



# Angeles Link – Phase 1 Quarterly Report (Q4 2024)

For the period of October 1, 2024 through December 31, 2024

## **Appendices**

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# **Appendix 1 - Phase 1 Studies Consolidated Report**



ANGELES LINK

# PHASE 1

## STUDIES CONSOLIDATED REPORT



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# I. INTRODUCTION



## A. Background

Angeles Link is envisioned as a non-discriminatory, open-access pipeline system dedicated to public use, transporting up to 1.5 million metric tons per year of clean renewable hydrogen<sup>1</sup> from regional third-party production and storage sites to end users across Central and Southern California, including the Los Angeles Basin and the Ports of Los Angeles and Long Beach.

In December 2022, the California Public Utilities Commission (CPUC) authorized SoCalGas to record costs associated with conducting preliminary engineering, design, and environmental feasibility studies to evaluate a variety of topics, including supply, demand, end uses, pipeline configurations and storage solutions, and to analyze project alternatives. The CPUC's Decision emphasized the potential public interest benefits that Angeles Link could bring to the Los Angeles Basin and the State of California. The CPUC concluded that "the public interest is served if SoCalGas studies whether Angeles Link is feasible, cost-effective, and viable."<sup>2</sup> In Phase 1, SoCalGas conducted over a dozen studies confirming, in particular, Angeles Link's viability, feasibility, cost effectiveness, and potential public interest benefits to ratepayers and the broader community. SoCalGas also produced an Environmental and Social Justice (ESJ) Community Engagement Plan (ESJ Plan) and a Framework for Affordability Considerations (Affordability Framework) (collectively, the Phase 1 Studies).<sup>3</sup>

Through information developed during Phase 1, the vision for Angeles Link and its relationship to the State's commitments to reduce GHG emissions has come into greater focus. At the beginning of Phase 1, SoCalGas examined a broad range of possible configurations of a clean renewable hydrogen energy transport system into the Los Angeles Basin. A more specific project description was then developed, including a range for pipeline throughput, and a handful of potential directional routes were identified based on: (1) potential end use sectors (e.g., hard-to-electrify industries and heavy-duty transportation), (2) potential third-party hydrogen production locations in SoCalGas's service territory, and (3) insights gathered through coordination with the Alliance for Renewable Clean Hydrogen Energy Systems (ARCHES) and other stakeholders.

The CPUC's direction to SoCalGas to join the ARCHES<sup>4</sup> led to ARCHES including two pipeline segments of Angeles Link in its California Hydrogen Hub Application: one located in the San Joaquin Valley and one from Lancaster into the Los Angeles Basin. Available information and developments related to ARCHES informed or were incorporated into the Phase 1 Studies. For example, the Preliminary Routing/Configuration Analysis considered routes that include the two pipeline segments described above. Similarly, ARCHES's projections of the California Hydrogen Hub's substantial environmental benefits, including significant reductions in local

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<sup>1</sup> D.22-12-055 defines clean renewable hydrogen as "hydrogen that does not exceed a standard of four kilograms of carbon dioxide-equivalent produced on a lifecycle basis per kilogram of hydrogen produced." D.22-12-055, Decision Approving the Angeles Link Memorandum Account to Record Phase One Costs (Dec. 20, 2022) ("Decision") at 66 (Finding of Fact (FOF) 35).

<sup>2</sup> *Id.* at 68 (Conclusion of Law 4).

<sup>3</sup> In compliance with the Decision, SoCalGas made reports of the results and data of the Phase 1 Studies available to the public. The Decision recognized that sharing this information "should be beneficial to the development of the clean renewable hydrogen industry and thus serve the public interest." (Decision at 62.) The Phase 1 reports are available at <https://www.socalgas.com/regulatory/angeleslink>.

<sup>4</sup> The CPUC's decision ordered SoCalGas to undertake a stakeholder engagement process throughout Phase 1 and join ARCHES, a statewide public-private partnership in support of the State of California's Department of Energy (DOE) clean hydrogen hub application.

air pollution, the creation of an estimated 220,000 new jobs, and approximately \$2.95 billion per year in economic value from better health and health cost savings,<sup>5</sup> are aligned with Angeles Link’s public interest benefits described further below.

## B. Purpose

The purpose of this consolidated report is to distill the Phase 1 Studies by providing an overview of what they collectively convey about Angeles Link. This report also discusses key findings developed during Phase 1 of Angeles Link that will guide future considerations and activities. The Phase 1 Studies collectively span over 2,500 pages and cover a wide range of topics, including safety requirements, demand estimates, production planning, economic analysis, environmental analysis, pipeline design, and stakeholder engagement. Given the extensive nature of these individual reports and plans, this consolidated report provides a summary of the critical insights and conclusions.

## C. Key Findings

The Phase 1 Studies collectively establish that Angeles Link is technically feasible, viable, cost-effective, and could offer public interest benefits. The studies show that third parties could produce clean renewable hydrogen that meets the CPUC’s clean renewable hydrogen production standards<sup>6</sup> and the projected demand to be served by Angeles Link over time (a throughput range of 0.5–1.5 million metric tons per year (MMTPY)<sup>7</sup>). The studies also confirm that SoCalGas could design, permit, construct, and operate a safe, reliable, and scalable pipeline system to connect clean renewable hydrogen producers to end users.

The Phase 1 Studies show that **Angeles Link can be safely designed, constructed, operated, and maintained;** and that its **routes can be designed to connect potential third-party hydrogen production areas with end users.**

Additionally, the studies demonstrate that **Angeles Link would offer a viable hydrogen delivery system,** also showing that clean renewable hydrogen transported via Angeles Link can be a competitive alternative to other potential decarbonization pathways. The studies indicate that **Angeles Link is the most feasible and cost-effective** hydrogen delivery option at scale across Central and Southern California compared to alternatives such as a localized hydrogen hub and trucking in terms of scalability, transport distances, and overall cost effectiveness.

The studies also demonstrate that Angeles Link, as envisioned, **could provide significant public interest benefits to ratepayers and the broader community.** For instance, Angeles Link could support significant decarbonization and air quality benefits, including the potential reduction of 4.5 to 9 million metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) per year (the equivalent of the annual greenhouse gas (GHG) emissions of removing approximately 725,000 to more than 1 million gasoline passenger vehicles off the roads per year), and approximately 5,200 tons per year of Nitrogen Oxide (NO<sub>x</sub>) emissions by 2045. The studies also demonstrate that Angeles Link can potentially create nearly 53,000 direct construction-related jobs and nearly a total of 75,000 jobs when considering indirect and induced jobs. The work performed in Phase 1 also considers disadvantaged communities (DACs), provides a screening of potentially impacted disadvantaged communities, and includes a plan to guide future engagement in DACs.

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<sup>5</sup> State of California – Office of Governor Gavin Newsom, *California launches world-leading Hydrogen Hub* (July 17, 2024), available at: <https://www.gov.ca.gov/2024/07/17/california-launches-world-leading-hydrogen-hub/>.

<sup>6</sup> The Decision restricts the hydrogen transported via Angeles Link to “clean renewable hydrogen that is produced with a carbon intensity equal to or less than four kilograms of carbon dioxide-equivalent produced on a lifecycle basis per kilogram and does not use any fossil fuel in its production processes.” (Decision at 42.)

<sup>7</sup> The units “metric tons” and “tonnes” are equivalent but different from “tons,” i.e., “U.S. tons.” One metric ton, or tonne, is equivalent to 1.10 ton, or U.S. ton.

The Phase 1 Studies' findings, based on information available and known at the time, support progressing to more detailed planning in Phase 2, including the selection of a preferred system route and front-end engineering design. These findings holistically demonstrate that Angeles Link is viable, technically feasible, and has the potential to be a cost-effective solution for delivering clean renewable hydrogen at scale and all the benefits that would entail, including significantly contributing to decarbonization efforts, enhancing air quality, and generating jobs.

#### **D. Stakeholder Feedback**

In accordance with the requirement to hold at least quarterly stakeholder meetings throughout Phase 1, SoCalGas coordinated with the CPUC to create a Planning Advisory Group (PAG), composed of representatives from industry, labor, academia, tribal governments, and environmental organizations, and a Community Based Organization Stakeholder Group (CBOSG), composed of community-based organizations. Based on requests from the PAG and CBOSG for more frequent information sharing, SoCalGas added additional workshops in between quarterly meetings. Ultimately, in Phase 1, SoCalGas held a total of 27 meetings and workshops with the 70 participating organizations from the PAG and CBOSG, as well as 32 one-on-one meetings with members to solicit their feedback on the Phase 1 feasibility studies and PAG and CBOSG process.

SoCalGas presented opportunities for the PAG and CBOSG to provide feedback at four key milestones in the course of conducting each study: (1) draft description of the scope of work, (2) draft technical approach, (3) preliminary findings and data, and (4) draft report.<sup>8</sup> These milestones were selected because they represented critical points at which relevant feedback could meaningfully influence the Phase 1 Studies.

Through this process, SoCalGas incorporated stakeholder input during the development and conduct of the work on the Phase 1 Studies. For example, in response to stakeholder feedback, a route variation was identified for further consideration that could potentially minimize impacts to DACs. Additionally, to address the concerns of community stakeholders, an ESJ Plan was developed that can be implemented in future phases of Angeles Link to engage DACs near potential preferred routes. SoCalGas also requested the Center for Hydrogen Safety<sup>9</sup> to conduct a third-party review of the draft Evaluation of Applicable Safety Requirements.

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<sup>8</sup> SoCalGas also provided opportunities for the PAG and CBOSG to provide feedback on drafts of the ESJ Plan and the Affordability Framework.

<sup>9</sup> The Center for Hydrogen Safety is a global non-profit organization dedicated to promoting hydrogen safety and best practices as an industry leader providing guidance, education, and collaboration to help realize the successful and transformative benefits of hydrogen. (See Center for Hydrogen Safety, available at: <https://www.aiche.org/chs>.) The Hydrogen Safety Panel, a part of the Center for Hydrogen Safety, was created to address concerns about hydrogen as a safe and sustainable energy carrier and its principal objective is to promote the safe operation, handling, and use of hydrogen and hydrogen systems. (See Center for Hydrogen Safety, *Hydrogen Safety Panel*, available at: <https://www.aiche.org/chs/hydrogen-safety-panel>; Hydrogen Tools, *Hydrogen Safety Panel*, available at: <https://h2tools.org/hsp>.)

## II. KEY FINDINGS FROM PHASE 1 STUDIES



The Phase 1 Studies demonstrate that Angeles Link is viable and cost-effective, technically feasible, and could be beneficial to ratepayers and the broader community.

### A. Angeles Link is Viable and Cost-Effective

As the CPUC's Decision recognizes, clean renewable hydrogen is one of the few viable carbon-free energy alternatives for the hard-to-electrify industry and the heavy-duty transportation sectors.<sup>10</sup> The Phase 1 Studies confirm that (1) there is sufficient potential market demand for clean renewable hydrogen to warrant a clean renewable hydrogen pipeline system to connect producers and end users; (2) there are potential sources of renewable energy and water supplies to enable third-party production of clean renewable hydrogen and serve the projected demand over time; and (3) pipeline transportation of hydrogen via Angeles Link could provide economies of scale that make clean renewable hydrogen a cost-effective decarbonization alternative for multiple categories of end users. Key findings evaluating and supporting commercial viability can be found in the Demand Study, Production Planning & Assessment, Water Resources Evaluation, High-Level Economic Analysis & Cost Effectiveness, and Project Options & Alternatives.

#### 1. Sufficient Potential Market Demand for Clean Renewable Hydrogen

The Demand Study evaluated potential clean renewable hydrogen demand across the mobility, power generation, and industrial sectors within SoCalGas's service territory through 2045. The study projects demand growth, ranging from 1.9 MMTPY in the conservative scenario to 5.9 MMTPY in the ambitious scenario. Specifically, the mobility sector could require between 1.0 and 1.7 MMTPY, driven by heavy-duty vehicles due to the Advanced Clean Fleets regulation. The power generation sector could require between 0.7 and 2.7 MMTPY, driven by regulations like Senate Bill 100, which mandates that 100% of all retail electricity sales come from carbon-free sources by 2045. The industrial sector's demand is projected to range from 0.2 to 1.5 MMTPY. These projections estimate the potential market for clean renewable hydrogen, a portion<sup>11</sup> of which could be served by Angeles Link.

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<sup>10</sup> Decision at 2.

<sup>11</sup> Angeles Link's projected throughput range is approximately 0.5 – 1.5 MMTPY.

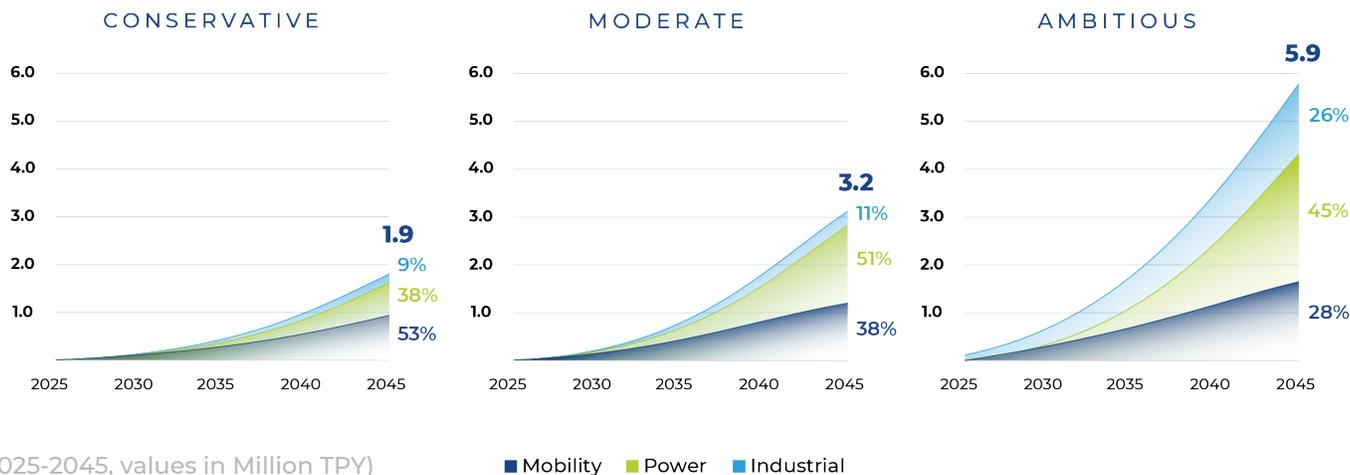


Figure 1. Clean Renewable Hydrogen Demand Forecast in SoCalGas's Service Territory, by Scenario<sup>12</sup>

## 2. Sufficient Potential Renewable Energy and Water Supplies to Support Clean Renewable Hydrogen Production by Third Parties

The Production Planning & Assessment Study assessed potential sources of clean renewable hydrogen production from renewable sources such as solar and wind, and identified three primary production areas within SoCalGas's service territory that could potentially produce between 0.5 to 1.5 MMTPY of clean renewable hydrogen by 2045: San Joaquin Valley, Lancaster, and Blythe. These locations could alone, or in some combination (depending on the throughput levels), meet the projected 0.5 – 1.5 MMTPY Angeles Link throughput range.

The study highlighted that solar power paired with electrolyzers is a preferred production method due to its maturity, cost-effectiveness, and the abundance of solar irradiance in SoCalGas's service territory. The assessment also noted that 2 million acres of land are potentially available for clean renewable hydrogen production, with only 12-15% of this land needed to meet anticipated maximum throughput scenarios.

The Water Resources Evaluation assessed the availability of water resources necessary for clean renewable hydrogen production and found that the water required to meet the potential demand for clean renewable hydrogen production within SoCalGas's service territory represents a small fraction (0.02-0.10%) of California's annual water usage. Multiple existing water supplies, such as surface water, treated wastewater, groundwater, and urban stormwater capture, could be utilized, and new supplies could be developed if necessary. Potential water supply sources were not considered to be available for third-party production at this feasibility stage if those water resources were: (1) fully allocated or planned for use in meeting existing or anticipated water needs for a given area; (2) part of existing or planned water recycling reuse projects; (3) part of sustainable management of local groundwater resources; or (4) already accounted for in long-term planning water management plans. The study also outlined potential water acquisition methods for third parties to pursue to address water needs for production, such as through exchange agreements, local water agencies (e.g., purchasing available supply), and water markets (e.g., adjudicated groundwater rights), or through land purchases with water rights.

Additionally, the Production Planning & Assessment Study found that various storage options, such as line pack (e.g., storage within the pipeline), construction of a parallel pipe in

<sup>12</sup> Angeles Link Phase 1 Demand Study at 8.

a portion or portions of the pipeline system (i.e., dual run), on-site storage at third-party clean renewable hydrogen production sites or end use locations, and/or dedicated above-ground or underground storage, could help to balance supply and demand.

