five years to testing every two years. There are significant challenges associated with testing all wells by April 1, 2021 due to the volume of wells and the limited availability of service providers that can perform the tests including new pressure limits that do not take into account the expansion of the testing fluid/ gas that occurs within a heated reservoir. Operators are currently working with CalGEM on a field by field basis to address this issue and to date no response on the proposed testing protocols has been received. In addition, the radioactive tracer survey required by the regulations relies on a radioactive material, Krypton, that is not readily available. A single MIT II test costs approximately \$10,000 to \$20,000 for a cyclic steam (CS) producer in a steam flood (SF). In order to conduct the tracer survey required in the MIT II test, tubing and downhole equipment must first be pulled from the well. The rig time needed to pull rods and tubing and then rerun is the largest component of the cost, \$7,500 or more per well. The survey itself costs approximately \$2,500 per well. Significant cost savings can be achieved if the testing were conducted while performing maintenance services on the well, such as servicing the pump. During these activities, the tubing is already being pulled and the cost is absorbed as part of the well work. In this scenario, operators are only paying for the tracer survey, \$2,500 per well. This solution allows for the test to be combined with other work and completed in a cost-effective manner. Routine well maintenance such as pump replacement occurs on roughly a five-year interval. This solution would reduce well downtime while allowing service companies to better attempt to keep up with demand.
    - Proposal Details:
      - Provide MIT II Testing Compliance Period to 4/1/2024 on SF wells
      - Provide MIT II Testing Compliance Period to 4/1/2026 on CS wells
      - Begin the regulatory testing frequency after the compliance period ends.
    - <u>Benefit to the State:</u> This proposal aligns with the State's mission of protecting public health, safety, natural resources, and the environment. The proposal ensures that CS and SF wells can undergo MIT II testing in a reasonable timeframe that enables operators

to comply and service companies to meet the demand. Failure to comply with UIC MIT testing can result in revocation of the permit to inject in that well. The process to add the well back into the UIC project and conduct the UIC project approval is a time and resource intensive process that is placed on CalGEM and the regional water boards. By providing an extended compliance period, the State will be able to utilize these resources conducting other work.

- 2. Mechanical Integrity Testing I and II Eliminate initial test for new CS wells: Eliminate initial MIT I and II tests for new CS steam wells
  - Background: As written, testing frequencies for the two mechanical integrity tests for cyclic steam wells are not in alignment. Currently, an MIT I casing pressure test is required prior to injection while MIT II testing is required within 3 months after injection has commenced. Cyclic steam wells are unique because they perform two functions: injecting steam into the reservoir and pumping (producing) heated fluids out of the same reservoir. The steam injection periods are shorter in duration than producing periods, which ensures that injected steam is re-captured. MIT I is a casing pressure test that subjects the wellbore to pressures that exceed the typical operational pressure of the wellbore. The MIT II is a tracer survey that demonstrates zonal isolation of the injected fluids. For new cyclic steam wells, this is an unnecessary test as the well will have demonstrated integrity through the construction and completion process as required by the drilling permit.
  - Proposal Details:
    - Eliminate MIT I casing pressure tests and MIT II for new CS wells and allow for alternative wellbore integrity demonstrations.
  - Benefit to the State: This proposal aligns with the State's mission of protecting public health, safety, natural resources, and the environment. by reducing the potential for inadvertently damaging new wellbores as a result of performing destructive casing pressure tests. The casing pressure tests can shorten the life of a well and potentially increase environmental risk.
- **3.** Continuous Pressure Recording: Delay the requirement to continuously record pressure on UIC wells by two years and clarify the definition of "continuous" to be inclusive of recording four datapoints per hour.

