

Date of Hearing: June 22, 2022

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY

Eduardo Garcia, Chair

SB 733 (Hueso) – As Amended June 13, 2022

SENATE VOTE: 38-0 : *Vote does not reflect current version of bill.*

SUBJECT: Gas corporations: renewable gas procurement

SUMMARY: Establishes a definition of “renewable hydrogen,” and mandates the California Public Utilities Commission (CPUC) establish renewable hydrogen procurement goals for each gas corporation on a proportionate basis. Additionally requires the CPUC to approve a gas corporation’s expenses from infrastructure built to deliver biomethane, renewable hydrogen, or both from a producer to the pipeline as part of the corporation’s rate base paid for by their customers. Specifically, **this bill:**

- 1) Defines “renewable hydrogen” to include:
 - a. Green electrolytic hydrogen, as specified in statute;
 - b. Biomethane-derived hydrogen
 - c. Hydrogen derived from the noncombustion thermal conversion of:
 - i. Agricultural crop residue.
 - ii. Bark or lawn, yard, and garden clippings.
 - iii. Leaves, silvicultural residue, forest thinnings, and tree and brush prunings.
 - iv. Wood, wood chips, and wood waste.
 - v. Nonrecyclable pulp or paper materials.
 - vi. Livestock waste.
 - vii. Municipal sewage sludge or biosolids.
 - viii. Methanated renewable hydrogen.
 - d. Hydrogen derived from splitting water by any process that receives only renewable energy as the primary input, including, but not limited to, direct photochemical conversion using solar energy.
 - e. Any other process yielding hydrogen from only renewable inputs, as determined by the CPUC.
- 2) Mandates the CPUC open a new proceeding, or new phase of an existing proceeding, to establish renewable hydrogen procurement goals for each gas corporation, and require each corporation to annually procure a proportionate share of renewable hydrogen to meet the procurement goals.

- 3) Mandates the CPUC approve, or modify and approve, a gas corporation's ability to include in its rate base expenses arising from infrastructure investments made to deliver biomethane, renewable hydrogen, or both from a producer to the pipeline system. Once approved, such ability to rate base would allow the gas corporation to charge their ratepayers for these expenses.

EXISTING LAW:

- 1) Defines "gas corporation" to include every corporation or person owning, controlling, operating, or managing any gas plant for compensation within this state, with exceptions. (Public Utilities Code § 222)
- 2) Defines "core transport agent" to include an entity that offers core gas procurement service to customers within the service territory of a gas corporation, but does not include a gas corporation, and does not include a public agency that offers gas service to core and noncore gas customers within its jurisdiction, or within the service territory of a local publicly owned gas utility. "Core transport agent" includes the unregulated affiliates and subsidiaries of a gas corporation. (Public Utilities Code § 980(b))
- 3) Defines "green electrolytic hydrogen" as hydrogen gas produced through electrolysis and does not include hydrogen gas manufactured using steam reforming or any other conversion technology that produces hydrogen from a fossil fuel feedstock. The statutory definition does not specify the type of energy input needed to drive the electrolytic reaction; thus any energy input would qualify under this definition. (Public Utilities Code § 400.2)
- 4) Requires the CPUC, the California Energy Commission (CEC), and the California Air Resources Board (CARB) to consider green electrolytic hydrogen an eligible form of energy storage and consider its potential uses. (Public Utilities Code § 400.3)
- 5) Requires the CPUC, in consultation with CARB, to consider adopting specific biomethane procurement targets or goals for each gas corporation. (Public Utilities Code § 651)
- 6) Requires the CPUC and CEC to undertake specified actions to advance the state's clean energy and pollution reduction objectives, including, where feasible, cost effective, and consistent with other state policy objectives, increasing the use of large- and small-scale energy storage with a variety of technologies, including green electrolytic hydrogen, as defined. (Public Utilities Code § 400)
- 7) Establishes a Renewables Portfolio Standard (RPS) Program requiring certain percentages of electricity retail sales be served by renewable resources, most recently increased by SB 100 (De Leon, Chapter 312, Statutes of 2018) to 60% by 2030 and a state goal of procuring 100% of electricity from eligible renewable energy resources and zero-carbon resources by December 31, 2045. Existing law requires state agencies,

including the CPUC, CEC, and CARB, to take certain actions to support these clean energy goals. (Public Utilities Code § 399.11)

- 8) Specifies that facilities using biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current qualify as RPS eligible facilities, if they meet other qualifying criteria as specified. (Public Resources Code § 25741)

FISCAL EFFECT: Unknown. The contents of this bill have substantially changed from the version last heard in the Senate Committee on Appropriations. This bill is keyed fiscal and will be referred to the Assembly Committee on Appropriations for its review.