### 3. Economies of Scale, Cost Effectiveness, and Viable Compared to Alternatives

The Project Options & Alternatives Study identified certain hydrogen delivery alternatives and non-hydrogen delivery alternatives based on the technical requirements provided in the Decision, geographic alignment with ARCHES’s hydrogen infrastructure development within California, and a high-level alignment with Angeles Link’s purpose and objectives. From the initial alternatives identified, the Project Options & Alternatives Study advanced certain hydrogen-delivery alternatives and non-hydrogen delivery alternatives to be evaluated for cost effectiveness and potential environmental impacts based on criteria described in the study. The criteria included evaluating several factors as applicable to certain alternatives, including alignment with state policy, distance or range of deliverability, reliability and resiliency, ease of implementation, scalability, technical maturity, and end-user requirements. The Project Options & Alternatives Study also incorporated findings from the High-Level Economic Analysis & Cost Effectiveness Study and the Environmental Analysis (discussed below) to evaluate each alternative’s fulfillment of the purpose and objectives of Angeles Link. Figure 2 below demonstrates the six steps that informed the study’s methodology.



Figure 2. Overview of Six-Step Evaluation Process

As depicted in Figure 2, the High-Level Economic Analysis & Cost Effectiveness Study assessed Angeles Link’s cost effectiveness as compared to those alternatives identified for further study in the Project Options & Alternatives Study based on available information. The cost effectiveness analysis demonstrated that among the hydrogen delivery alternatives, such as trucking and power transmission and distribution (T&D) with in-basin production,<sup>13</sup> clean renewable hydrogen transported via Angeles Link is the most cost-effective means to deliver hydrogen into the Los Angeles Basin at scale. Figure 3 from the evaluation, shown below, illustrates that Angeles Link can deliver clean renewable hydrogen at a cost that is lower than the next most cost-effective hydrogen delivery alternative, liquid hydrogen shipping, which has high inherent costs due to liquefaction. The third most competitive hydrogen delivery alternative, power T&D with in-basin production, has high inherent costs due to electric infrastructure and storage needs. Angeles Link was also found to be cost-effective for certain end uses when compared to non-hydrogen alternatives like electrification<sup>14</sup> and carbon capture and sequestration. In the mobility and power sectors, hydrogen delivered via Angeles Link was found to be competitive with electrification.

<sup>13</sup> The power T&D with in-basin production alternative assumes that hydrogen production would occur in-basin, and renewable energy for that production would be transmitted as electrons through multiple 500 kV AC electric power lines to the LA Basin.

<sup>14</sup> The electrification alternative is a non-hydrogen alternative where a combination of technology changes was analyzed to assess their ability to support growing electric demand.

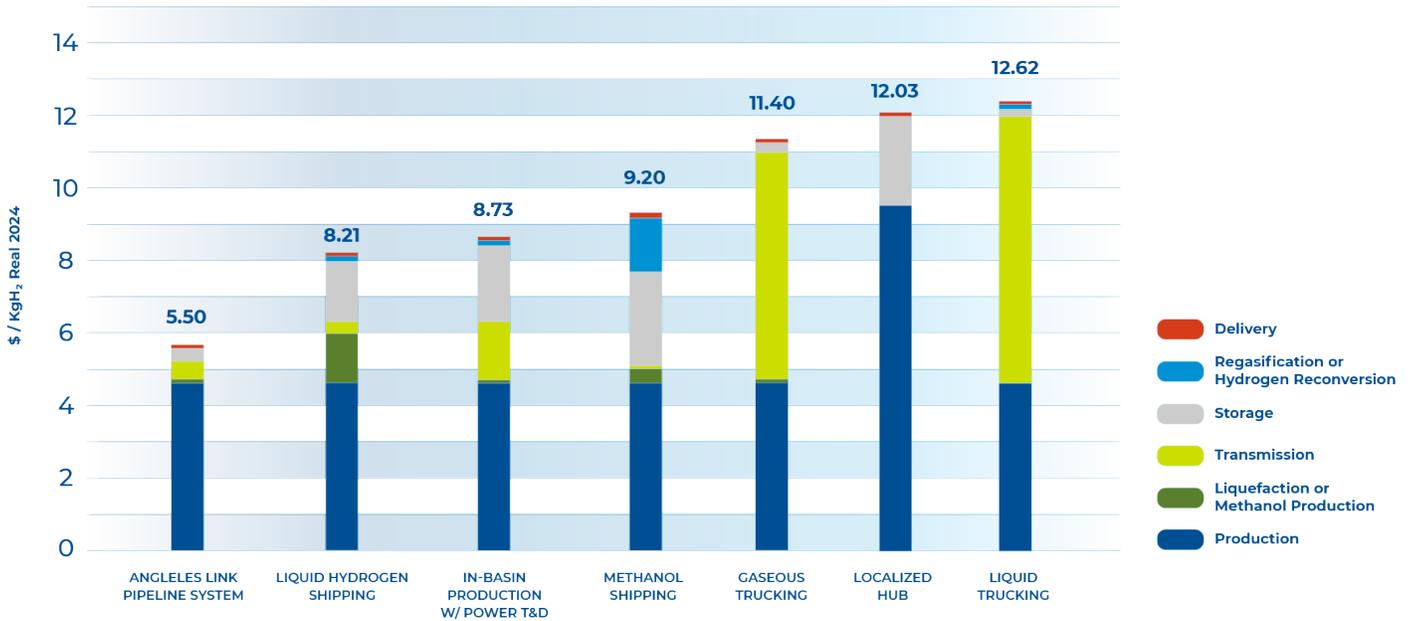


Figure 3. Cost Effectiveness of Angeles Link versus Hydrogen Delivery Alternative<sup>15</sup>

The Project Options & Alternatives concluded that (i) pipeline delivery of hydrogen, as proposed by Angeles Link, is the most feasible and cost-effective hydrogen delivery option at scale across Central and Southern California; and (ii) clean renewable hydrogen could be a viable alternative to other non-hydrogen decarbonization pathways, such as carbon capture and sequestration (CCS) and electrification. The study incorporated supporting analysis from the High-Level Economic Analysis & Cost Effectiveness Study. With respect to hydrogen delivery alternatives, the study identified economies of scale provided by a pipeline system that can transport clean renewable hydrogen over long distances to support meeting the projected clean renewable hydrogen demand in Central and Southern California. Those findings for the hydrogen delivery alternatives are summarized in Table 15 of the study, excerpted below. For example, due to the limitations to build dedicated renewable electricity resources within the Los Angeles Basin, clean renewable hydrogen production costs alone for the localized hub exceed the cost of other hydrogen delivery alternatives and have inherent limitations to scale. In addition, certain non-hydrogen delivery alternatives (e.g., CCS and electrification) are less viable and/or not cost-effective alternatives for a number of end users due to their higher costs and limited applicability in certain sectors. In contrast, Angeles Link can support up to 1.5 MMTPY of hydrogen and address sectors that are difficult to electrify.

Moreover, Angeles Link was found to be the most reliable and resilient hydrogen delivery alternative due to its less complex infrastructure requirements (as compared to in-basin production with power transmission) and its potential to integrate storage access via multiple routes. For example, in the power generation sector, hydrogen was shown to be more reliable, resilient, and well suited to address seasonal variability and multi-day intermittency due to its ability to be stored and used to generate firm dispatchable power when needed.

The Project Options & Alternatives Study also concluded that clean renewable hydrogen could work synergistically with electrification to support the State’s decarbonization goals, providing additional benefits, such as the GHG and air quality benefits discussed below.

<sup>15</sup> Angeles Link Phase 1 High-Level Economic Analysis & Cost Effectiveness at 35.

This analysis shows that Angeles Link aligns with the California Air Resources Board (CARB) Scoping Plan, which analyzes a portfolio of pathways, including electrification and clean renewable hydrogen, to achieve the state’s decarbonization goals.

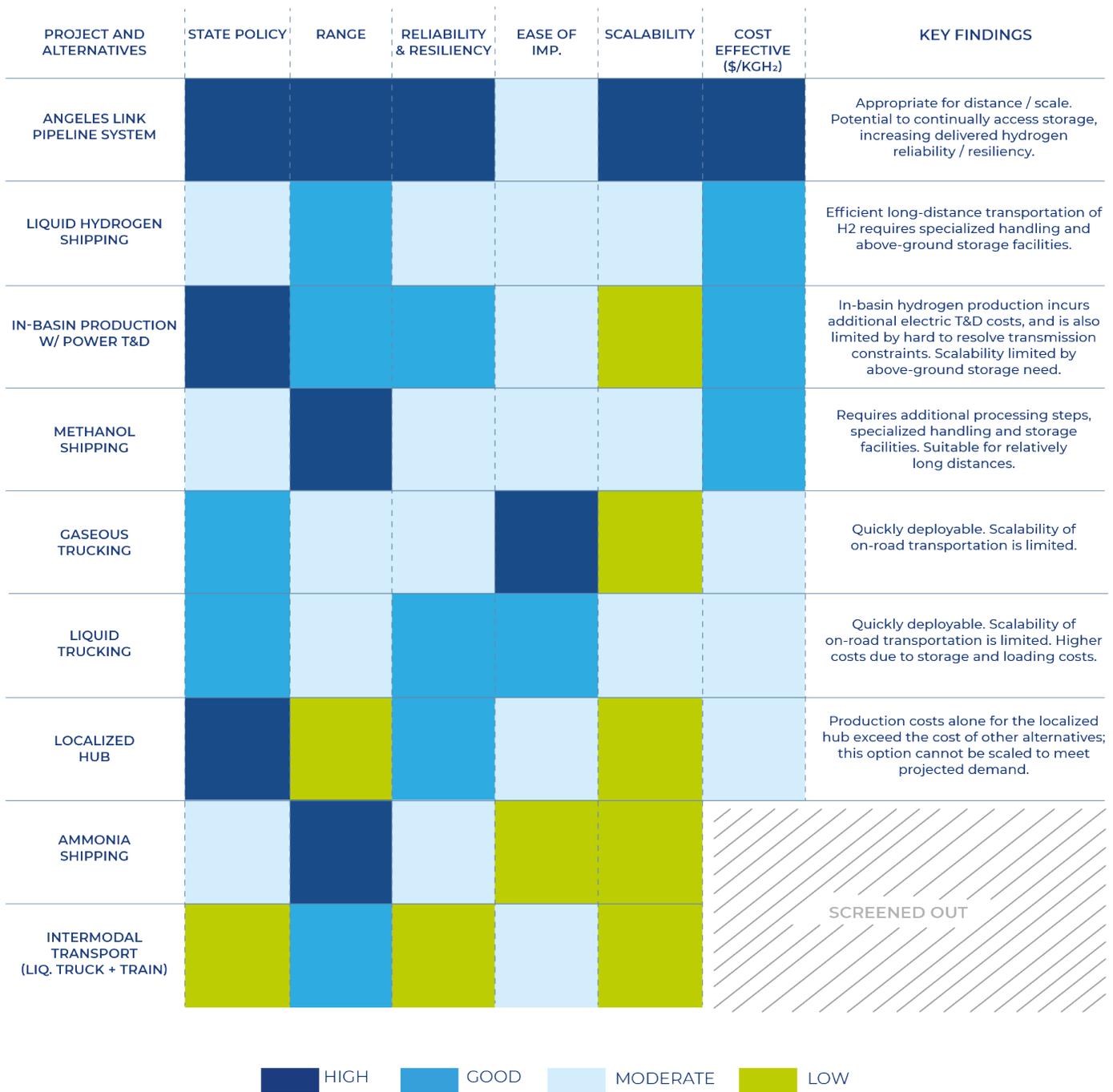


Figure 4. Hydrogen Delivery Alternatives Comparison<sup>16</sup>

## B. Angeles Link is Technically Feasible and Can Be Designed and Implemented to Minimize Impacts

Angeles Link has been evaluated for its technical feasibility—i.e., whether it can be designed, constructed, and operated safely and reliably—with key findings from various studies

<sup>16</sup> Angeles Link Phase 1 Project Options & Alternatives at 102-104. Note: Ammonia shipping and intermodal transport were initially assessed to determine whether those alternatives would meet initial assessment criteria. Because it was determined that these alternatives would not meet the criteria, they were not carried forward for further analysis.

confirming that a hydrogen pipeline delivery system connecting producers and end users in Central and Southern California is feasible. The studies also highlight that Angeles Link can be designed and implemented in a way that minimizes environmental and social impacts, with considerations for safety, reliability, and communities throughout its development and operation.

## **1. Comprehensive Safety Measures**

The Evaluation of Applicable Safety Requirements demonstrated that there are limited regulatory differences between hydrogen and natural gas pipeline transportation, and SoCalGas's expertise in natural gas pipeline construction, operation, and maintenance can be leveraged to safely design, construct, operate, and maintain a hydrogen pipeline system. This includes adapting existing safety regulations and industry standards to suit the specific properties and characteristics of hydrogen and developing new standards and practices specific to the transport of hydrogen. As detailed in the evaluation, existing regulations (e.g., 49 CFR Part 192) and industry standards (e.g., ASME B31.12 and NFPA 2) can be leveraged to safely design, construct, operate, and maintain a hydrogen pipeline system. The evaluation identified safety requirements ranging from material selection, pipeline design, fire protection strategies, leak detection, and monitoring programs to emergency response procedures and public awareness plans. It also considered lessons learned from prior industry and third-party experience with hydrogen. The evaluation described SoCalGas's ability to adapt and expand its existing safety practices, including existing emergency response and public awareness plans and training for employees and contractors, to accommodate a pure clean renewable hydrogen pipeline system. The evaluation also detailed how safety considerations can be incorporated into Angeles Link's design (including the determination of preliminary pipeline sizing, compression requirements, and pipeline material selection) and, subsequently, how construction, operation, and maintenance requirements can be developed and implemented. Given the foundational nature of safety to Angeles Link, and in response to stakeholder feedback, SoCalGas requested a third-party review of the draft evaluation by the Hydrogen Safety Panel.<sup>17</sup> The Panel's recommendations, including identifying areas for further assessment as Angeles Link is advanced, were incorporated into the final evaluation, where appropriate.

## **2. Safe, Reliable, and Scalable Pipeline Design**

The Pipeline Sizing & Design Criteria evaluated the potential range of pipeline size(s), materials, pressures, and maintenance operations required to safely design, construct, and maintain Angeles Link. The study identified a range of pipeline diameters and pressure profiles, as well as specifications for suitable equipment, logistics, and materials of construction. Multiple sizing options and both single and dual-run pipeline configurations were assessed to maintain functional flexibility to allow for fluctuating or growing demand. The system is expected to utilize pipelines with diameters ranging from 16 to 36 inches and, to maintain system efficiency and reliability at maximum throughput, two or three compressor stations may be required. These findings support that Angeles Link can be designed and developed as a safe, reliable, and scalable pipeline system capable of transporting clean renewable hydrogen from producers to end users. The study also explored a range of potential material specifications to address key aspects of physical pipeline properties, such as wall thickness and metallurgical composition, and considered maintenance practices to improve pipeline and equipment safety and longevity. As discussed in more detail in Production Planning & Assessment, the study highlighted that, as Angeles Link is further designed and developed, and in alignment with the development of system requirements, the role of storage to support regional hydrogen producers and end users over time should be considered.

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<sup>17</sup> The Hydrogen Safety Panel was founded by the U.S. Department of Energy to develop and implement guidance, procedures, and best practices that would support safety in the operations, handling, and use of hydrogen and hydrogen systems.

### 3. Routing and Configuration, Including Minimizing DAC Impacts

The Preliminary Routing/Configuration Analysis identified several potential directional routes for the system, considering various factors such as engineering requirements and environmental and social impacts. The study examined existing pipeline corridors, rights-of-way, franchise rights, and designated federal energy corridors, as well as the need for new rights-of-way. Based on current information, the analysis identified four potential directional routes and, in response to stakeholder feedback, discussed a potential route variation that reduces traversing through DACs.<sup>18</sup> When combined, these initial route configurations traversed a total of approximately 1,300 miles, providing a wide range of options within which to narrow down the route for the Angeles Link system, which is anticipated to be approximately 450 miles.



Figure 5. Illustration of Potential Directional Routes and Route Variation 1<sup>19</sup>

<sup>18</sup> Angeles Link Phase 1 Preliminary Routing/Configuration Analysis at 45-47. These potential directional routes reflect current understanding of various factors relevant to siting, including the locations of potential hydrogen producers and offtakers, and are subject to refinement in Phase 2 as additional information becomes available.

<sup>19</sup> Angeles Link Phase 1 Preliminary Routing/Configuration Analysis at 47.

