

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

In The Matter of the Application of Southern California Gas Company (U 904 G) for Authorization to Implement Revenue Requirement for Costs to Enable Commencement of Phase 2 Activities for Angeles Link.

Application 24-12-011  
(filed December 20, 2024)

**CALIFORNIA HYDROGEN BUSINESS COUNCIL OPENING BRIEF REGARDING  
THE APPLICATION OF SOUTHERN CALIFORNIA GAS COMPANY (U 904 G) FOR  
AUTHORIZATION TO IMPLEMENT REVENUE REQUIREMENT FOR COSTS TO  
ENABLE COMMENCEMENT OF PHASE 2A ACTIVITIES FOR ANGELES LINK**

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ENABLE COMMENCEMENT OF PHASE 2 ACTIVITIES FOR ANGELES LINK**

The California Hydrogen Business Council (CHBC) submits this Opening Brief regarding the Application of Southern California Gas Company (SoCalGas) for Authorization to Implement Revenue Requirement for Costs to Enable Commencement of Phase 2 Activities for Angeles Link. CHBC appreciates the opportunity to comment on this Application as a party to the proceeding.

CHBC is the longest established and largest hydrogen trade association in the United States, comprised of over 100 companies, agencies, and individuals involved in

the business of hydrogen.<sup>1</sup> Our mission is to inform policymakers and stakeholders on the substantial benefits of hydrogen and support the commercialization of hydrogen and fuel cells in the energy and transportation sectors to achieve California's climate, air quality, and decarbonization goals.

CHBC submits these comments pursuant to the July 31 Assigned Commissioner's Scoping Memo and Ruling in the proceeding. The structure of our comments will come in our response to two Phase 2A issues raised in Commissioner Reynolds' memo. The issues on which CHBC will comment are Issue 1 regarding scheduling and Issue 4 regarding appropriateness of ratepayer cost responsibility.

**I. The CPUC should not wait to consider the SoCalGas Phase 2 application before reviewing the SoCalGas Phase 1 Compliance Application.**

There are no issues raised in A.25-06-011 or A.24-12-011 that need to be resolved before the other application should move forward. The Commission should set a procedural schedule that advances both applications concurrently, with the substance of each resolved in a timely manner. CHBC will show below the manifold benefits of construction of Angeles Link, including helping California achieve its greenhouse gas goals, which are important to mitigate the impacts of climate change and air quality, both immediate public concerns.

**II. Investments in an Angeles Link pipeline would have broad public benefit**  
**a. There are many potential off-takers for hydrogen in Southern California**

The Angeles Link pipeline would have the capacity to deliver up to 1.5 million metric tons of hydrogen per year to SoCalGas territory in Southern California. There are many potential off-takers for this hydrogen. The transit agencies using hydrogen powered buses include Foothill Transit in West Covina and Sunline Transit in Thousand Palms, both of whom already operate fuel cell buses. The Ports of Los Angeles and

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<sup>1</sup> See a complete list of CHBC members at <https://members.californiahydrogen.org/directory>.

Long Beach also would be sites for off-take, where hydrogen powers drayage trucks and forklifts at the ports and has the potential to power oceangoing vessels, shore power, and trucks that move freight in and out of the ports. Angeles Link could supply hydrogen refueling stations for light-duty cars and medium-duty and heavy-duty trucks, which are becoming more prevalent as California needs cleaner options to meet its air quality goals.

**b. Angeles Link would help bring down the cost of hydrogen overall**

Having a robust supply of hydrogen delivered by Angeles Link would reduce hydrogen's cost, which is the primary barrier to hydrogen's adoption currently. Reducing hydrogen's cost can unlock its potential for broad environmental, energy and economic benefits.

**III. Hydrogen has many benefits compared to an energy grid that electrifies everything**

Broadly speaking, there are two paths to decarbonize the energy grid. One is to "electrify everything" and power electricity via solar, wind, nuclear, geothermal, and hydropower resources. The other path is to electrify many aspects of the grid but to also allow for some gaseous molecules to power the system, while "decarbonizing" those molecules. Hydrogen fits into this second path as a way to decarbonize molecules. This discussion will compare a strategy of "electrifying everything" to one that includes hydrogen as a part of the solution.

**a. Relying on solely electricity makes the energy system vulnerable to price spikes**

Electrification relies upon power sources such as wind, solar, and hydropower, each of which are inherently intermittent. Wind turbines can only produce energy when the wind is blowing. Solar panels can only capture energy on sunny days and never at night. Hydro turbines rely upon the speed and flow of water at a given source. Furthermore, each of these sources is particularly vulnerable to fluctuations under

extreme weather conditions.<sup>2</sup> These generation capacity limitations pose dangers to grid reliability as it is difficult to both prevent and predict supply shortfalls that can lead to outages. Supply restrictions also contribute to electricity price spikes that directly harm consumers.

Hydrogen energy can contribute to the resolution of these supply shortfalls. Broadly speaking, diversification of electricity sources is the best way to hedge against supply volatility.<sup>3</sup> Hydrogen specifically is a solution to grid reliability concerns. The U.S. Department of Energy found that “particularly during the transition before cost parity is achieved, hydrogen can also provide value such as grid services, arbitrage, or flexibility of fuels used in power generation.”<sup>4</sup>

**b. A system that includes hydrogen reduces costs overall compared to an all-electric system**

A study published in *One Earth* in 2024 compared the total cost of electrification to the total cost of building out a hydrogen economy by examining 25 potential decarbonization scenarios, each with a differing degree of electrification, hydrogen energy, and alternatives.<sup>5</sup> Using an advanced computational model, researchers concluded hydrogen deployment can reduce overall energy decarbonization costs by 15-22%.<sup>6</sup>

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<sup>2</sup> Montel Team, “How to manage price volatility in energy markets,” Montel, (September 2024), <https://montel.energy/resources/blog/effective-strategies-for-managing-price-volatility-in-energy-markets>

<sup>3</sup> Montel Team.