BACKGROUND:

The Hydrogen Color Wheel – Hydrogen has been considered the “swiss army knife” of decarbonization technologies; praised for its touted zero-GHG profile and potential to replace fossil fuels in most applications relatively easily. However, there are many types of hydrogen with varying levels of climate benefits. In other words, not all hydrogen is created equal. The type of feedstock (what material is used to make the hydrogen) and the production method (what is done to break apart the feedstock into hydrogen) determines the type of hydrogen produced.

Some notable feedstocks of hydrogen include biomass, biomass-derived liquids like ethanol and bio-oil, biogas, coal, natural gas, and water. These feedstocks are then broken down through thermochemical processes to generate hydrogen. The thermochemical processes vary and can generate different amounts and types of particulate pollution and GHGs. In every process, energy is needed in order to generate hydrogen. Some processes rely on clean resources exclusively for their power, while others are less discriminating. The combinations of feedstocks and processes result in a multitude of hydrogen products. A simplified color spectrum has been adopted to describe these hydrogen products; however, the definitions of these colors are neither universally agreed upon nor rigorous.

- “Gray (or brown) hydrogen” is produced from a natural gas feedstock and whatever energy is cheapest, via natural gas steam methane reforming. **The vast majority of hydrogen currently used in the United States comes from this process.** While cheap and efficient, it generates carbon dioxide and other pollutants, depending on the energy source used.
- “Blue hydrogen” employs the same process as gray hydrogen, but the carbon dioxide emitted from steam methane reforming is captured and stored, lessening the GHG impact of this process.
- “Turquoise hydrogen” uses a natural gas feedstock, which is passed through molten metal to split the natural gas into hydrogen and solid carbon.

- “Green hydrogen” is produced using only renewable feedstock – such as biomass, renewable natural gas, or water – and typically (but not always) relies on renewable electricity to generate the hydrogen.
- “Green electrolytic hydrogen” is a specific type of green hydrogen which uses water as the feedstock and renewable electricity to split the water in order to generate hydrogen. Green electrolytic hydrogen is currently the only type of hydrogen defined in the Public Utilities Code (Public Utilities Code § 400.2). However, its statutory definition does not specify that renewable electricity must be used to split the water, making it only partially “green” in the traditional sense.
- “Pink hydrogen” refers to a specific type of green electrolytic hydrogen where only nuclear energy is used to split the water.
- “Yellow hydrogen” refers to a specific type of green electrolytic hydrogen where only solar energy is used to split the water.

As the Color Wheel indicates, any conversation about hydrogen is heavily dependent upon the color and precise definition of that color being discussed. With so many colors and so many loose definitions, it is easy to misunderstand or misascribe the climate benefits when discussing hydrogen.

What Do We Do With All the H₂? Hydrogen has the potential to be used in a multitude of applications – from fuel cells in cars; to replacing natural gas in homes; to fuel replacement in aviation, shipping, and trucking industries; and to generate electricity. One, much discussed, potential application of hydrogen is to firm our renewable energy grid. By using low-cost, abundant electricity from intermittent renewables during the day (i.e. solar and wind) to produce hydrogen, and then using that hydrogen in fuel cells or injecting into a pipeline to provide power at other times, hydrogen can act as a form of storage. However, in practice, many of the technologies used to produce hydrogen from renewables are still expensive and unable to economically cycle on and off in line with the availability of intermittent renewables. This example in the energy sector is characteristic of many other hydrogen applications – where the GHG footprint, cost, and availability of the hydrogen are uncertain or unclear – calling for a more thorough understanding of which hydrogen product is best suited to which application.

Hydrogen in the Pipeline – The end-uses for hydrogen will strongly depend on reliable methods for safely storing and transporting it in large quantities. It is not as simple as injecting hydrogen directly into the natural gas pipeline. Hydrogen can embrittle and crack gas pipeline materials.¹ Older pipelines may be compromised as the percentage of hydrogen in the pipeline increases, due to the operating pressure of the pipeline needing adjustment to accommodate the smaller gas.²

¹ Hafsi, Z., Mishra, M., and Elaoud, S., “Hydrogen embrittlement of steel pipelines during transients,” *Procedia Structural Integrity*, Vol. 13, 2018, pg. 210-217.