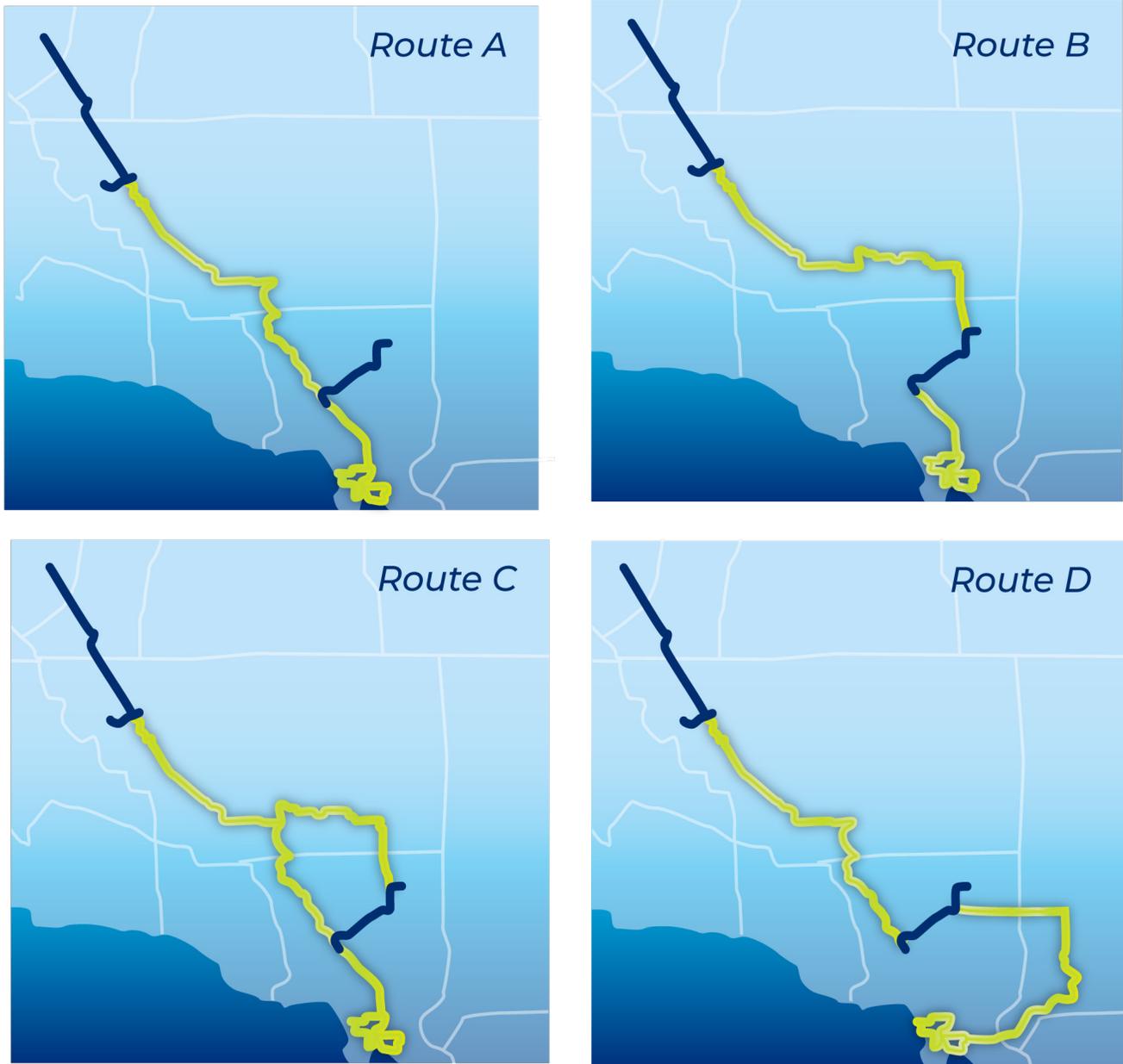


Figure 6. Potential Directional Routes<sup>20</sup>

#### 4. Feasible Permitting Pathway

The High-Level Feasibility Assessment and Permitting Analysis evaluated the potential environmental and regulatory approvals required to construct Angeles Link. The study analyzed the 1,300 miles of conceptual pipeline routes considered in the Preliminary Routing/Configuration Analysis and included a high-level review of federal, state, and local jurisdictional lands and waters, military bases, existing transportation corridors, highway and railroad crossings, state and federally protected plants and wildlife, and land owned by special districts. Permitting is anticipated to involve multiple federal agencies like the Bureau of Land Management and U.S. Fish and Wildlife, and state agencies like the CPUC and California Department of Fish and Wildlife. The study found that permitting timelines potentially range from months to several years and suggested that timelines could be reduced if permit streamlining legislation is adopted.

<sup>20</sup> Angeles Link Phase 1 Preliminary Routing/Configuration Analysis at 46. These renderings illustrate potential directional routes for Angeles Link. The routing of the pipeline system will be optimized through further detailed siting analysis, considering environmental, social, and technical factors to minimize impacts and enhance operational efficiency.

## 5. Hydrogen Leakage Mitigation

The Hydrogen Leakage Assessment evaluated potential hydrogen leakage associated with general hydrogen infrastructure (compression and transmission, as well as third-party production and third-party storage), as well as potential leakage associated specifically with Angeles Link infrastructure (i.e., transmission of hydrogen via pipeline, including compression). The assessment included a preliminary high-level volumetric estimate of the potential for leakage associated with general hydrogen infrastructure to be between 1,200 metric tons per year (MT/yr) and 13,800 MT/yr. For leakage associated with Angeles Link infrastructure, the assessment estimated the potential to be between 850 MT/yr and 4,065 MT/yr for the throughput scenarios.<sup>21</sup> The study also highlighted mitigation measures in the design and engineering of new infrastructure, such as leak detection systems on compressors, leakage capture and return mechanisms, purge systems, and dry seals. The study identified specific leak detection and measurement methods with emerging tools and technologies. It found that operational and maintenance practices such as leak detection and repair programs using high-performance hydrogen gas sensors can further minimize leakage and, collectively with other mitigation measures, reduce potential leakage from Angeles Link by 90%.<sup>22</sup>

## 6. Minimizing Environmental Impacts

The Environmental Analysis evaluated the potential environmental impacts of Angeles Link as well as specified alternatives identified in the Project Options & Alternatives Study. The study demonstrated that while there will be potential construction, operation, and maintenance impacts associated with Angeles Link, including potential impacts related to air quality, GHG emissions, biological resources, cultural resources, energy, hazards, hydrology, and land use, many of these impacts can potentially be minimized or avoided through established best management practices and avoidance measures. The analysis also highlighted that undergrounding most of the infrastructure would minimize certain permanent impacts. As Angeles Link progresses, a proposed project and the project alternatives will be further evaluated in compliance with relevant laws and policies, including the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA).

## 7. Environmental and Social Justice

The ESJ Plan was developed in response to feedback to engage directly with DACs along potential preferred hydrogen pipeline corridors and solicit their input on Angeles Link. The ESJ Plan identified engagement approaches or mechanisms recommended by CBOSG members for SoCalGas to draw upon in Phase 2 to support ESJ stakeholder engagement efforts. The ESJ Plan also included an ESJ community screening assessment (ESJ Screening), which provided baseline DAC designation information and other demographic information for the potential directional routes evaluated in Phase 1. Additionally, the ESJ Plan discussed how Angeles Link supports applicable CPUC ESJ goals, including: enhancing public participation; increasing investment in clean energy resources to benefit ESJ communities; improving local air quality and public health; and promoting high-road career paths and economic opportunities for residents of ESJ communities.

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<sup>21</sup> To prepare a preliminary high-level estimate of the potential for leakage associated with general hydrogen infrastructure, the leakage estimates provided in literature were compiled. For general infrastructure, which is composed of production, compression, storage, and transmission, the median and mean of the leakage estimates were calculated and determined to be 0.24% and 0.92%, respectively. For estimates of Angeles Link infrastructure, which include only the compression and transmission categories, the median and mean of the leakage estimates were calculated and determined to be 0.17% and 0.27%, respectively. This is compared to the EPA estimate of natural gas leakage rate of 2%-3%.

<sup>22</sup> The Angeles Link Phase 1 Hydrogen Leakage Assessment did not analyze hydrogen leakage associated with end users as information was not available.

### C. Angeles Link Can Offer Public Interest Benefits

In the Decision, the CPUC acknowledged that Angeles Link could bring public interest benefits to the State because clean renewable hydrogen has the potential to decarbonize the State and the Los Angeles Basin’s energy future and bring economic opportunities and new jobs to the region.<sup>23</sup> The Phase 1 Studies confirm that Angeles Link could offer environmental and other public interest benefits to ratepayers and communities. In particular, the findings from various studies demonstrate that Angeles Link can deliver substantial GHG reductions, improved air quality, and job creation.

#### 1. Meaningful Greenhouse Gas Reductions

The GHG Emissions Evaluation demonstrated the potential GHG benefits that could be provided by Angeles Link. The analysis shows that in 2045, based on throughput scenarios, the Angeles Link system could result in a reduction of between 4.5 to 9 million metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) per year. These reductions are primarily attributable to the mobility sector, followed by the power generation and hard-to-electrify industrial end user sectors. The GHG reductions are equivalent to removing approximately 725,000 and over 1 million gasoline passenger vehicles from the road, respectively, for the low and high throughput scenarios. While Angeles Link infrastructure would have associated emissions, the study highlights that they are small in comparison to the estimated GHG reductions associated with end users. In response to stakeholder feedback, the Study incorporated a preliminary high-level volumetric estimate of potential leakage and assessed its impact on projected GHG reductions. The Study concluded that the overall impact of potential leakage on estimated GHG reductions is likely to be less than 1 percent for Angeles Link infrastructure.

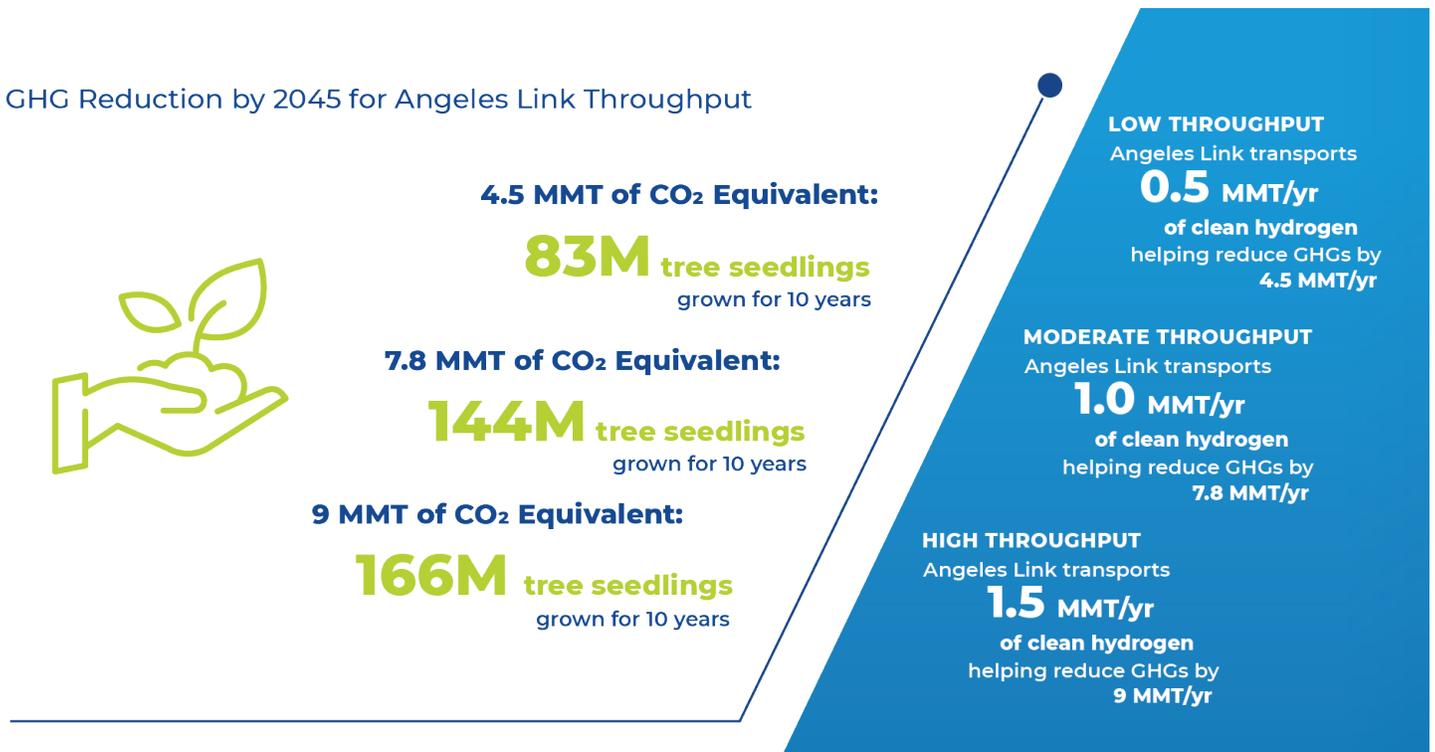


Figure 7. Visualizing the Impact: GHG Reductions Through Angeles Link<sup>24</sup>

<sup>23</sup> Decision at 61 (FOF 1). To request Commission authority to record costs for Phase 2 activities, the Final Decision requires SoCalGas to present findings related to public benefits including compliance with California environmental law and public policies, air quality emissions, workforce planning and training and plans for addressing and mitigating affordability concerns. Decision at 75-77 (Ordering Paragraph 6).

<sup>24</sup> Angeles Link Phase 1 GHG Emissions Evaluation at 1.10.

## **2. Air Quality and Community Benefits**

The NOx and Air Emissions Assessment evaluated the potential NOx emissions reductions associated with Angeles Link. The analysis showed that in 2045 the Angeles Link system could result in a reduction of up to 5,200 tons per year of NOx emissions, primarily due to fuel displacement in the mobility sector. This value is equivalent to approximately 90% of the NOx reductions that the South Coast Air Quality Management District has proposed to be achieved by 2037 for total stationary (i.e., not mobile) commercial and large combustion source NOx control measures in their 2022 Air Quality Management Plan. The study also included a spatial evaluation of estimated NOx emissions reductions geographically and demonstrated that many of the potential air quality benefits will accrue in DAC communities.

## **3. Job Creation and Economic Growth**

The Workforce Planning & Training Evaluation assessed the potential job creation and workforce development associated with Angeles Link. The study discussed how SoCalGas's existing workforce planning programs can be adapted to support hydrogen infrastructure, leveraging the company's longstanding experience in safely and reliably operating and maintaining a pipeline system. The evaluation also demonstrated that Angeles Link can create nearly 53,000 direct construction-related jobs at peak and a total of approximately 75,000 jobs at peak when considering indirect (i.e., jobs generated in related industries that support the project) and induced jobs that occur through wage earners spending income. Angeles Link workforce development can support the local economy while constructing, operating, and maintaining Angeles Link safely.

## **4. Affordability for Ratepayers Considered in Planning Process**

The Affordability Framework described how Angeles Link's planning process has considered and identified opportunities to mitigate affordability concerns. The document described the CPUC's framework for evaluating affordability; discussed projected costs of decarbonization more broadly to provide context for the potential investment in Angeles Link; summarized the work SoCalGas has conducted to date on cost effectiveness as a building block to consider the affordability of Angeles Link and address stakeholder feedback about affordability concerns received to date; and identified potential strategies for addressing affordability in the development of Angeles Link during Phase 2 and beyond. As part of the efforts described in the framework, SoCalGas is considering affordability on both a system-wide basis and individual basis.

### III. COORDINATION WITH AND SUPPORT OF ARCHES



Consistent with the Decision, SoCalGas joined ARCHES. The DOE and ARCHES recently signed a landmark \$12.6 billion agreement to build a clean, renewable Hydrogen Hub in California (California H2Hub), including up to \$1.2 billion in federal funding. This made the California H2Hub the first of seven Hydrogen Hubs in the country to sign a funding agreement with DOE. The California H2Hub will facilitate a network of clean renewable hydrogen production sites and end users connected by transmission systems. The California H2Hub aims to cut fossil fuel use throughout California, with the ultimate goal of decarbonizing public transportation, heavy-duty trucking, and port operations by 2 million metric tons per year—equivalent to the annual emissions of 445,000 gasoline-fueled cars.<sup>25</sup>

ARCHES’s submission to DOE included two segments of Angeles Link as an integral part of the California H2Hub: one in the San Joaquin Valley and another extending from Lancaster to the Los Angeles Basin. These segments are part of the broader Angeles Link system, facilitating the transition to a hydrogen-based economy and California’s sustainable future.