<sup>4</sup> U.S. National Clean Hydrogen Strategy and Roadmap, November 15, 2021, page 18: <https://www.hydrogen.energy.gov/docs/hydrogenprogramlibraries/pdfs/us-national-clean-hydrogen-strategy-roadmap.pdf>

<sup>5</sup> Paul Wolfram et al., “The hydrogen economy can reduce costs of climate change mitigation by up to 22%,” *One Earth* 7, no. 5 (May 2024): 885-895, <https://www.sciencedirect.com/science/article/pii/S2590332224002021#sec2>

<sup>6</sup> Wolfram et al., 886.

### **c. Some sectors of the economy are hard to electrify**

Hydrogen can meet California's clean energy needs by decarbonizing sectors that are hard to electrify. Cement, concrete, aviation, marine applications, medium- and heavy-duty transportation, and manufacturing all have shown advantages for hydrogen solutions over electrification. The California Energy Commission (CEC) in their 2023 Integrated Energy Policy Report admits "California is electrifying much of the transportation and building sectors while rapidly scaling up deployment of low-carbon, renewable generation like solar and wind that are increasingly paired with lithium-ion battery storage. Yet these resources alone may not be sufficient to reach economy-wide decarbonization."<sup>7</sup>

## **IV. Building Angeles Link would have air pollution benefits**

Concurrent with the greenhouse gas benefits of hydrogen are its localized air quality benefits. Hydrogen can be used to displace diesel as a fuel for heavy duty trucking, transit buses, powering locomotives, and drayage trucks used at ports. Each of these applications would displace diesel fuel, which has significant NOx and Particulate Matter emissions associated with it. Hydrogen is the favored solution to heavy duty applications as it is more energy dense than batteries and has a longer range for similarly-sized power packs.

## **V. Building Angeles Link would have job creation benefits and help transition the oil and gas labor force**

Hydrogen energy has immense potential for job creation and can ease the impact of decarbonization on laborers. It is for this reason many labor groups support hydrogen energy to transition to a low-carbon economy. Yvonne Wheeler, President of the Los Angeles County Federation of Labor, says clean hydrogen represents "real and meaningful opportunities" for skilled workers in California's existing energy sector to

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<sup>7</sup> CEC, 2023 Integrated Energy Policy Report, page 62.

participate in the transition.<sup>8</sup> Lorena Gonzalez, the Executive Secretary-Treasurer of the California Labor Federation says hydrogen will “foster green careers for thousands throughout California.”<sup>9</sup>

Electrification, on the other hand, demands a more challenging transition for workers as the same gas infrastructure, knowledge, and skills will not transfer to a newly electrified economy.

## **VI. SoCalGas’s proposal is crucial to achieving hydrogen’s broad benefits**

The Angeles Link project is the largest proposed dedicated hydrogen pipeline in California. Its construction would increase manifold hydrogen production and hydrogen offtake in SoCalGas territory. This would bring down hydrogen’s cost, making it economical to use hydrogen in the hard-to-electrify applications cited above.

A study of the Angeles Link project finds construction of a new 450-mile pipeline for transport of clean renewable hydrogen would be the most cost-effective means of delivering hydrogen at-scale to Central and Southern California.<sup>10</sup> Angeles Link is therefore the best way to achieve hydrogen’s many benefits.

## **VIII. As the project will have broad public benefits, it is appropriate to allocate its cost across a broad spectrum of customer classes**

The Angeles Link project will have the broad public benefits outlined above, including greenhouse gas emission reduction, air pollution reduction in local communities, and job creation. As these benefits will be distributed broadly, it is appropriate to allocate the costs of the Phase 2 activities across a broad spectrum of customer classes. If it becomes clear that the project only benefits one set of customer

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<sup>8</sup> Molly Weedn, “Labor Unions Unite in Support of a Hydrogen Hub in California,” ARCHES, (April 2023), <https://archesh2.org/labor-unions-unite-in-support-of-a-hydrogen-hub-in-california/>

<sup>9</sup> Weedn.

<sup>10</sup> Wood Mackenzie, “Angeles Link Phase 1 – High-Level Economic Analysis and Cost Effectiveness,” SoCal Gas, (December 2024), <https://www.socalgas.com/sites/default/files/alproject/Angeles-Link-Phase-1-Final-High-Level-Economic-Analysis-&-Cost-Effectiveness.pdf>

classes, the Commission can recharacterize who will bear the cost in a later ruling in the process.

An open-access, non-discriminatory pipeline dedicated to public use could provide transparent and fair rates to a diversity of end users in the pipeline corridor. Angeles Link has the potential to exponentially grow the local air quality and carbon emission reduction benefits of hydrogen by bringing hydrogen to more end users in Southern California communities already disproportionately burdened by poor air quality. The project will also facilitate the build-out of the required refueling infrastructure for fuel cell and hydrogen vehicles, which will help California meet its ambitious Zero-Emission Vehicle and greenhouse gas goals.

## **IX. CONCLUSION**

The CHBC expresses strong support for the SoCalGas Phase 2 Angeles Link Application and appreciates the opportunity to participate in this proceeding. Thank you for your consideration of this response.

DATED: September 3, 2025

Respectfully submitted,

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