² Penev, M., Zuboy, J., and Hunter, C., “Economic analysis of a high-pressure urban pipeline concept (HyLine) for delivering hydrogen to retail fueling stations,” *Transportation Research Part D: Transport and Environment*, Volume 77, 2019, pg. 92-105.

While hydrogen is not explicitly barred from the pipeline, the CPUC's Standard Renewable Gas Interconnection Tariff currently limits the amount of pure hydrogen gas concentration injected into the intrastate pipeline to 0.10%.³ Any concentration above that amount would pass the "trigger level,"⁴ and testing for hydrogen concentration must be done for all sources of biomethane without exception. As a result, pure hydrogen is currently not injected into the common carrier pipeline; however, the CPUC currently has a \$1.5 million contract with the University of California Riverside and the Gas Technology Institute to conduct experimental work on the safety and efficacy of injecting hydrogen into California's pipeline.⁵

The Biomethane Template – Since 2013, the CPUC has had an ongoing rulemaking examining these very issues of safety and pipeline open access rules as they relate to biomethane injection into the common carrier pipeline.⁶ Analysis by CARB, the Office of Environmental Health Hazard Assessment,⁷ and the California Council on Science and Technology⁸ answered many of the outstanding questions of safe injection of biomethane. With many of the safety issues resolved, the Legislature directed⁹ the CPUC to adopt biomethane procurement goals for gas corporations. In February 2022, the CPUC adopted biomethane procurement targets of 17.6 billion cubic feet annually by 2025 and 72.8 billion cubic feet annually by 2030.¹⁰ For context, California's average natural gas demand in 2020 was approximately 2 trillion cubic feet annually.¹¹ Hydrogen injection standards or procurement was not ordered as part of this decision.

Rather, in November 2019, the CPUC issued a Scoping Memo in the proceeding to develop a hydrogen gas pipeline injection standard, among other considerations. This standard will specify how much hydrogen gas can be blended into the existing gas pipeline system in California without compromising pipeline integrity and safety. The CPUC reports that now that the biomethane procurement order is complete, they will next be taking up hydrogen considerations in the proceeding.

³ D. 20-08-035; "Decision Adopting the Standard Renewable Gas Interconnection Tariff;" R. 13-02-008; CPUC; September 4, 2020.

⁴ A "trigger level" denotes a threshold measured value of a constituent, when exceeded will trigger additional periodic testing and analysis.

⁵ UC Riverside Center for Environmental Research and Technology, "Hydrogen Impacts Study;" April 2020-September 2021. <https://www.cert.ucr.edu/hydrogen-impacts-study>

⁶ R.13-02-008 "Order Instituting Rulemaking to Adopt Biomethane Standards and Requirements, Pipeline Open Access Rules, and Related Enforcement Provisions." CPUC, February 21, 2013.

⁷ CARB and OEHHA; "Recommendations to the California Public Utilities Commission Regarding Health Protective Standards for the Injection of Biomethane into the Common Carrier Pipeline;" May 15, 2013; https://oehha.ca.gov/media/final_ab_1900_staff_report_appendices_051513.pdf

⁸ CCST, *Biomethane in California Common Carrier Pipelines: Assessing Heating Value and Maximum Siloxane Specifications*; June 2018; <https://ccst.us/wp-content/uploads/2018biomethane.pdf>.

⁹ SB 1440 (Hueso, Chapter 739, Statutes of 2018)

¹⁰ D. 22-02-025; CPUC; *Decision Implementing Senate Bill 1440 Biomethane Procurement Program*; February 24, 2022.

¹¹ 2020 total consumption reported at 2.074 trillion cubic feet; U.S. Energy Information Administration, "Natural Gas Consumption by End Use;" https://www.eia.gov/dnav/ng/ng_cons_sum_dc_u_sca_a.htm ; accessed 06.17.2022

COMMENTS:

- 1) *Author's Statement.* According to the author, "Hydrogen is poised to become an essential component of the low carbon energy economy of the future. In California and other parts of the world, hydrogen will be integral to achieving energy decarbonization at scale, especially for the hard to abate sectors. Hydrogen is an entirely carbon-free fuel, but one that needs a policy and economic jumpstart. Just as California has done with the renewable portfolio standard, renewable hydrogen procurement is necessary to bring renewable hydrogen to scale in time to achieve the State's ambitious clean energy and climate goals. SB 733 authorizes the CPUC to expand the biomethane procurement standard adopted pursuant to SB 1440 (Hueso, Chapter 739, Stats of 2018) to also include renewable hydrogen. The bill also requires the CPUC to approve a gas corporation's application to recover in the rate base investments in infrastructure necessary to deliver renewable hydrogen from a producer to the pipeline system. Analogous to the RPS and the corresponding decrease of solar energy prices, the goal is to help jump start production of renewable hydrogen in order to decarbonize the existing natural gas system and lower the cost of the fuel for a potential dedicated hydrogen system in the future. These efforts will help California continue to lead the nation in efforts to combat climate change and set a model for other states and countries."
- 2) *What's in a name?* This bill proposes a definition for "renewable hydrogen" that lists a variety of feedstocks that would qualify hydrogen derived from them as "renewable hydrogen." Many of the feedstocks are mirrored on those eligible under the RPS. For example, biomass burned to generate electricity is RPS eligible; biomass converted into hydrogen using noncombustion thermal conversion would be considered "renewable hydrogen" under this bill. However, unlike the hydrogen color wheel mentioned above, the majority of qualifying hydrogen sources presented in this bill do not specify the energy source used to drive the conversion of organic material to hydrogen.¹² Presumably, non-renewable, system power would be used for many of the types of hydrogen manufacturing listed as "renewable hydrogen" in this bill. The consequence of not specifying the energy source in this bill is having a hydrogen product labeled as "renewable" that likely used fossil fuel-powered energy to derive it. Moreover, the definition of "renewable hydrogen" as presented in this bill is silent regarding location of the hydrogen production. This diverges from RPS-eligible electrical resources which have specific qualifying categories depending on whether the resource is located in, or connected to, the California grid.
- 3) *A Need for alignment.* While the CPUC is poised to examine hydrogen injection standards and safety, this bill may accelerate or supplant those efforts by calling for

¹² The exception being § 652 (a)(5) "Hydrogen derived from splitting water by any process that receives only renewable energy as the primary input, including, but not limited to, direct photochemical conversion using solar energy."

renewable hydrogen procurement goals or targets without acknowledging any safety concerns. In 2018, SB 1440 (Hueso, Chapter 739, Statutes of 2018) directed the CPUC to adopt biomethane procurement goals *only if* certain criteria were met, including alignment with state greenhouse gas reduction goals, short-lived climate pollutant reduction targets, and applicable state and federal laws. This bill requires the CPUC establish procurement targets without first requiring it to develop a hydrogen gas pipeline injection standard. If adopted, this bill could disharmonize state policy support between the hydrogen and biomethane markets and lead to potentially unsafe outcomes.

- 4) *Approval is the only option?* This bill further requires the CPUC to approve, or modify and approve, a gas corporation's application to rate base expenses arising from interconnecting biomethane or hydrogen production facilities to the pipeline. To rate base an expense means a utility not only can recover the costs from their ratepayers, but that infrastructure is eligible to generate a return on investment for the lifetime of the asset. Currently the cost of interconnecting biomethane production facilities is borne by the facility owner; who then likely increases the contract price with the gas corporation for the biomethane a higher rate to account for the biomethane procurement. This requirement does not permit the CPUC to *deny* a gas corporation's cost-recovery application if the costs are found to be unjust and unreasonable. In addition, this bill requires that *all* infrastructure costs from the point where hydrogen is produced to its injection point into the existing common carrier gas pipeline system be rate base expenses. Mandating the recovery of infrastructure costs from the point of production to the common carrier gas pipeline system, could be challenged by fossil natural gas producers as anti-competitive and discriminatory in a gas production market that is highly competitive and lightly regulated.
- 5) *The Missing Few – Core Transport Agents (CTAs)*. Similar in kind to community choice aggregators in the electricity space, CTAs are entities that offer core gas procurement service to customers within the service territory of a gas corporation, but do not include a public agency that offers gas service to core and noncore gas customers within its jurisdiction or within the service territory of a local publicly owned gas utility. "Core transport agent" includes the unregulated affiliates and subsidiaries of a gas corporation. Core Transport Agents were excluded from the CPUC's recent biomethane procurement goals or targets, as they were not explicitly mentioned in SB 1440 (Hueso, Chapter 739, Statutes of 2018). *To ensure gas distributor requirements are equal across the state, the author and committee may wish to include CTAs in any renewable hydrogen procurement considerations.* Otherwise, there is a potential created for gas customers to depart gas corporation service for CTAs in order to avoid the likely high costs associated with the potential renewable hydrogen procurement.
- 6) *Need for Amendments*. Given the issues raised above related to mandating procurement of a resource whose injection safety is unknown, requiring the CPUC to authorize an application to rate base interconnection of facilities that may result in anti-competitive