Just as the benefits of Angeles Link are anticipated to be substantial, so are the expected benefits of the California H2Hub. As Governor Gavin Newsom stated, “We’re going to use clean, renewable hydrogen to power our ports and public transportation—getting people and goods where they need to go, just without the local air pollution.”<sup>26</sup> ARCHES expects the California H2Hub will create an estimated 222,400 new jobs, including 130,000 in construction and 90,000 permanent jobs, and generate approximately \$2.95 billion per year in economic value from better health and health cost savings.<sup>27</sup>

As stated in an ARCHES press release, “at least 40% of the benefits from [ARCHES] projects will flow to disadvantaged communities through community-directed investments, workforce training, and family-supporting jobs.”<sup>28</sup>

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<sup>25</sup> DOE, *California Hydrogen Hub (ARCHES) Fact Sheet*, available at: [https://www.energy.gov/sites/default/files/2024-07/H2Hubs%20ARCHES\\_Award%20Fact%20Sheet.pdf](https://www.energy.gov/sites/default/files/2024-07/H2Hubs%20ARCHES_Award%20Fact%20Sheet.pdf)

<sup>26</sup> State of California – Office of Governor Gavin Newsom, *California launches world-leading Hydrogen Hub* (July 17, 2024), available at: <https://www.gov.ca.gov/2024/07/17/california-launches-world-leading-hydrogen-hub/>

<sup>27</sup> *Id.*

<sup>28</sup> *Id.*

## IV. STAKEHOLDER PROCESS



SoCalGas created a comprehensive stakeholder engagement process involving the PAG and the CBOSG. This process was continually refined based on feedback from participants to promote transparency and inclusivity.

### 1. Engagement with CPUC's Energy Division

SoCalGas engaged with (i) the CPUC's Energy Division to establish a stakeholder engagement framework that included the PAG and CBOSG and (ii) staff to devise a plan and set of procedures to compensate CBOs for their participation in the Phase 1 stakeholder engagement process. Throughout Phase 1, SoCalGas maintained regular scheduled touchpoints with staff to discuss and refine the stakeholder engagement process.

### 2. Meetings and Workshops

SoCalGas has collectively held 27 meetings and workshops, as well as 32 one-on-one meetings with PAG and CBOSG members. These sessions were designed to solicit input and foster meaningful dialogue about the Angeles Link Phase 1 activities.

### 3. Diverse Input Channels

Stakeholder input was received through various channels, including verbal comments during in-person and virtual meetings (both large meetings and one-on-ones), discussions at workshops, and written feedback via email. This multi-faceted approach was designed to allow all voices to be heard and considered.

### 4. Living Library

To facilitate access to information, SoCalGas created a "Living Library" that hosted a wide range of documents. This library included 75 informational documents (e.g., preliminary findings, draft feasibility studies, etc.), 27 presentations, 27 meeting recordings, 27 meeting transcripts from PAG/CBOSG quarterly meetings and workshops, 2 PAG/CBOSG rosters, and 65 comment letters received from stakeholders during Phase 1 activities. The library was accessible to all PAG and CBOSG participants on demand, promoting transparency and ease of engagement.

### 5. Milestones for Input

As described above, SoCalGas presented opportunities for the PAG and CBOSG to provide feedback at four key milestones.

## V. STAKEHOLDER FEEDBACK



SoCalGas has addressed feedback from stakeholders and incorporated relevant and appropriate feedback into the planning for and execution of the Phase 1 Studies. Certain stakeholder feedback received will inform future phases of Angeles Link.<sup>29</sup> The following are select examples of the impacts of stakeholder feedback on various studies:

### 1. **Third-Party Review of Evaluation of Applicable Safety Requirements**

The evaluation underwent a third-party review by the Center for Hydrogen Safety's Hydrogen Safety Panel, and key feedback was incorporated.

### 2. **Routing Analysis**

The Preliminary Routing/Configuration Analysis added a route variation for consideration along with the four potential directional routes to minimize impacts to disadvantaged communities.

### 3. **ESJ Plan**

The ESJ Plan serves as a framework for engaging ESJ communities and identifies engagement mechanisms recommended by CBOSG members for SoCalGas to draw upon to support ESJ community stakeholder engagement efforts. The plan aims to engage communities living near potential preferred routes and create opportunities for community input.

### 4. **GHG Evaluation**

The study used the range of preliminary high-level volumetric estimates of the potential for leakage from the Hydrogen Leakage Assessment to predict a range of potential impacts to the estimated overall GHG reductions associated with each of general new hydrogen infrastructure and Angeles Link infrastructure. This analysis used the values provided in the study which are a summary of the ranges of estimated Global Warming Potential (GWP) 100 and GWP 20 for hydrogen available in the literature.

### 5. **NOx and Air Emissions Assessment**

The assessment refers to maps depicting potential NOx emission reductions geographically that are included in Appendix C of the NOx and Other Air Emissions Assessment.

### 6. **Water Resources Evaluation**

The study included a desktop analysis of potential GHG emissions associated with water treatment and conveyance to provide more information about the potential environmental impacts related to water use for third-party clean renewable hydrogen production.

### 7. **Hydrogen Leakage Assessment**

The study included preliminary high-level volumetric estimates of the potential for leakage based on the range of values available from the literature for both general hydrogen infrastructure and Angeles Link infrastructure.

<sup>29</sup> All feedback received is included, in its original form, in the quarterly reports, which also contain the responses to feedback and are submitted to the CPUC and published on SoCalGas's website. Certain comments identified in the quarterly reports were not incorporated into final studies due to reasons such as being out of scope, anticipated to be addressed in Phase 2, requiring third-party actions beyond SoCalGas's control, or raising issues better suited for third parties other than SoCalGas.

## PHASE 1 STAKEHOLDER ENGAGEMENT

Received

**100+**  
COMMENT LETTERS  
from PAG and CBOSG

Reviewed and responded to

**1,000+**  
PAGES  
of comments

### FEASIBILITY STUDIES

Conducted

**16**  
STUDIES

includes multiple feasibility studies, an Affordability Framework, and an ESJ plan

which collectively span

**2,500+**  
PAGES

covering a wide range of topics

**70** PARTICIPATING ORGANIZATIONS

### TOP FIVE STAKEHOLDER PRIORITIES BASED ON FEEDBACK

SAFETY

HEALTH

COST

WORKFORCE DEVELOPMENT

ROUTING / ENVIRONMENTAL

**PLANNING ADVISORY GROUP (PAG)** offers technical advice and feedback

**42**  
PAG

+

**COMMUNITY BASED ORGANIZATION STAKEHOLDER GROUP (CBOSG)** provides community feedback

**28**  
CBOSG

**27** TOTAL MEETINGS

**14** Quarterly Meetings

**13** Workshops

## VI. FUTURE CONSIDERATIONS



As described above, the Phase 1 Studies demonstrate that Angeles Link is technically feasible, viable and cost-effective. It could offer meaningful benefits to ratepayers and the broader community while supporting California's decarbonization goals. Building on the findings in the Phase 1 Studies, the next stage of Angeles Link would include the selection of a preferred route, the development of a 30% design (Front End Engineering Design (FEED)), and the execution of further technical, economic, and environmental analysis. Upon completion of Phase 2 activities, SoCalGas may apply to the CPUC for a Certificate of Public Convenience and Necessity (CPCN) and obtain other necessary permits for Angeles Link's construction and operation.

In addition, the Phase 1 Studies have identified several areas for further consideration and collaboration with stakeholders.

### 1. Enhanced Stakeholder Engagement

SoCalGas plans to enhance its stakeholder engagement efforts in Phase 2 by adding additional representation to its PAG from other sectors and regions and conducting both in-person and virtual meetings to solicit input from communities along preferred routes at key project milestones. These efforts aim to increase transparency and garner more community participation and input into the Angeles Link development process.

### 2. Demand Evaluation and Economic Analysis

Future phases will involve a geographic demand analysis focused on potential end users to help inform the preferred route with more precision and defined throughput. SoCalGas plans to utilize available information to build on the Demand Study, such as incorporating hydrogen pricing into the demand curve, assessing demand associated with potential market subsectors that were not specifically evaluated in Phase 1, and updating the demand forecast based on new market information. SoCalGas will also incorporate updated information from ARCHES on end users and demand as more information becomes available. Economic modeling will also be refined to account for expected future declines in hydrogen costs and increases in current fuel costs due to carbon pricing. An economic analysis will build upon Phase 1 results that estimated the levelized cost of clean renewable hydrogen delivered by Angeles Link, incorporating more detailed hydrogen market data and cost estimates from the preferred route.

### 3. Engineering and Safety Considerations

Future phases will refine assumptions regarding the design of the Angeles Link system. Detailed hydraulic modeling, including transient hydraulic analysis, will be conducted so that the pipeline system can be designed to accommodate dynamic flow conditions and maintain safety and efficiency while supporting energy system reliability and resiliency. As the development of Angeles Link progresses, SoCalGas will continue to incorporate safety considerations and requirements into the design basis, and will

leverage applicable safety specifications, standards, and plans. New hydrogen-specific specifications, standards, training, operator qualifications and plans and procedures will be developed, as appropriate.

#### **4. Routing Optimization**

The routing of the pipeline system will be optimized to minimize impacts and enhance operational efficiency. This will result in further detailed siting analysis, considering environmental, social, and technical factors of a preferred route and 30% engineering design. Future analysis will include a street-level alignment evaluation to refine the preferred route, taking into account stakeholder feedback and potential route variations (including by conducting a DAC analysis of the route variation identified in Phase 1). This iterative process will help design a pipeline route that meets current and future energy needs while minimizing environmental and community impacts.

#### **5. Affordability**

SoCalGas will explore recommendations from stakeholders and others on how to manage the costs of decarbonization projects like Angeles Link, including potential programs to promote affordability for its ratepayers. Future phases will involve monitoring and participating in legislative and regulatory proposals concerning affordability, as appropriate.

## VII. CONCLUSION



The Phase 1 Studies—conducted with the valuable perspectives and contributions of stakeholders—provide a comprehensive demonstration that Angeles Link warrants advancing to the next phase. The studies conclude that Angeles Link is viable and cost-effective, technically feasible, and can offer significant decarbonization and other public interest benefits to ratepayers and the broader community. Even more, the studies provide a comprehensive analysis that contributes to and advances the understanding of the role of clean renewable hydrogen in supporting decarbonization efforts.

As SoCalGas moves forward, the findings from Phase 1 provide a solid foundation for subsequent phases, positioning Angeles Link to substantially contribute to California’s decarbonization efforts, progress the development of the California H2 Hub, enhance air quality, create jobs, and provide a safe, reliable, and cost-effective clean energy solution.

## VIII. ANGELES LINK PHASE 1 STUDIES



Demand Study  
Environmental Analysis  
Environmental Social Justice (ESJ) Community Engagement Plan and ESJ Screening  
Evaluation of Applicable Safety Requirements  
Framework for Affordability Considerations  
Greenhouse Gas (GHG) Emissions Evaluation  
High-Level Economic Analysis & Cost Effectiveness  
High-Level Feasibility Assessment and Permitting Analysis  
Hydrogen Leakage Assessment  
Nitrogen Oxides (NOx) and Other Air Emissions Assessment  
Pipeline Sizing & Design Criteria  
Preliminary Routing/Configuration Analysis  
Production Planning & Assessment  
Project Options & Alternatives  
Water Resources Evaluation  
Workforce Planning & Training Evaluation



## **Appendix 2 - Phase 1 Stakeholder Engagement Summary (March 2023 - December 2024)**



ANGELES  
LINK

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# Phase 1

## Stakeholder Engagement Summary

March 2023 - December 2024



## INTRODUCTION

On December 15, 2022, the California Public Utilities Commission (CPUC) adopted Decision 22-12-055 authorizing the establishment of SoCalGas's Angeles Link Memorandum Account (ALMA) to track costs for advancing the first phase of Angeles Link. SoCalGas aims to develop an open-access clean renewable hydrogen pipeline system to serve end users across Central and Southern California, including the Los Angeles Basin.

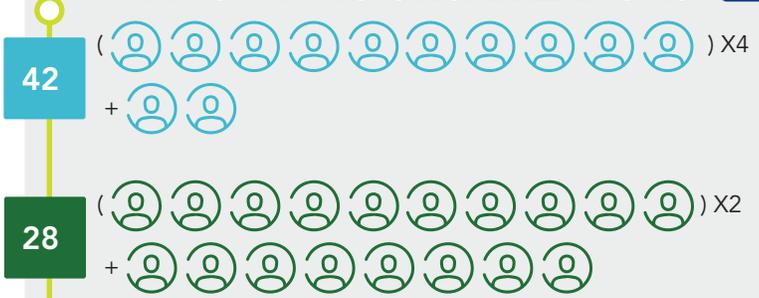
To provide technical advice and collaboration on Angeles Link design and development of Angeles Link, SoCalGas established a Planning Advisory Group (PAG). In addition, a Community-Based Organization Stakeholder Group (CBOSG) was also convened in parallel to the PAG to focus on local community issues and opportunities.



The **PAG** and **CBOSG** membership was extended to a wide range of organizations to promote a broad, diverse and representative group while also providing opportunities for all to be heard and actively participate in the meetings. Participating PAG organizations represented state-wide and industry sector memberships while the CBOSG focused on participation from the LA Basin region. SoCalGas plans to further expand PAG membership to include organizations from outside the Los Angeles Basin that represent communities and stakeholders near the proposed routes evaluated in Phase 2.

70

## PARTICIPATING ORGANIZATIONS



**PAG**

**CBOSG**



## ORGANIZATION CATEGORIES



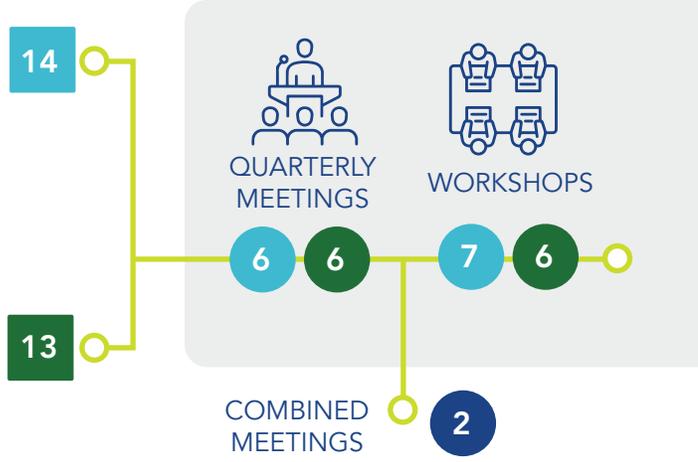
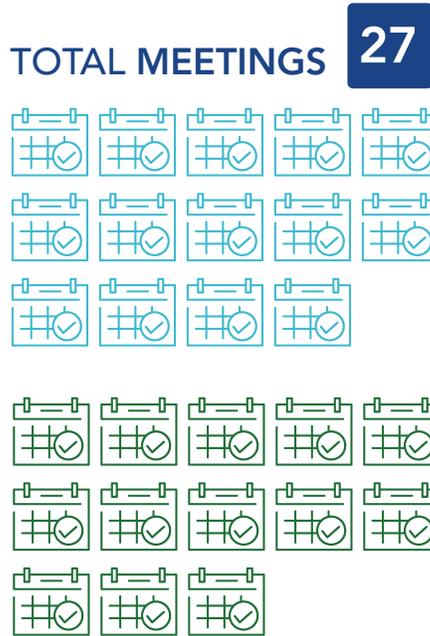
Shared **16** Feasibility Studies which collectively span 2,500 pages covering a wide range of topics.

## FEEDBACK PROCESS

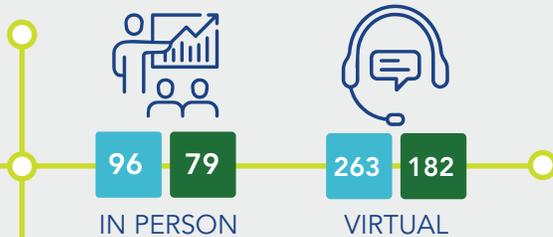


PAG  
CBOSG

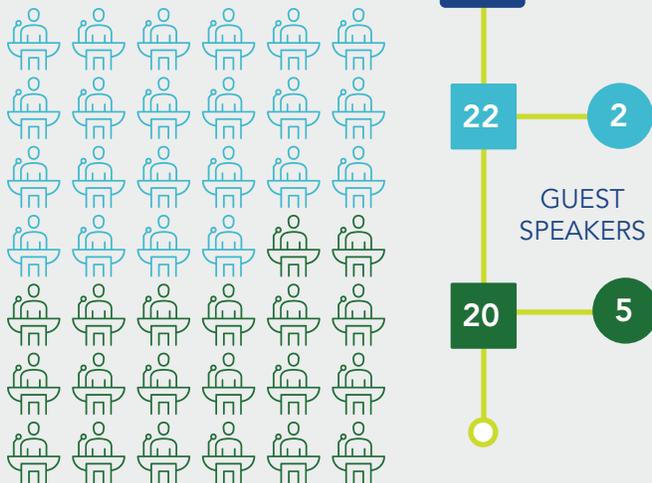
Quarterly Meetings were held throughout Phase 1 starting in March 2023. Workshops were held intermittently as new information became available. Additional workshops were requested by members to delve deeper into specific topics.



### TOTAL MEETING PARTICIPATION



### SOCALGAS PRESENTERS 42



Most meetings and workshops were held in a hybrid format, allowing both in-person and virtual participation. All formats featured presentations from various subject-matter experts across the Phase 1 studies.

## MEMBER COMMENTS

Phase 1 Studies\*  
Reviewed

16

118

Total Number of  
Comment Letters  
Received

Total Number of  
Reports & Supporting  
Documents

79

1,069

Total Number of  
Comment Pages  
Received

\*which included multiple feasibility studies, an  
Affordability Framework, and an ESJ plan.