Background: Operators are required to provide continuously recording pressure on injection wells. There are two primary concerns with this requirement: the cost of upgrading equipment on all existing injection wells and the lack of clarity around the definition of "continuous" monitoring. The purpose of this requirement is evidently to demonstrate that the maximum allowable injection pressure is not exceeded. This data is to be provided to the State in a digital format and the highest injection pressure for each month reported. It was shared at a CalGEM UIC regulation workshop that "continuous" means multiple point measurements every minute. However, operators have been unable to locate a definition in the rulemaking documents to support this. Operators without supervisory control and data acquisition systems will find it challenging to record, analyze, and store billions of points of data and transfer that data to CalGEM when requested. Many operators have not identified inexpensive technical solutions to

meet this new regulation and continue to have questions regarding definitions of "continuous" and digital formats. Without clear definition of what is required, operators are at risk of incurring unnecessary costs associated with purchasing inadequate equipment or being found non-compliant upon submission of inadequate data. With some flexibility, as an example, industry could leverage existing technology (steam meters) to record and store data. There is adequate memory to hold one month of data recording four points per hour. Operators could implement a process for lease operators to drive to the meter once a month, hook up a laptop, and download the data. A technician could then analyze the data for the maximum injection pressure, report it and store the data. Additionally, idle wells must be monitored unless they are disconnected. Allowing for a double block is virtually equivalent to being disconnected.

# Proposal Details:

- Delay the deadline for continuous pressure monitoring for two years to April 1, 2023, which requires new field equipment and IT investments, additional human resources, and new field and engineering processes.
- Clarify that the definition of continuous pressure monitoring is inclusive of four measurement points per hour and the definition of required digital formats.
- Eliminate required continuous monitoring for idle injectors if they have a double block to ensure they cannot inject.
- Benefit to the State: The state already requires operators to continuously measure
  pressure with gauges and recording devices which are monitored. A delay and definition
  clarification will not present a major risk to exceeding MASPs. The proposed definition of
  continuous will benefit the State by operators providing less data for CalGEM to accept,
  store and analyze while operators record at a frequency in which injection pressures do
  not greatly vary.
- 4. Remedial Work and Testing Period: Extend Allotted Time to Remediate and Test UIC Wells. <u>Background:</u> Operating and testing requirements for UIC projects went into effect on 4/1/2019, California Code of Regulations, 1724.10. Under these new requirements, if a UIC mechanical integrity test (MIT) is unsuccessful under Sections 1724.10.1 (casing pressure test) or 1724.10.2, operators must perform remedial work on the well and pass the MIT within 180 days of the failed test per Section 1724.10(5). Under the prior and current UIC testing regulations, operators are required to immediately stop any and all injection upon the failure of MIT testing per Sections 1724.10.1 1724.10.2, and 1724.10.13. The cessation of injection in itself serves to ensure that freshwater and underground sources of drinking water, if present, are not harmed. Because of this, a longer period of time should be allowed to perform remedial work and subsequent well testing. Additionally, under California Code of Regulations, section 1772.1 of the idle well regulations, operators are provided one year to remediate a well after failing the MIT required under that section. Given that both sets of regulations serve to ensure integrity of the wellbore and prevent damage to public health, safety, natural resources, and the environment, both UIC and idle well testing requirements should be in alignment with respect to the amount of time allotted for remediation. Current Pressure Test pressure variance of 3% unrealistic in thermally enhanced wells as the temperature impacts the fluid expansion of the testing fluid. Controlling the pressure variance in this scenario is

impossible as the pressure continues to climb due to the thermal expansion of the testing fluid. The issue is that to control the thermal expansion requires a consistent test fluid temperature. If the test pressure is at or above what is required, the test should be deemed valid and sufficient proof of casing integrity.

#### Proposal Details:

- Extend the allotted time to remediate and test UIC wells from 180 days to 1 year under Section 1724.10(5).
- If the well is disconnected by the operator, align the remediation to the date the first idle well test would be due, 4 years after the failure, or immediately prior to the start of injection again.
- Benefit to the State: This proposal aligns with the State's mission of protecting public health, safety, natural resources, and the environment. UIC wells that are not injecting pose no risk to underlying freshwater aquifers and underground sources of drinking water. Additionally, extending the remediation due date reduces the burden on the CalGEM inspectors.

It is our understanding that you, with the approval of the Governor, can implement temporary measures to ensure that regulated parties – particularly those in deemed essential infrastructure – are able to fulfill the requirements imposed by current laws, rules, and regulations. Nothing we request in any way jeopardizes public health or environmental safety. We look forward to your rapid response to these emergency requests.

Sincerely,

Rock Zierman, CEO

California Independent Petroleum Association

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