behavior, or the absence of CTAs from these procurement rules, *the author and committee may wish to consider the following amendments to address these concerns:*

SEC. 2. Section 652 is added to the Public Utilities Code, to read:

652. (a) For purposes of this section, “renewable hydrogen” means any of the following:

1. Green electrolytic hydrogen, as defined in Section 400.2.
2. Hydrogen derived from biomethane.
3. Hydrogen derived from the noncombustion thermal conversion of any of the following materials when separated from other waste:
 - (1) Agricultural crop residue.
 - (2) Bark or lawn, yard, and garden clippings.
 - (3) Leaves, silvicultural residue, forest thinnings, and tree and brush prunings.
 - (4) Wood, wood chips, and wood waste.
 - (5) Nonrecyclable pulp or nonrecyclable paper materials.
 - (6) Livestock waste.
 - (7) Municipal sewage sludge or biosolids.
- ~~4. Methanated renewable hydrogen.~~
5. Hydrogen derived from splitting water by any process that receives only renewable energy as the primary input, including, but not limited to, direct photochemical conversion using solar energy.
6. Any other process yielding hydrogen from only renewable inputs, as determined by the commission.

(b) The commission shall open a new proceeding, or a new phase of an existing proceeding, to do ~~both of~~ the following:

1. ~~Consider establishing~~ Establish renewable hydrogen procurement goals for each gas corporation ~~and core transport agent.~~
2. ~~Consider requiring~~ Require each gas corporation ~~and core transport agent~~ to annually procure a proportionate share of renewable hydrogen to meet the procurement goals established pursuant to paragraph (1).
3. ~~Prior to establishing renewable hydrogen procurement targets or goals, the commission shall make the following findings:~~
 - a. ~~The targets or goals are cost-effective means of achieving the forecast reduction in the emissions of short-lived climate pollutants pursuant to Section 39730.5 of the Health and Safety Code and other greenhouse gases pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code.~~
 - b. ~~The targets or goals comply with all applicable state and federal laws.~~
 - c. ~~The safety risk of using renewable hydrogen in pipelines will be appropriately regulated, mitigated, and monitored. Projects are prohibited from using~~

pipelines until the CPUC acts to set safety standards and the pipelines meet those standards.

SEC. 3. Section 653 is added to the Public Utilities Code, to read:

653.(a) The commission, in furtherance of the goals of Sections 399.24 and 651, ~~and 652~~, shall evaluate whether authorizing ~~approve, or modify and approve~~, a gas corporation's application to recover in ~~the~~ its rate base expenses incurred from investments in infrastructure to ~~deliver~~ interconnect facilities producing biomethane, renewable hydrogen, or both, ~~from a producer from the point of receipt~~ to the pipeline system is just and reasonable, ~~including, but not limited to, the point of receipt downstream, and authorize the recovery of expenses from the gas corporation's customers.~~

(b) As part of the evaluation pursuant to subdivision (a), the commission may consider to what extent a gas corporations' investments in infrastructure and its potential recovery of expenses impact the unit price of biomethane or renewable hydrogen, the effect on gas corporation customer rates and bills, the impact on market competition, and the ability to achieve state greenhouse gas reduction goals, as well as other relevant impacts, effects, or considerations determined by the commission.

7) *Related Legislation.*

SB 1075 (Skinner, 2022) advances hydrogen as a decarbonization solution by creating a Clean Hydrogen Hub Fund to support a state bid for a federal Hydrogen Hub grant. Additionally requires CARB, the CPUC, and the CEC to incorporate hydrogen in various decarbonization strategies, including requiring the CEC to develop a definition for "renewable hydrogen" that would enable a facility using the hydrogen to be an eligible RPS resource. Status: *pending hearing* in this committee on June 22nd, 2022.