### TOP 5 MOST COMMENTED REPORTS

1. Demand Study
2. Environmental & Social Justice  
Community Engagement Plan and  
Environmental & Social Justice  
Screening
3. Nitrogen Oxide (NOx) & Other Air  
Emissions Assessment
4. Production Planning & Assessment
5. Water Resources Evaluation

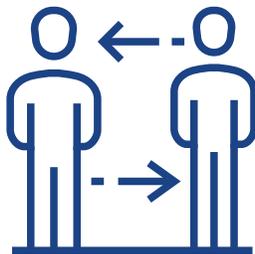


MEETING  
LOCATIONS



PAG

CBOSG



To fulfill the requests of CBOSG members,  
meetings were hosted in different locations to  
address accessibility concerns and encourage  
greater participation from members.



## **Appendix 3 - Attendee Lists for PAG and CBOSG Meeting (including those invited)**

### CBOSG December Q4 Invitee List

Organization	First Name	Last Name
Protect Playa Now	Faith	Myhra
Protect Playa Now	Kevin	Weir
Ballona Wetland Institute	Marcia	Hanscom
Ballona Wetland Institute	Marcia	Hanscom
California Greenworks	Jessy	Shelton
California Greenworks	Michael	Berns
Communities for a Better Environment	Theo	Caretto
Communities for a Better Environment	Roberto	Cabrales
Communities for a Better Environment	Ambar	Rivera
Communities for a Better Environment	Roselyn	Tovar
Breathe Southern California	Marc	Carrel
Breathe Southern California	Tigran	Agdaian
Nature for All	Belen	Bernal
Nature for All	Steven	Ochoa
Climate Action Campaign	Ayn	Craciun
Climate Action Campaign	Lexi	Hernandez
Vote Solar	Andrea	Leon-Grossmann
Food and Water Watch	Andrea	Vega
Food and Water Watch	Chirag	Bhakta
Defend Ballona Wetlands	Robert Roy	van de Hoek
Defend Ballona Wetlands	Jackson	Garland
Physicians for Social Responsibility - Los Angeles	Alex	Jasset
Go Green Initiative	Jill	Buck
Chinatown Service Center	Daisy	Ma
Chinatown Service Center	Kerry	Situ
Soledad Enrichment Action	Enrique	Aranda
Soledad Enrichment Action	Luis	Melliz
Soledad Enrichment Action	Nathan	Aranda
Communities for Responsible Community Development	Ricardo	Mendoza
Communities for Responsible Community Development	Kenta	Estrada-Darley
Watts/Century Latino Organization	Autumn	Ybarra
Little Tokyo Community Council	Kristin	Fukushima
Little Tokyo Community Council	Chris	Fukushima
Reimagine LA Foundation	Rashad	Trapp
Reimagine LA Foundation	Shawna	Andrews
Reimagine LA Foundation	Raul	Claros
Mexican American Opportunity Foundation	Ciriaco "Cid"	Pinedo
Watts Labor Community Action Committee	Timothy	Watkins
Watts Labor Community Action Committee	Thelmy	Alvarez
Watts Labor Community Action Committee	Ava	Post
Alma Family Services	Lourdes	Caracoza
Alma Family Services	Aida	Vega
Alma Family Services	Diego	Rodriguez
Southside Coalition of Community Health Centers	Andrea	Williams
Southside Coalition of Community Health Centers	Lucy	Castro

Greater Zion Church Family	Michael	Fisher
Greater Zion Church Family	Danny	Harrison
Greater Zion Church Family	Aquyla	Walker
Faith and Community Empowerment (FACE)	Hyepin	Im
YMCA of Greater Los Angeles	Gerry	Salcedo
Parents, Educators/Teachers, and Students in Action (PESA)	Seymour	Amster
Parents, Educators/Teachers, and Students in Action (PESA)	Ella	Cavlan
Parents, Educators/Teachers, and Students in Action (PESA)	Sydney	Rogers
Parents, Educators/Teachers, and Students in Action (PESA)	Ayasha	Johnson
Parents, Educators/Teachers, and Students in Action (PESA)	Araksya	Nordikyan
Parents, Educators/Teachers, and Students in Action (PESA)	Olivia	Fike
Los Angeles Indigenous People's Alliance	Luis R.	Pena
Los Angeles Indigenous People's Alliance	Jamie	Patino
California Native Vote Project	Rene	Williams
Comunidades Indigenas en Liderazgo (CIELO)	Odilia	Romero
LA Black Workers Center/ CARE at Work, UCLA Labor Center	Andrea	Slater

## CBOSG December Meeting Attendees - December 17 - Hybrid

CBOSG				
Organization	First Name	Last Name	In person	Zoom
Ballona Wetlands Institute	Marcia	Hanscom		X
California Greenworks	Michael	Berns		X
Defend Ballona Wetlands	Robert 'Roy'	van de Hoek	X	
Food & Water Watch	Andrea	Vega		X
Food & Water Watch	Andrew	Pezullo		X
Los Angeles Indigenous Peoples Alliance	Luis R.	Pena		X
Mexican American Opportunity Foundation	Ciriaco	Pinedo		X
Protect Playa Now	Kevin	Weir		X
Protect Playa Now	Faith	Myhra		X
Reimagine LA	Rashad	Rucker-Trapp		X
Soledad Enrichment Action	Isaac	Galvan		X
Soledad Enrichment Action	Enrique	Aranda		X
Southside Coalition	Andrea	Williams	X	
YMCA LA	Gerry	Salcedo	X	
Little Tokyo LA	Kisa	Ito	X	
Breathe Southern California	Marc	Carrel	X	
Faith and Community Empowerment (FACE)	Hyepin	Im		X
Physicians for Social Responsibility - Los Angeles	Edgar	Barraza	X	
Reimagine LA	Raul	Claros		X
Coalition for Responsible Community Development (CRCD)	Ricardo	Mendoza		X
Non CBOSG				
California Public Utilities Commission	Sasha	Cole	X	
California Public Utilities Commission	Christopher	Arroyo	X	
Insignia Environmental	Armen	Keochekian	X	
Insignia Environmental	Julie	Roshala	X	
Insignia Environmental	Anniken	Lydon	X	
California Strategies	Marybel	Batjer	X	
<b>TOTAL CBOs</b>				<b>16</b>

## PAG December Invitee List

Organization	First name	Last name
Agricultural Energy Consumers Association	Michael	Boccardo
Air Products	JP	Gunn
Air Products	Lorraine	Paskett
Air Products	Seth	Hilton
Air Products	Miles	Heller
Air Products	Vince	Wiraatmadja
ARCHES	Angelina	Galiteva
ARCHES	Tyson	Eckerle
Bizfed	Sarah	Wiltfong
Bloom Energy	Christina	Tan
California Air Resources Board	Steve	Cliff
California Energy Commission	Rizaldo	Aldas
California Hydrogen Business Council	Katrina	Fritz
California Manufacturers and Technology Association	Lance	Hastings
California Manufacturers and Technology Association	Robert	Spiegel
California Public Utilities Commission	Arthur (Iain)	Fisher
California Public Utilities Commission	Christopher	Arroyo
California Public Utilities Commission	Christopher	Myers
California Public Utilities Commission	Matthew	Taul
California Public Utilities Commission	Jack	Chang
California Public Utilities Commission	Sasha	Cole
California Public Utilities Commission	Nick	Zanjani
California Public Utilities Commission	Nathaniel	Skinner
California Public Utilities Commission	Kaj	Peterson
California Public Utilities Commission	Benjamin	Tang
California Water Data Consortium	Deven	Upadhay
City of Burbank	Anthony	D'aquila
City of Long Beach - Long Beach Water	Diana	Tang
City of Long Beach - Utilities	Tony	Foster
City of Long Beach - Utilities	Dennis	Burke
City of Long Beach - Utilities	Heather	Hamilton
City of Long Beach*	Mario	Cordero
Clean Energy	Nora	Sheriff
Clean Energy Strategies representing the Utility Consumers' Acti	Tyson	Siegele
Communities for a Better Environment	Theo	Caretto
Communities for a Better Environment	Shara	Burwell
Communities for a Better Environment	Roberto	Cabrales
Communities for a Better Environment	Jay	Parepally
Communities for a Better Environment	Lauren	Gallagher
Earth Justice	Sara	Gersen
Energy Independence Now	Brian	Goldstein
Environmental Defense Fund	Joon Hun	Seong
Environmental Defense Fund	Michael	Colvin
Environmental Justice League	Russell	Lowery

Fernandeno Tataviam Band of Mission Indians	Ray	Salas
GoBiz	Deedee	Myers
Green Hydrogen Coalition	Hope	Fasching
Green Hygroden Coalition	Sergio	Dueñas
Green Hydrogen Coalition	Janice	Lin
Harbor Trucking Association	Karla	Sanchez
Harbor Trucking Association	Matthew	Schrap
Independent Energy Producers Association*	Jan	Smutny Jones
Independent Energy Producers Association*	Sara	Fitzsimon
International Longshore and Warehouse Union Local 13	Sal	DiConstanzo
International Longshore and Warehouse Union Local 13	Mark	Jurisc
International Longshore and Warehouse Union Local 13	Sophia	Dubrovich
LAWDP	Joseph	Ortiz
Local Union 250	Nathaniel	Williams
Local Union 250	Hector	Carbajal
Los Angeles Department of Water and Power	Aaron	Guthrey
Los Angeles Department of Water and Power	Marty	Adams
Los Angeles Department of Water and Power	Paul	Habib
Los Angeles Department of Water and Power	Nermina	Rucic
Los Angeles Department of Water and Power	Jesse	Vismonte
Los Angeles Department of Water and Power	Xinhe	Le
Los Angeles Department of Water and Power	Eric	Hill
Metropolitan Water District	Deven	Upadhyay
Natural Resources Defense Council	Pete	Budden
Pasadena Water & Power	Erik	Johnson
Port of Los Angeles	Mike	Galvin
Port of Los Angeles	Tim	DeMoss
Protect our Communities Foundation	Malinda	Dickenson
Reimagine LA	Rashad	Rucker-Trapp
Reimagine LA	Raul	Claros
Sierra Club	Monica	Embrey
Sierra Club	Julia	Dowell
Sierra Club	Teresa	Cheng
South Coast AQMD	Maryam	Hajbabaei
South Coast AQMD	Sam	Cao
South Coast AQMD	Aaron	Katzenstein
South Coast AQMD	Vasileios	Papapostolou
Southern CA Water Coalition	Charley	Wilson
Southern California Association of Governments	Kome	Ajise
Southern California Generation Coalition	Norman	Pedersen
Southern California Leadership Council	Richard	Lambros
Southern California Pipe Trades	Rodney	Cobos
Southern California Public Power Authority	Charles	Guss
The United Association	Aaron	Stockwell
UC Davis Insitute of Transportation Studies	Lukas	Wernert
UC Davis Sustainable Transportation Energy Pathways	Lew	Fulton
UCI Advanced Power and Energy Program	Jack	Brouwer

University of CA Riverside	Arun	Raju
UC Davis Sustainable Transportation Energy Pathways	Stefania	Mitova
Utility Reform Network (TURN)	Marcel	Hawiger
Utility Reform Network (TURN)	Marna	Paintsil Anning
Utility Workers Union of America 483	Ernest	Shaw
Utility Workers Union of America 483	Robin	Downs
Utility Workers Union of America 483	Anthony	Flores
Utility Workers Union of America Local 132	Joe	Moreno

## PAG Q4 Meeting Attendees - December 17, 2024

PAG		
Organization	First name	Last name
Air Products	Miles	Heller
California Energy Commission	Rizaldo	Aldas
California Hydrogen Business Council	Katrina	Fritz
California Public Utilities Commission	Arthur (Iain)	Fisher
California Public Utilities Commission	Christopher	Arroyo
California Public Utilities Commission	Matthew	Taul
California Public Utilities Commission	Benjamin	Tang
City of Burbank	Matt	Ko
City of Long Beach - Utilities	Tony	Foster
Clean Energy Strategies representing the Utility Consumers' Action Network	Tyson	Siegele
Energy Independence Now	Brian	Goldstein
Environmental Defense Fund	Joon Hun	Seong
Environmental Defense Fund	Michael	Colvin
Green Hydrogen Coalition	Dhruv	Bhatnagar
Green Hydrogen Coalition	Tim	Kamer Mayer
Local Union 250	Nathaniel	Williams
Local Union 250	Hector	Carbajal
South Coast AQMD	Sam	Cao
Southern California Pipe Trades DC 16	William	Kunz
Non PAG		
Arellano Associates*	Chester	Britt
Arellano Associates*	Stevie	Espinoza
Arellano Associates*	Keven	Michel
Insignia Environmental	Anniken	Lydon
Insignia Environmental	Armen	Keochekian
Lee Andrews Group*	Alma	Marquez
Lee Andrews Group*	Keshanna	Wiley
Lee Andrews Group*	Isaac	Martinez
SoCalGas*	Maryam	Brown
SoCalGas*	Neil	Navin
SoCalGas*	Andy	Carrasco
SoCalGas*	Frank	Lopez
SoCalGas*	Amy	Kitson
SoCalGas*	Shirley	Arazi
SoCalGas*	Yuri	Freedman
SoCalGas*	Annie	Ng
SoCalGas*	Katrina	Regan



## **Appendix 4 - PAG and CBOSG Meeting Transcript**



1 HEARD BEFOR SO CAL GAS

2 ANGELES LINK TEAM

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5 In the Matter of the Meeting re: )  
6 ANGELES LINK COMMUNITY BASED )  
7 HYBRID STAKEHOLDER MEETING )  
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15 TRANSCRIPT OF PROCEEDINGS, TAKEN AT  
16 LYNWOOD, CALIFORNIA, COMMENCING AT 10:00 A.M. AND  
17 CONCLUDING AT 1:37 P.M. ON TUESDAY, DECEMBER 17,  
18 2024, REPORTED BY STEPHANIE NELSON, A HEARING  
19 REPORTER IN AND FOR THE STATE OF CALIFORNIA.  
20  
21  
22  
23  
24  
25

1 APPEARANCES :

2 FACILITATORS : CHESTER BRITT  
3 ARELLANO ASSOCIATES  
4 PAG LEAD  
5 ALMA MARQUES  
6 LEE ANDREWS GROUP  
7 CBOSG LEAD

8 PRESENTERS : YURI FREEDMAN  
9 SENIOR DIRECTOR  
10 BUSINESS DEVELOPMENT  
11  
12 AMY KITSON  
13 ANGELES LINK DIRECTOR  
14 ENGINEERING & TECHNOLOGY  
15  
16 FRANK LOPEZ  
17 REGIONAL PUBLIC AFFAIRS  
18 DIRECTOR  
19 SOCALGAS  
20 SHIRLEY ARAZI  
21 ANGELES LINK DIRECTOR  
22 REGULATORY & POLICY  
23 HUMBERTO RAMIREZ  
24 BROUGHAM AMBULANCE  
25 GENERAL MANAGER

1 Orange, California, Tuesday, December 17, 2024

2 10:00 A.m.

3  
4  
5 CHESTER BRITT: Let's get started. Today is a special  
6 day. It is the final meeting as part of our phase one  
7 Angeles Link activities. Today is a combined meeting with  
8 the Planning Advisory Group and the Community Based  
9 Organization Stakeholder Group. Typically we meet  
10 individually, but you guys are here together today, and  
11 it's a special day. I think we had one other meeting  
12 where we were joined together, so this should be a good  
13 meeting. We have lots to talk about. We have a full  
14 agenda. So I'm going to jump right into it.

15 My name is Chester Britt. I am the Executive  
16 Vice President of Arellano Associates. I've been the  
17 facilitator of the Planning Advisory Group for the last  
18 two years, and I am very happy to play that role and  
19 excited to be here today and have this be a successful  
20 meeting as well. I want to introduce Alma Marquez. She's  
21 my counterpart and has been working with me, and I'll let  
22 her introduced herself.

23 ALMA MARQUEZ: Good morning, everyone. It's a  
24 pleasure to be here. Welcome to the beautiful city of  
25 Lynwood, and I just want to give a shout out to he staff

1 for helping us set up this beautiful room for you all this  
2 morning. They're just a great team. And with that, I'm  
3 going to pass it back -- oh, Alma Marques with Lee Andrews  
4 Group, co-facilitator and have been the lead for CBOSG.  
5 Thank you to all the CBO folks that are here. I  
6 appreciate you taking the time to be here. Thank you.

7 CHESTER BRITT: Yeah. And I do want to echo what she  
8 said, it really is a tribute to you guys that we have so  
9 many people here today which should make it a really good  
10 meeting as well.