8) *Prior Legislation.*

SB 18 (Skinner, 2021) would have required CARB, CPUC and the CEC to incorporate green electrolytic hydrogen into various decarbonization strategies, and would have required CARB to analyze and provide recommendations regarding potential uses of hydrogen to reduce economy-wide emissions. Status: Held in the Assembly Committee on Appropriations.

SB 697 (Hueso, 2021) would have required CARB to establish a Green Hydrogen Credit Program to provide industrial facilities that produce green hydrogen with an additional Cap-and-Trade GHG allowance of 10 tons for every metric ton of green hydrogen produced during a compliance period. Status: Held in the Senate Committee on Appropriations.

SB 1122 (Skinner, 2020) would have required CARB to incorporate planning and recommendations for green electrolytic hydrogen into the scoping plan. The bill

contained provisions substantially similar to some of those contained in this bill. Status: Died in the Senate Committee on Energy, Utilities, and Communications.

SB 100 (De León) raised the RPS procurement requirement from 50 percent to 60 percent by 2030. The bill also established a goal of procuring 100 percent of the state's electricity from zero-carbon resources by December 31, 2045. Status: Chapter 312, Statutes of 2018.

SB 1369 (Skinner) established a definition of green electrolytic hydrogen, required the CEC and CPUC to incorporate green electrolytic hydrogen as a resource that may be considered for procurement to reach state clean energy goals, and required the CPUC, CEC, and CARB to consider green electrolytic hydrogen an eligible form of energy storage. Status: Chapter 567, Statutes of 2018.

SB 1440 (Hueso) requires the CPUC, in consultation with CARB, to consider adopting specific biomethane procurement targets or goals for each corporation, as specified. This bill requires the CPUC, if the CPUC adopts those targets or goals, to take certain actions in regards to the development of the targets or goals and the procurement of the biomethane to meet those targets or goals Status: Chapter 739, Statutes of 2018.

AB 3187 (Grayson) requires the CPUC open a proceeding not later than July 1, 2019 to consider options to promote the in-state production and distribution of biomethane. Status: Chapter 598, Statutes of 2018.

SB 433 (Mendoza, 2017) would have authorized the CPUC to allow a gas corporation to procure zero-carbon hydrogen and recover through rates the reasonable cost of pipeline infrastructure developed to transport the hydrogen to end users. The bill died in the Assembly.

SB 360 (Cannella, 2015) would have authorize the CPUC to consider providing the option to all gas corporations to engage in competitive bidding and direct investment in ratepayer financed biomethane collection equipment in California. Status: died in the Senate Committee on Energy, Utilities and Communications.

SB 687 (Allen, 2015) would have established a renewable gas standard in California. Status: Died in the Senate Committee on Appropriations.

SB 1383 (Lara) required state agencies to consider and, as appropriate, adopt policies and incentives to significantly increase the sustainable production and use of renewable gas, including biomethane to meet the state's climate change, renewable energy, low-carbon fuel, and short-lived climate pollutants goals, including black carbon, landfill diversion, and dairy methane targets. Status: Chapter 395, Statutes of 2016.

SB 840 (Committee on Budget and Fiscal Review) required the CPUC to reevaluate its requirements and standards for biomethane to be injected into common carrier pipelines. Status: Chapter 341, Statutes of 2016.

AB 1900 (Gatto) directed the CPUC to identify landfill gas constituents, develop testing protocols for landfill gas injected into common carrier pipelines, adopt standards for biomethane to ensure pipeline safety and integrity, and adopt rules to ensure open access to the gas pipeline system. Status: Chapter 602, Statutes of 2012.

AB 2196 (Chesbro) ensured that biogas qualifies for RPS credit, provided its production, delivery and use meet certain conditions. Status: Chapter 605, Statutes of 2012.

- 9) *Double Referral*. This bill is double-referred; upon passage in this Committee, this bill will be referred to the Assembly Committee on Natural Resources.

REGISTERED SUPPORT / OPPOSITION:

Support

Oberon Fuels
Sempra Energy Utilities

Opposition

Agricultural Energy Consumers Association
California Environmental Justice Alliance (CEJA) Action
California Environmental Voters
Communities for A Better Environment
Earthjustice
Environmental Justice League
Leadership Counsel for Justice & Accountability
Natural Resources Defense Council
Sierra Club
The Climate Center
The Utility Reform Network (TURN)
Union of Concerned Scientists

Oppose Unless Amended

Air Products and Chemicals, INC.
Clean Energy

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