11 A little housekeeping items for you online and  
12 for those of you in the room, some of these should be very  
13 familiar. This meeting will be recorded, both video and  
14 audio, and the court reporter will be transcribing the  
15 meeting. Really, really important to please announce  
16 yourself before you speak. So, I know sometimes when it's  
17 your turn to speak, you just jump right into your  
18 comments, but if you could please state your name and your  
19 organization before you speak, that would be great. The  
20 Zoom microphones are muted by us to eliminate any  
21 background noise. When you raise your hand on Zoom and we  
22 call on you to speak, you will need to unmute yourself, we  
23 will do the same on our side. So please make sure to do  
24 that. In person, we have this little tradition that when  
25 you want to speak, you take your little name placard and

1 turn it on its end, and then I can see that you want to  
2 speak. It's a little glary today, so I don't see you,  
3 it's not that I'm ignoring you. Just wave your hand or  
4 get my attention so I can see what's going on. We want to  
5 make sure that everyone who wants to speak is able to do  
6 that. We also would encourage you to turn on your cameras  
7 so we can better engage with you. We do have PVs here in  
8 the room so people in the room can see the participants  
9 online, especially when it's your turn to speak. It'd be  
10 nice if you had it on the whole time, but if you need to  
11 have it off, that's fine. When you do speak, if you could  
12 turn it on, that would be really good. We also encourage  
13 you to use the Zoom chat. It's there for you to you use,  
14 and if you want to make a comment or ask a question, we  
15 always try to balance the in-person questions with the  
16 chat questions, make sure we go back and forth and, kind  
17 of, get all those done. And again, if you would like to  
18 speak, please raise your hand at the bottom of the Zoom  
19 feature. In person we have some wireless microphones.  
20 They should be scattered around. I see one there with a  
21 yellow cover on it, and there should be a couple others.  
22 We can pass those around. Make sure in-person you have  
23 one of those when you are speaking so the people online  
24 could have the benefit hearing your you as well.

25 We do have a full agenda, as I mentioned. I want

1 to thank Alma and her team for setting up the continental  
2 breakfast. We are going to have lunch, and then we are  
3 going to have a little reception afterwards. So we do  
4 have a full day. We also are going to have a safety  
5 moment and land acknowledgement, and we'll call -- we'll  
6 get some welcomes from our executives from SoCalGas, and  
7 then we'll dive right in to our agenda where we're going  
8 to talk about the Angeles Link phase one summary of  
9 studies, we'll have a member discussion following that,  
10 then we'll talk about a summary of the PAG and CBOSG  
11 process, we'll break for lunch, and then we'll come back  
12 and talk about the phase 2 updates and have a discussion  
13 about that, then we'll get into next steps, we'll have a  
14 roundtable discussion, we'll have some closing remarks  
15 from Neil, and then we'll begin our reception.

16 So I am now going to introduce Olga Quinones,  
17 she's the Media Relations and Strategic Engagement Project  
18 Manager with SocalGas, and she's going to do our safety  
19 moment today.

20 OLGA QUINONES: Good morning, everyone. And welcome  
21 to my hometown, the City of Lynwood. Seven easy holidays  
22 for safety driving. The holiday season is a time for  
23 celebration, but it also increases risk on the road, so  
24 here are seven safety tips for you while you drive this  
25 time of year. One, inspect your vehicle; two, to get

1 proper rest; three, don't drive distracted; four, drive  
2 the speed limit; five, practice defensive driving; six,  
3 travel early or during daylight hours; and finally, fuel  
4 up during the day. These tips will keep you safe and  
5 others on the road this holiday season.

6 CHESTER BRITT: All right. Thank you, Olga, for that.  
7 I'm now going to turn it over to Alma, if she can run over  
8 real quickly, and she is going to introduce our speaker  
9 for our land acknowledgment.

10 ALMA MARQUEZ: Yes. Good morning, actually Enrique  
11 Aranda with Soledad Enrichment Action is going to be  
12 leading us in the land acknowledgment, so we are going to  
13 give him a few minutes to settle himself and get ready to  
14 read it, and we'll hand over the mic.

15 CHESTER BRITT: Okay. If you want, we can do the roll  
16 call first, and then come back to land acknowledgment.

17 ALMA MARQUEZ: That would be great.

18 CHESTER BRITT: Okay. So I'm going to have -- we are  
19 going to do, because we have so many people in this  
20 meeting, instead of taking 45 minutes to do roll call like  
21 we typically do it, I am going to bring up the invitation  
22 list and I was making notes of who was here and person. I  
23 am going to write off everybody that I know RSVP'd and is  
24 here in person that I can see online. Afterwards, if I  
25 missed anyone, then please raise your hand and will let

1 you introduce yourself, but I apologize ahead of time for  
2 any butchering of names. No promises, but I will do my  
3 best. So, Miles Heller with Air Products; Rizaldo Aldas  
4 with California Energy Commission; Katrina Fritz with  
5 California Hydrogen Business Council; Benjamin Tang with  
6 California Public Utilities Commission; Christopher Arroyo  
7 with California Public Utilities Commission; Mathew Taul  
8 with California Public Utilities Commission; Anthony  
9 D'Aguila with the City of Burbank; Mathew Culajay with the  
10 City of Burbank; Tony Foster with the City of Long Beach  
11 Utilities; Erik Johnson with the City of Pasadena Water  
12 and Power; Tyson Siegele with Clean Energy Strategies;  
13 Brian Goldstein with Energy Independence Now; Michael  
14 Colvin with Environmental Defense Fund; Joon Hun Seong  
15 with Environmental Defense Fund; Tim Kamermayer with Green  
16 Hydrogen Coalition; Janice Lin with Green Hydrogen  
17 Coalition; Sara Fitzsimons with Independent Energy  
18 Producers Association; Sal DiCostanzo with International  
19 Longshore and Warehouse Union Local 13; Nathaniel Williams  
20 with Local Union 250; Hector Carbajal with Local Union  
21 250; Julia Dowell with Sierra Club; Sam Cao with South  
22 Coast AQMD; Norman Peterson with Southern California  
23 Generation Coalition; William Kunz with Southern  
24 California Pipe Trades; Charles Wilson with Southern  
25 California Water Coalition; and Matt Ko with the City of

1 Burbank. Those were all the PAG members.

2 Now to the CBOSG. Lourdes Caracoza with Alma  
3 Family Services; Marcia Hanscon with Ballona Wetlands;  
4 Michael Berns with Defense Ballona Wetlands; Andrea Vega  
5 with Food & Water Watch; Andrew Pezzullo with Food & Water  
6 Watch; Kristin Fukushima with Little Tokyo Community  
7 Council; Luis Pena with Los Angeles Indigenous People's  
8 Alliance; Cid Pinedo with Mexican American Opportunity  
9 Foundation; Ella Cavlan with PESA, P-E-S-A; Kevin Weir  
10 with Protect Playa Now; Faith Myhra with Protect Playa  
11 Now; Rashad Rucker-trapp with Reimagine LA; Isaac Galvan  
12 with Soledad Enrichment Action; and Enrique Aranda with  
13 Soledad Enrichment Action; Andrea Williams with Southside  
14 Coalition; Andrea Slater with UCLA Labor Center; Gerry  
15 Salcedo with YMCA LA; Autumn Ybarra with Watts/Century  
16 Latino Organization; Kisa Ito with Little Tokyo LA; Marc  
17 Carrel with Breathe Southern California; and Edgar Barraza  
18 with Physicians for Social Responsibility Los Angeles.

19 And that was the hardest part of my day right  
20 there. Did I miss anybody, either online or in person,  
21 that I did not read your name or I did not read it  
22 correctly?

23 If you could just grab the microphone just so  
24 people can hear you online. Good morning.

25 HYPEPIN IM: Hyepin Im with Faith and Community

1 Empowerment.

2 CHESTER BRITT: All right. Thank you and I also see  
3 someone online, or two people, Marybel Batjer, if you  
4 could introduce yourself.

5 MARYBEL BATJER: Sorry, unmuting. Yes, Marybel  
6 Batjer, partner at California Strategies.

7 CHESTER BRITT: And I see Roy. You know, I must have  
8 just skipped over your name because you were on the list,  
9 Roy, but go ahead and introduce yourself. I apologized  
10 for that.

11 ROBERT ROY VAN DE HOEK: It's okay. Robert Van De  
12 Hoek, Roy nickname. I heard you say Defense Ballona  
13 Wetlands and I am with Defense Ballona Wetlands.

14 CHESTER BRITT: It was one of the line items, sorry  
15 about that. That was not intentional, I promise.

16 ROBERT ROY VAN DE HOEK: I understand. You're doing  
17 great. Happy holidays, everybody.

18 CHESTER BRITT: Happy holidays to you as well. Okay.  
19 Now were going to go back to --

20 FRANK LOPEZ: I think we also had Matt Schrap from  
21 Harbor Trucking Association just joined us and dropped in  
22 the chat. And just to clarify, Michael Berns California  
23 Greenlands. Did we get your organization wrong.

24 CHESTER BRITT: We got it right now. Thank you for  
25 that.

1 ALMA MARQUEZ: And Michael was here first today, so  
2 thank you, Michael, for being here on time.

3 CHESTER BRITT: The original OG. Yes.

4 Go ahead, Enrique.

5 ENRIQUE ARANDA: Thank you, Chester. Thank you, Alma.  
6 Good evening, friends and relatives. Blessings to all,  
7 and welcome to Lynnwood, California, where we like to call  
8 the heart of Southeast LA. I know Edith always reminds us  
9 of the importance of Southeast LA, and especially when it  
10 comes to regulatory agencies that hardly have a presence  
11 here. So thank you for facilitating this process and  
12 bringing this event, this important event to our  
13 communities.

14 As we begin this program, we must first of all  
15 acknowledge colonialism as an ongoing process. That just  
16 possesses an indigenous land, life and resources were ever  
17 recall home. We acknowledge that this land, and the land  
18 that you might live, work and raise families is on  
19 indigenous land that was stolen from its original  
20 caretakers. With gratitude and respect today we honor the  
21 indigenous people on this ancestral land we gather, of the  
22 diverse and vibrant communities of the Tongva, the  
23 Tataviam, the Serrano, the Quis, the Chumash people, who  
24 have cared for these lands and make their home here today.  
25 We honor and pay our deepest respects to their elders and

1 descendent, past, present and emerging as they continue  
2 their stewardship of these lands and waters for  
3 generations to come. We also acknowledge that  
4 colonization resulted in land seizures and disease and  
5 subjugation and slavery and relocation and broken  
6 promises, not to mention genocide and multigenerational  
7 trauma that continues to today. This acknowledgment today  
8 demonstrates our responsibility, a collective  
9 responsibility, and commitment to truth, to healing, to  
10 reconciliation and to elevating the stories the culture of  
11 community of the original caretakers of this region for  
12 whom we are grateful for the opportunity to live in and  
13 work on these ancestral lands. We celebrate the  
14 resilience of strength and the wavering spirit of  
15 indigenous peoples who are dedicated to creating  
16 collaborative accountable and respectful relations with  
17 indigenous nations and local tribal governments. Such as  
18 Fernandeno Tataviam Band of Mission Indians, the  
19 Gabrielino-Tongva Indians of California Tribal Council,  
20 the Gabrielino-Tongva San Gabriel Band of Mission Indians,  
21 and the Gabrieleño Band of Mission Indians - KIZH Nation,  
22 the San Manuel Band of Mission Indians, and lastly, the  
23 San Fernando Band of Mission Indians.

24 As we positioned ourselves as visitors and  
25 settlers, it is our responsibility to always honor

1 indigenous sovereignty, moving past just acknowledging  
2 that today, but by one day materializing to solidarity in  
3 our every day.

4 Thank you.

5 CHESTER BRITT: Thank you.

6 So now we're going to turn it over to Maryam  
7 Brown, the president of SoCalGas, and I just want to  
8 acknowledge the fact that she's come to different meetings  
9 throughout the two years that we have been facilitating  
10 these meetings, and what a pleasure it is to have her be  
11 able to speak to the group as the president and  
12 understanding what's going on from her perspective. So we  
13 are very excited to have her again today. I know she came  
14 to the original meeting at Alta City, and now the last  
15 meeting for part of phase one here tonight, or today. So  
16 I want to welcome Maryam and turn it over to her for her  
17 remarks.

18 MARYAM BROWN: Thank you very much, Chester. And,  
19 Enrique, thank you very much for that land  
20 acknowledgement. I really appreciate that and starting  
21 our day there.

22 I want to say good morning and welcome to  
23 everyone. It's incredible group of diverse stakeholders  
24 that are here today, and it's just so impressive, and I  
25 think that it's a big part why we view today so much as a

1 success. It's a successful day on the phase one report on  
2 Angeles Link being published last week on Friday, and I  
3 think it's a successful being on the heels of soon filing  
4 for the phase two application for Angeles Link. I asked  
5 to join this meeting, one, because it's the last of so  
6 many sessions were good work was done, but really the  
7 opportunity to thank you for everything it is that you  
8 have done to support the Angeles Link effort.

9           You know, when we started this stakeholder  
10 engagement endeavor, the original idea was quarterly  
11 meetings with the idea of a feedback loop and this effort  
12 has far, far exceeded that goal. And I think as we worked  
13 to be authentic in this first-of-it's-kind stakeholder  
14 engagement effort, the process of evolved to monthly  
15 meetings and in some circumstances, one-on-one meetings.  
16 In those meetings there was hours and hours of work to  
17 prepare for those meetings that we held, and hours and  
18 hours of thoughtful comments and feedback on the subject  
19 matters that were discussed in those meetings, and I think  
20 the results of it is that the work product in phase one  
21 was much improved because of that time and energy that you  
22 all put into Angeles Link phase one. And what I'll say  
23 for SoCalGas is our company grew from the experience of  
24 this stakeholder engagement process that we have been in.  
25 And, you know, I think my -- I think in one of the

1 previous PAG meetings that we had I noted that my parents  
2 are both Persian. There's a very famous poet in the  
3 Persian culture named Rumi, and he has a line that he says  
4 that I think is very fitting for how this has effected  
5 SoCalGas. It has to do with how humbling it is to take  
6 constructive criticism and make yourself better from it,  
7 and the line is "How I will you ever become a polished  
8 mirror if you hurt at every rub." I think what this  
9 process has done is it has polished this mirror for our  
10 company, and I want to thank you very much for the time  
11 that you put into this.

12 I often say that time is the only truly limited  
13 resource, and I think that time can be allocated in one of  
14 two ways: You can spend it or you can invest it. And,  
15 you know, the difference when you are investing it is when  
16 you are investing it, you have a vision for that time and  
17 what it's going to mean in the future. And I think that  
18 the work that we have done here on Angeles Link is about a  
19 shared investment -- an investment in a shared vision of a  
20 decarbonized California. And I would like to give you  
21 some examples of that investment and the difference that  
22 it has made. I have eight of them actually that I wanted  
23 to today. There are probably many many more, but these  
24 are the ones that were at the top of my list. I think  
25 that UCAN invested in Angeles Link by helping us to make

1 this stakeholder engagement process better. Early on,  
2 they asked that we provide PAG with the basis for the  
3 compensation structure for those that are engaging in this  
4 process, and they asked that we always include, as we have  
5 since then, a virtual option for attendance. And they  
6 also asked that we publish the information on our public  
7 web page to improve transparency. We did all of these  
8 things. UCAN also invest in Angeles Link with its  
9 emphasis on being realistic about demand projections.  
10 Comparative analysis we provide in the phase one reports I  
11 think is useful to many of our stakeholders, and I think  
12 that was an important investment.

13 Food and Water Watch also invest in Angeles Link  
14 with our enhanced safety analysis. Projects like Angeles  
15 Link cannot move forward unless there's confidence that  
16 the safety standards are at least, if not even more,  
17 strong than that of incumbent fuels.

18 The Longshoreman and UWUA invested in Angeles  
19 Link by helping with our understanding of the workforce  
20 implications a project of this nature.

21 EDF and NRDC invested in Angeles Link with our  
22 improved NOx emission reduction modeling. This will help  
23 us, the concentrated spacial understanding of NOx  
24 emissions, will help us in our understanding EJ impacts.

25 Food and Water Watch and CBE invested in Angeles

1 Link with our improved GHD analysis that account for the  
2 implications any possible leakage. And because with  
3 Angeles Link we are often talking about green hydrogen,  
4 water is the key. CBE invested in Angeles Link engines  
5 with our improved GHD analysis associated with water  
6 treatment and conveyance. It is a water wells to wheels  
7 GHD analysis if you're familiar with the -- with the GHD  
8 analysis parlay.

9 And lastly, I want to note that a lot of time has  
10 been spent trying to reduce reliance on Aliso Canyon. I  
11 think that time is invested in creating a real path to do  
12 so with Angeles Link. There is nothing wrong with  
13 spending time, and it is absolutely everyone's right.  
14 With the challenges we face, I think that investing time  
15 to help shape the future is much, much smarter, and that  
16 is what it is that we have done here with this effort.  
17 Angeles Link's goals are: Cleaning California's air,  
18 reducing the use of fossil fuels, and creating tens of  
19 thousands of jobs, union jobs. As I said at the outset,  
20 with the publication with the phase one report on Friday,  
21 and being on the brink of the phase two application, this  
22 is very much a successful day. And I am very hopeful that  
23 there will be a day where Angeles Link is successful, and  
24 if she is, she will have a thousand fathers as is the case  
25 with success, but to me the people in this room and on

1 this video will always be her original investors. So I  
2 want to thank you very much for that very sincerely, on  
3 behalf of SoCalGas. I look forward to the continuation of  
4 this journey with you, and appreciate the time. Chester.

5 CHESTER BRITT: Thank you so much, Maryam. I  
6 appreciate you being here today. It's a significant  
7 milestone and a very long journey.

8 We're going to not switch over to our main agenda  
9 focused on and Angeles Link phase one summary of studies.  
10 We've been going through this process for two years now  
11 and as Maryam mentioned, we've been having monthly  
12 meetings, and the reason for that is because there's a lot  
13 of work studies and we took four bites of the apple with  
14 each one of. We talked about the scoping, the technical  
15 approach, the preliminary findings and the draft reports,  
16 and today is kind of the culmination of that. We're going  
17 to hear in our presentations today, you know, where we  
18 ended up, what we found out, and I think it's significant  
19 to mark this as an opportunity for us to see all of our  
20 hard work that we all put in. As Maryam so eloquently  
21 mentioned, you know, we have taken a lot of input from you  
22 and SoCalGas has done a lot of internalizing of that input  
23 and figuring out how to incorporate that into the studies.

24 And, so I'm going to introduce Yuri Freedman, he  
25 is a senior director of business development. He's no

1 stranger to you. He's been making a lot of  
2 representations along with Amy Kitson, who's the Angeles  
3 Link Director of Engineering and Technology. So I'm going  
4 to turn it over to them for our first set of  
5 presentations.

6 YURI FREEDMAN: Thank you, Chester. Good morning,  
7 everybody, it's good to be here to see again all of you,  
8 both in the room and online. As Chester mentioned, I'm  
9 Yuri Freedman, Senior Director of Business Development of  
10 SoCalGas, and what I would like to do today is to provide  
11 a very brief, very high level overview, a recap, if you  
12 will, of sound status followed by Amy's presentation who  
13 will continue to provide this overview for other  
14 categories.

15 And the categories of studies that you see in  
16 front of you on the screen there are 16 studies, as you  
17 know. They fall into three broad categories. First  
18 category is what we call viability where we analyzed the  
19 fundamental equation of viability of Angeles Link as a  
20 project that has been envisioned. Then there's a  
21 technical section, and the third section is public  
22 interest. So I'm going to provide the condensed overview  
23 of the viability section, and with that, if you go to the  
24 next slide, again, recap of some of the key numbers. The  
25 total addressable market for clean renewable hydrogen, we

1 have identified in our analysis is in the range from 1.9  
2 to 5.9 million tons per year. Angeles Link is a fraction  
3 of this. And Angeles Link is designed to transport  
4 between 0.5 and 1.5 tons per year of clean renewable  
5 hydrogen. We realized early on in the process that we  
6 spent a lot of time, but we, as we progressed, got better  
7 in explaining the difference between the total addressable  
8 market and the throughput of the project. We really  
9 appreciate the comments that you all -- many of you made  
10 to that effect. We also added, per your feedback, the  
11 third party studies, third-party forecast of demand which  
12 comes from the state itself, the state's agencies such as  
13 the Area Source Board, California Energy Commission, the  
14 academic community University of California Davis, and  
15 also large study was conducted by the National Patrol  
16 Council. So now we and you can put our results, our  
17 numbers, in the context of these studies.

18 Turning over to production, the big takeaways are  
19 that we are going to need tons of gigawatts of renewable  
20 electricity to produce the upper end of the range of  
21 Angeles Link throughput. As an example here, for 1.5  
22 million tons per year of hydrogen, it would require just  
23 short of 40 gigawatts of solar capacity, which would take  
24 approximately 240,000 acres of land. That area is, while  
25 undoubtedly quite substantial, it represents about 12% of

1 identified land which could be used for construction of  
2 the solar facilities. So the visibility appears to be  
3 established. What we appreciate from your feedback we  
4 added material to the report that addressed your feedback  
5 on additional land constraints, because to be clear,  
6 there's significantly more work that needs to be done to  
7 analyze this issue deeper and ultimately that's what  
8 renewable hydrogen producers are doing today in real-time,  
9 identifying land positions and developing their project.

10 On the -- excuse me -- on the next slide there's  
11 is very brief overview of the key takeaways the analysis  
12 of project options and alternatives and high-level  
13 economics and cost-effectiveness. Having analyzed  
14 multiple options and alternatives, both alternatives that  
15 don't include hydrogen, such as the electrification,  
16 carbon capture sequestration and alternatives of hydrogen  
17 delivery that don't include pipelines, we have established  
18 that Angeles Link is the best suited and the least-cost  
19 option importantly to deliver clean renewable hydrogen at  
20 scale. This hydrogen deliver Angeles Link is a  
21 competitive and viable decarbonization pathway compared to  
22 electrification and carbon capture sequestration.

23 We have received a lot of stakeholder feedback  
24 which we really appreciate. What we do, we clarify that  
25 Angeles Link is meant to be scalable and serve demand as

1 it progresses, as it grows from 2030s to the higher  
2 long-term demand at 2045 and past 2045 as California is  
3 going to reach its carbon neutrality goal. There's no  
4 doubt that tracking would be useful for certain less-mile  
5 delivery solutions; however, pipelines allow for greater  
6 throughput volumes over long distances, and in that, they  
7 offer greater scale and lower cost which ultimately  
8 benefit the customers, consumers and increase the  
9 likelihood of adoption and affordability of clean  
10 renewable hydrogen.

11           Turning over to high-level economics and  
12 cost-effectiveness. Comparing the economics of the  
13 various pathways for, again, hydrogen and nonhydrogen  
14 solutions, we have established that Angeles Link offers  
15 the most cost effective solution to transport clean  
16 renewable hydrogen to serve Central and Southern  
17 California including the Los Angeles-based scale. We also  
18 found that is cost effective with electrification and  
19 carbon capture sequestration as an alternative pathway for  
20 dispensable power generation and transportation with an  
21 emphasis on medium and heavy-duty transport and certain  
22 hard-to-electrify industrial sectors.

23           Like in many other reports, we received various  
24 demands of stakeholder feedback, which we do appreciate;  
25 and what we do to reflect that, we, among other matters,

1 edit a section to assess an additional alternative which  
2 we have not analyzed before. That's high voltage direct  
3 current or HVDC transmission for in basic electricity  
4 transmission. We also updated key findings to identify  
5 hydrogen purification costs and explain storage  
6 assumptions as they progress over time, in line with  
7 demand and supply growth.

8 Let me stop here and turn it over to Amy who is  
9 going to provide an overview of the reports and technical  
10 section.

11 AMY KITSEN: Yes. Thank you, Yuri. I'm going to  
12 speak now to some of the findings and feedback from the  
13 environmental and engineering studies conducted in phase  
14 one. The GHD and air quality studies, as show on this  
15 slide, provide significant public interest benefits to  
16 rate pairs in the broader community. For instance,  
17 Angeles Link could support significant decarbonization and  
18 air quality benefits including the potential reduction of  
19 4.5 to 9 million tons of carbon dioxide equivalent per  
20 year. The equivalent of approximately 725,000 to 1  
21 million gasoline passenger vehicles off the road per year.  
22 And approximately 5200 tons per year of NOx emissions by  
23 2045.

24 The GHD and NOx studies also received feedback  
25 from the stakeholder groups and that feedback was

1 incorporated in each of the studies as Maryam touched on.  
2 Here are a couple of those examples: The stakeholders  
3 indicated that hydrogen leakage should be considered in  
4 the GHD emission impact calculations. They requested  
5 that the volume of leakage estimates and associated  
6 impacts to climate change be discussed and the volumetric  
7 analysis be included in the leakage and GHD study. In  
8 response to stakeholder comments, the range of preliminary  
9 high-level volumetric estimates quantifying the potential  
10 for leakage provided in the leakage studies was used in  
11 the GHD study to predict a high-level range of potential  
12 impacts to the estimated overall GHD reductions associated  
13 with general new hydrogen infrastructure with Angeles Link  
14 infrastructure using the potential leakage values found  
15 during literature review. Stakeholders recommended that  
16 geographic depiction of the cumulative impact of NOx  
17 emissions be prepared that includes data from  
18 environmental justice screening tools. Stakeholders  
19 provided comments regarding the potential benefit of  
20 displacing fossil fuels using the hydrogen and reducing  
21 pollution in industrial and heavily trafficked areas,  
22 especially as it related to disadvantaged communities.  
23 They had a question of how the NOx will determine  
24 geographical impacts of disadvantaged communities.  
25 Stakeholders suggested that existing emissions levels in

1 the communities local to the proposed Angeles Link  
2 pipeline route to the proposed compressors to the proposed  
3 power generation units be examined. Given that many  
4 communities are already disproportionately burdened by  
5 pollution, an estimate of cumulative impacts of NOx was  
6 deemed to be important. In response to stakeholder input,  
7 Appendix C was added to the final NOx study. This  
8 appendix includes several maps that identify the projected  
9 NOx emissions reductions by zip code, and the  
10 environmental justice communities by census track. Both  
11 sets of maps include preliminary pipeline routing  
12 information identified in the routing analysis. Quality  
13 cumulative impact analysis is outside the scope of this  
14 excusability study, but will be considered as part of  
15 future analysis of Angeles Link during the sequel  
16 analysis.

17 Next slide. The workforce and planning training  
18 evaluation, as Maryam mentioned, discussed how SoCalGas'  
19 existing workforce planning program can be adopted to  
20 support hydrogen infrastructure leveraging the company's  
21 long-standing experience and safely and reliably operating  
22 and maintaining a pipeline system.

23 Stakeholders suggested inclusion of job estimates  
24 potentially created by Angeles Link. In response to this  
25 feedback, an employment impact analysis that estimates job

1 creation associated Angeles Link was conducted and  
2 provided in appendix A of the study. The evaluation also  
3 demonstrated that Angeles Link can create nearly 53,000  
4 direct construction related jobs at peak and in total of  
5 approximately 75,000 jobs at peak when considering  
6 indirect and induced jobs that occur through wage earners  
7 spending more income. Angeles Link workforce development  
8 can support the local economy while constructing,  
9 operating and maintaining Angeles Link safely. The  
10 evaluation of applicable safety requirements demonstrated  
11 that there are minimal regulatory differences between  
12 hydrogen and natural gas pipeline transportation and that  
13 SoCalGas' expertise in natural gas pipeline construction,  
14 operation and maintenance can be leveraged to design --  
15 safely design, construct, operate and maintain a hydrogen  
16 pipeline system. This includes adapting existing safety  
17 regulations and industry standards to address the unique  
18 properties of hydrogen as well as developing new company  
19 standards and practices tailored to hydrogen transport.  
20 The evaluation also highlighted the ability of existing  
21 regulations such as 49 CFR Part 192 and industry standards  
22 including ASME, E31 12 and NFPA 2 to support the safe  
23 design and operation of hydrogen pipelines. Key safety  
24 requirements identified include material selection,  
25 pipeline design, fire protection strategies, leak

1 detection, and monitoring programs, as well as emergency  
2 response procedures and public awareness initiatives. The  
3 evaluation also incorporated lessons learned from prior  
4 industry and third-party experiences with hydrogen  
5 pipelines. The evaluation described SoCalGas' ability to  
6 adapt and expand its existing safety practices including  
7 existing emergency response and public awareness plans and  
8 employee and contractor training. These practices will be  
9 expanded within the industry per safety management system  
10 framework to support the implementation of clean renewable  
11 hydrogen pipeline system; furthermore, the evaluation  
12 outlined how safety considerations can be considered in  
13 Angeles Link's design process including preliminary  
14 pipeline sizing, compression requirements and material  
15 selection. It also detailed how construction, operation  
16 and maintenance protocols can be developed and implemented  
17 to align with industry best practices and allow for safe  
18 and reliable hydrogen transportation.

19 Stakeholders requested as part of the study that  
20 SoCalGas engage with the Center for Hydrogen Safety for  
21 the idea of the study. As a reminder, the Center for  
22 Hydrogen Safety, or CHS, is a globally recognized  
23 nonprofit organization that promotes the safe use of  
24 hydrogen across industries including transportation,  
25 energy and industrial applications. It is a part of the

1 American Institute of Chemical Engineers and serves as a  
2 hub for sharing best practices, resources and expertise to  
3 advance hydrogen safety. The CHS panel or Hydrogen Safety  
4 Panel refers to the advisory committee of hydrogen experts  
5 assembled under the CHS framework. Engagement from this  
6 panel is endorsed by the Department of Energy and SoCalGas  
7 enlisted the expertise of the Hydrogen Safety Panel to  
8 review and provide comments on the draft evaluation of the  
9 applicable safety requirements. The Hydrogen Safety Panel  
10 identified key -- additional key hydrogen safety codes,  
11 and safety best practices and made other recommendations  
12 for information to consider in the planning of Angeles  
13 Link. Changes were made in the safety study in Section 6  
14 Risk Management, Section 8 Specification Standards and  
15 Procedures Evaluation, and Section 11 Lessons Learned From  
16 the Feedback Hydrogen Safety Panel. A copy of the  
17 Hydrogen Safety Panel's feedback, along with SoCalGas'  
18 full response to the feedback, is included in the third  
19 quarterly report available on SoCalGas' website.

20 Now I will hand it over to Frank to talk about  
21 the environmental and social justice plan.

22 FRANK LOPEZ: Thank you, Amy. In addition to the  
23 studies highlighted by Yuri and Amy, we also conducted an  
24 ESJ screening to help us identify disadvantaged and  
25 environmental social justice communities located near

1 potential routs. We primarily relied on the state's  
2 CalEnviroScreen and the federal government's to climate  
3 and economic justice screening tool to identify  
4 disadvantaged communities. During the process, we  
5 received some valuable feedback from all of you on how to  
6 improve the screening. A couple of these examples include  
7 adding jurisdictional information to census tracks so you  
8 know what cities and counties they correspond to, adding  
9 the language that is spoken in the community's along  
10 potential routes so we know what language we may need to  
11 conduct future outreach in, and adding additional  
12 demographic and economic data from other industries, like  
13 the Community Development Index developed by the South LA  
14 All In initiative. Thank you to CRCDC for bringing this to  
15 our attention. And finally, we overlaid this data with  
16 the potential routes, so you can see how those relate to  
17 each other. The data we assembled from this process was  
18 informative and helped inform our routing study, which Amy  
19 will speak about shortly. In addition to this screening,  
20 we also learned from you that we should rely solely on  
21 government mapping tools to inform our outreach efforts.  
22 We heard loud and clear from you that the communities we  
23 serve are more than just data on a map, and that we need  
24 to engage with communities more directly, which we intend  
25 to do so in the subsequent phase. While our outreach

1 efforts were limited to the PAG and CBOSG during this  
2 first phase, we decided to develop an ESJ plan with your  
3 help that outlines how we intend to engage with ESJ  
4 communities in phase two. We utilized your expertise to  
5 identify potential mechanisms we can use to broaden our  
6 awareness about our proposals and solicit input into our  
7 planning efforts. Our goal is to leverage the data we  
8 gathered from the ESJ screening to help us identify what  
9 communities we should be focusing on in phase two and  
10 leverage the ESJ plan to inform us on how to best  
11 engagement them. This includes more engagement with  
12 tribes and communities outside the LA area. We have  
13 incorporated your feedback into our phase two stakeholder  
14 engagement activities, which I will go over later today.

15 I want to thank all of you who contributed to our  
16 ESJ screening and plan. I think your feedback was pivotal  
17 in helping us acquire valuable insights about  
18 environmental social justice concerns associated with our  
19 project. Back to Amy.

20 AMY KITSEN: Thank you, Frank. I'm going to touch on  
21 routing. The preliminary routing and configuration  
22 analysis identified several preliminary routes for the  
23 system and considered various factors such as engineering  
24 requirements and environmental and social features. The  
25 study examined existing pipeline corridors, rights of way,

1 franchise rights, and designated federal energy corridors  
2 as well as the need for new rights of way. When combined,  
3 these initial route configurations transfers a total of  
4 approximately 1300 miles, overlaying ARCHES demand and  
5 production sights, shown above in the map, and providing a  
6 wide range of options within which to narrow down the  
7 route for the Angeles Link system, which is anticipated to  
8 be approximately 450 miles.

9 Next slide. These are the routes within the  
10 final report that were identified within the draft report  
11 issues earlier this year and presented at the PAG and  
12 CBOSG meetings in July. Preliminary pipeline segments  
13 were assembled over various configurations to meet the  
14 established criteria and four potential directional route  
15 configurations emerged. The four potential directional  
16 routes, titled A, B, C and D, are shown here. As Frank  
17 discussed, route variation 1 was also added after  
18 evaluating ESG screening information in response to  
19 stakeholder feedback as a variation for further evaluation  
20 in phase two as it has he potential to minimize route  
21 mileage traversing disadvantaged communities in the LA  
22 Basin. These four potential directional routes share the  
23 common characteristic of delivering up to 1.5 million  
24 metric tons per year of clean renewable hydrogen from  
25 third-party production locations in San Joaquin Valley and

1 Lancaster to Central and Southern California including the  
2 LA Basin while passing through the connection, collection  
3 and central zone in supporting connection between the two  
4 ARCHES segments. On average, they traverse approximately  
5 450 miles.

6 Before we open it up to questions, I wanted to  
7 remind everyone that these findings, as well as findings  
8 for all phase one feasibility studies can be found on our  
9 website. Each study contains a section on stakeholder  
10 feedback and the changes to the studies that were made as  
11 a result to that feedback. In addition, a consolidated  
12 report was produced that provides a high-level summary of  
13 all of the studies in one place. Thank you for all of  
14 your engagement throughout phase one of Angeles Link.

15 CHESTER BRITT: All right. And there you have two  
16 years of work consolidated into thirty minutes of  
17 presentation. While we were making the presentation,  
18 there were a few people that joined, so I want to make  
19 sure we give you the opportunity to introduce yourself.  
20 So if you came while the presentation was going on, could  
21 you just raise your hand, and we'll pass the microphone to  
22 you in person. If there was anyone online that joined  
23 that wants to introduce themselves, raise your hand online  
24 as well.

25 ALMA MARQUEZ: And I believe it was Rashad and Ricardo

1 and Tony that walked in. Hand the mic to them. Thank  
2 you. Good morning everyone.

3 RASHAD RUCKER-TRAPP: Rashad Ruckertrap with --  
4 Executive Director with Reimagine LA Foundation, and  
5 really happy to be here this morning. I apologize for  
6 being tardy.

7 CHESTER BRITT: No worries.

8 ALMA MARQUEZ: Again. Just kidding, Rashad. If we  
9 can hand it over to Ricardo.

10 RICARDO MENDOZA: Good morning, everyone, Ricardo  
11 Mendoza, Chief Business Development Officer with Coalition  
12 for Responsible Community Development, or CRCDD, and thank  
13 you for holding us accountable, Alma.

14 ALMA MARQUEZ: No worries, Ricardo.

15 CHESTER BRITT: I think there's one more over here.  
16 Pass the microphone.

17 TONY FOSTER: Good morning, everyone. My name is Tony  
18 Foster. I'm a senior director of the Utility Business  
19 Services for the City of Long Beach's utility department.  
20 So I'm very excited to be here. I've been tracking this a  
21 long time, and our entire city is looking forward to this.

22 CHESTER BRITT: All right. Great. Thank you so --

23 ALMA MARQUEZ: And then we have one more over here.  
24 Good morning, everyone. Raul Claros, Chief Strategist for  
25 Reimagine LA Foundation.

1 CHESTER BRITT: Thank you so much. All right. I want  
2 to just reiterate a few points. As we've been going  
3 through this process with you, we have created what we  
4 call the Living Library, which has all of the documents as  
5 we've progressed through the studies. So I have mentioned  
6 earlier that the process that we've gone through, we use a  
7 four-step process for each of the studies. We talked  
8 about scoping, technical approach, the preliminary  
9 findings, and the draft findings. We have posted, as of  
10 Friday, the final reports for all of the work studies, so  
11 you should have access to that link. As part of that  
12 submittal, or dropping of all that information, is also  
13 the consolidated report, which today's presentation  
14 highlights some of that, but I think the consolidated  
15 report is more robust, has more detail in it than what was  
16 presented here today. Today's presentations was an  
17 overview of that. So you should have access to all that.  
18 If, for some reason, any of your links are not working or  
19 you're not able to access any of those files, you can  
20 always reach out to either us or Arellano Associates, Lee  
21 Andrews Group, or SoCalGas, your normal people like  
22 myself, Alma or Frank and will make sure that you have  
23 access to those individual studies, okay?

24 So I want to thank you --

25 FRANK LOPEZ: Can I add one more thing, too, Chester?

1 For those of you that haven't reviewed the final studies,  
2 if you go in there, during our presentation today we did  
3 highlight some of the changes with the feedback that we  
4 gotten, how we incorporated that into the studies, but if  
5 you want the full list of feedback that we incorporated  
6 into the study, each study has a chart at the beginning  
7 that summarizes all of those edits. Sp if you're  
8 interested in that, you can go to each study and find out  
9 more information about the feedback that we incorporated.

10 CHESTER BRITT: Yeah, that's really important. Thank  
11 you for that.

12 Okay. I want to -- do now is the time for member  
13 discussion on the presentation, any of the information you  
14 heard today. I want to just reiterate that, again, this  
15 is our last opportunity to be together as part of phase  
16 one, so if you have any lingering questions about any of  
17 the 16 work studies, any thoughts on the final report, if  
18 you had a chance to look at the consolidated reports since  
19 Friday, please, you know, provide that input and let us  
20 know what you think. We also want to make sure that our  
21 comments today are focused on Angeles Link. We know  
22 there's others things going on with SoCalGas, but today's  
23 meeting is focused on Angeles Link. We have a lot of  
24 executive staff for SoCalGas here and regular staff as  
25 well, technical staff, they'll be available for our

1 breaks, during lunch, at our reception if you have other  
2 questions not Angeles Link related, they'd be happy to  
3 talk to you about those things at that time.

4           So, again, if you are in-person and would like to  
5 speak, just turn your placard up on its end so that I know  
6 you're interested speaking. If you are online and would  
7 like to speak, too, you'll need to raise your hand so I  
8 can see that, and then we'll call on you individually and  
9 you'll be to join the group and ask your question. So,  
10 again, I'm going to apologize for the glare a little bit,  
11 so let me get my glasses on so I can see. Hyepin, I think  
12 you raised your hand first, so you're going to get the  
13 first opportunity. So if you could pass the microphone.  
14 And, again, for all the speakers, please introduce your  
15 name, your organization so the court reporter has access  
16 to then when she's recording the comment. There it is  
17 right there.

18           ALMA MARQUEZ: Right behind you.

19           CHESTER BRITT: I'm not sure you're on. There you go.

20           HYEPIN IM: Good to have friends.

21           CHESTER BRITT: State your name again.

22           HYEPIN IM: Again, good morning. Hyepin Im with Faith  
23 and Community Empowerment. It was really encouraging that  
24 you are actually formulating iterating the feedback you  
25 received and the actions that you are taking. Very

1 appreciative of that process. I just want to perhaps ask  
2 a question. In terms of the release of the report, I know  
3 that in the past, one of the recommendations was to make  
4 sure that you had a list of ethnic media, and I am just  
5 wondered if, when you release the report, if the ethnic  
6 media -- there was intentionality of sharing that with,  
7 those I guess, outlets. Partly because, again, I believe  
8 that many of the ethnic media, they are the ones that help  
9 bring news to the community. I'm not sure -- just like  
10 with any groups that are underserved, you kind of need a  
11 meeting before the meeting, so I don't know how many may  
12 have even -- -if you did release it, I don't know how many  
13 showed up, how many covered it, but I would like to  
14 recommend that perhaps there may be some intentionality  
15 also in cultivating also the ethnic media as potential  
16 partners along the way.

17 FRANK LOPEZ: Yeah, it's a great suggestion. Frank  
18 Lopez, Director of Regional Public Affairs. So when we  
19 say release the report, what we mean by that is  
20 essentially that we've posted the studies on our website,  
21 and I think we're distributed to the Angeles Link  
22 preceding service list. So we haven't really distributed  
23 very widely at this point, and we haven't given much  
24 thought about how to promote the studies once final.  
25 We've been primarily focused on just fulfilling our

1 obligations with this first phase, completing the PAG and  
2 CBOSG process, and then filing the phase two application.  
3 I think once we that, we'll have a discussion about how to  
4 share the results or findings more broadly. We'll make  
5 sure to include ethnic media as part of that discussions.  
6 So thank you for that recommendation.

7 HYEPIIN IM: Thank you.

8 CHESTER BRITT: Thank you. Andrea Vega, I see your  
9 name placard up. If you could pass the microphone to  
10 Andrea, that would be great.

11 ANDREA VEGA: Hello. Andrea Vega on behalf of Food  
12 and Water Watch. The phase one and stakeholder process  
13 for the Angeles Link project is deeply flawed and has  
14 failed to meet the requirements outlined in the California  
15 Public Utilities Commissions decision document, SoCalGas's  
16 own application and the CPUC action plan. SoCalGas, has  
17 ignored key environmental and safety risk failing to  
18 implement hydrogen specific safety protocols as required.  
19 Public health impacts like NOx emissions have been  
20 inadequately assessed, putting vulnerable communities at  
21 risk. Water management concerns remain unresolved with no  
22 feasible plan for sourcing water for hydrogen production,  
23 violating the CPUC's requirements for comprehensive water  
24 analysis. The process has also violated equity and  
25 environmental justice principles delaying meaningful

1 engagement with EJ communities and perpetuating  
2 environmental injustices. Finally, the economic impacts  
3 and rate payer burden have been grossly underestimated  
4 with ratepayers funding projects that do not serve the  
5 public interest. Their public engagement has been  
6 superficial and disingenuous. SoCalGas has provided  
7 unreasonable short feedback, windows shared incomplete and  
8 inconsistent information and actively avoided discussing  
9 key issues like hydrogen blending, which directly  
10 contradicts their claim that the project focuses on  
11 hard -- to-electrify sectors. The voices of environmental  
12 justice communities and other critical stakeholders have  
13 been ignored, and the process has lacked the transparency  
14 and meaningful involvement that both the CPUC decision and  
15 SoCalGas' own application required. Because this process  
16 fails to meet regulatory standards and does not protect  
17 our communities, the organization -- my organization does  
18 not recognize this phase one process as legitimate. I  
19 also have in my hands a copy of a letter signed on behalf  
20 of Food and Water Watch, Protect Playa Now, Physicians for  
21 Social Responsibility Los Angeles and Communities for a  
22 Better Environment addressed to the Public Utilities  
23 Commission which outlines why our organizations are  
24 formally leaving this process. Therefore, Food and Water  
25 Watch is leaving the community based organization

1 stakeholder group and walking out of this meeting.

2 CHESTER BRITT: All right. Thank you for your  
3 comment. Marcia Hanscon, I think you're next. We're just  
4 waiting for the microphone for those of you online, and  
5 again, I don't see any hands raised online, so if you  
6 would like to speak, you'll need to raise your hand so I  
7 can acknowledge you. Pass the microphone to Marcia, she's  
8 next.

9 MARCIA HANSCON: Can you hear me?

10 CHESTER BRITT: We can hear you.

11 MARCIA HANSCON: Marcia Hanscon with the Ballona  
12 Wetlands Institute. Quick question, can we receive the  
13 summary slides that were here today because we didn't get  
14 anything in paper this time and usually we do. So --

15 FRANK LOPEZ: Absolutely. We always make the  
16 presentation materials available after the meeting as  
17 well. The court reporter --

18 MARCIA HANSCON: Thank you. I'm finally online so I  
19 could see some of them, but I see the first couple. But  
20 here's one of the things that's still troubling to me.  
21 When you got to the conclusions, as previously reported by  
22 your executives and also by some of the experts we've hear  
23 from, they're based on the possibility, but no evidence  
24 yet that hydrogen use eventually might to get to 100%  
25 hydrogen. Right now, however, and I think, Yuri, you said

1 for the foreseeable future, we don't know, it's kind of a  
2 question the use of hydrogen for powering electricity  
3 plants, and like the hydrogen house we saw in Downey,  
4 still requires 75% fossil gas, or methane, and being mixed  
5 with 30% hydrogen. And, you know, I've just seen numerous  
6 things over the last year or two about how all the  
7 scientists are saying that methane is such a bigger  
8 contributor to climate change impacts than we ever knew  
9 before, and so, you know, I keep hearing from the younger  
10 generations constantly in my ears "We are in a climate  
11 emergency." And Dr. Mark Jacobson from -- I keep seeing  
12 his things on Twitter and elsewhere about how every day --  
13 he's from Stanford, I'm sure you know, and he keeps  
14 reporting how every day we're getting more and more  
15 genuine renewable energy from the sources we know are  
16 working in California and constantly expanding the amount  
17 of energy that is replacing -- renewable energy that's  
18 replacing fossil fuel use. An our fossil gas, the methane  
19 that SoCalGas has given us for so many decades, it is a  
20 fossil fuel and it is contributing to climate change. So,  
21 I guess, with all due respect to all the nice people here  
22 who I've have met and appreciate all the amazing amount of  
23 work you have done, how can these conclusions be, as have  
24 said, the conclusions seem to mean you're based on 100%  
25 hydrogen and that is not possible. So --

1           YURI FREEDMAN: Thank you, Marcia. Excellent  
2 question. As many others we have engaged on in these two  
3 years, I appreciate you bringing this up. So here's a  
4 couple facts to put the hydrogen into context. As I think  
5 most of you know, Los Angeles Department of Water and  
6 Power is on the path to start operations of the plant in  
7 Utah, intermountain power plant, next year. That plant,  
8 as you correctly said, is going to - - around the plant;  
9 however, by 2035, that plant is going to run pure 100%  
10 hydrogen. The Los Angeles Department of Water and Power  
11 is taking next steps with their, what they call, invasive  
12 plans beginning from Scattergood Power Plant which they  
13 are also going to transition to full 100% hydrogen  
14 combustion in 2035. Hydrogen combustion, pure hydrogen  
15 combustion, has been in dozens of plants. It's not  
16 technologically new and the equipment manufacturers stand  
17 behind their commitments to keep emissions of nitric oxide  
18 an acceptable level.

19           Now here's one more fact, and that's just hot off  
20 the press last week, as you may have seen, California  
21 energy commission just last week approved one \$1.4 billion  
22 funding for 0 emissions building which reportedly  
23 concludes development of electric vehicles charging for  
24 the battery vehicles, but also building hydrogen fueling  
25 stations for -- especially for medium and heavy-duty

1 hydrogen fuel cell vehicles. This is, to be clear, 100%  
2 hydrogen. Electric fuel cell mobility runs on pure  
3 hydrogen today. It continue to do so tomorrow. So 300%  
4 hydrogen is a reality that comes in California at actually  
5 a rather rapid clip.

6 MARCIA HANSCON: To just to clarify, it works for  
7 automobiles and heavy trucks, but we still, from what I  
8 heard from the experts you have at ARCHES at UC Irvine and  
9 some of the other universities, they still don't know  
10 when, I mean I know you have a 2035 goal, but we don't  
11 know if we can get to that for the electricity plants.  
12 And I have to say, I believed Eric Garcetti, LA's mayor,  
13 when he said this was the end of natural gas in Los  
14 Angeles and you were going to phase out all those, you  
15 know, the gas and start using genuine renewables. And I  
16 you guys see this as a genuine renewable, but I don't see  
17 it when we're still using 70% methane. So I know you have  
18 a goal of that, but the experts seem to not be sure of  
19 that. So that's what troubles me.

20 YURI FREEDMAN: I appreciate the comment. And there  
21 are multiple scientists and technologies that the  
22 combustion of hydrogen is a reality today, scaling it up  
23 is what we are trying to enable. So I will turn the  
24 question a little bit around and say what we do know today  
25 is that we absolutely do need molecules to supplement

1 intermittent renewables. We know today that clean  
2 renewable hydrogen is the preeminent molecule to enable us  
3 to do that, and we know that the state of California is  
4 actually advancing adoption of clean hydrogen with  
5 multiple finding steps as does the federal government. We  
6 are doing our part connecting this supply of hydrogen  
7 which is coming with demand in power plants and refueling  
8 stations and other assets, but technical viability is not  
9 a question, which I think has been demonstrated amply,  
10 frankly worldwide. Again, we can take this conversation  
11 further offline. I'm happy to continue that.

12 CHESTER BRITT: Thank you, Martia. Joon, we're going  
13 to go to you next, and then we're going to go over to Roy  
14 online, and then we'll -- I know, we have some others that  
15 were here, but I think I was working my way around, going  
16 to go back online, and then I'm going to come over to this  
17 side. Go ahead, Joon.

18 JOON HUN SEONG: Hi, Joon Seong with Environmental  
19 Defense Fund. First of all, thank you so much for hosting  
20 this final round of discussions, and thank you so much for  
21 the summary presentations. I might be jumping the gun a  
22 little bit now because I know we're to talk about phase  
23 two process after lunch, but I think I heard the  
24 figure 1.5 millimetric tons. Is that a figure SoCalGas is  
25 going to move forward with with the expected throughput

1 for Angeles Link for the next steps of the process?

2 FRANK LOPEZ: Do you want to explain the range of  
3 throughput?

4 YURI FREEDMAN: I would refer it to the previous  
5 numbers. I know you've seen those, so the range we  
6 indicated in our view is the reasonable range of the  
7 project as been noted today. Based on the demand that we  
8 know today, the purpose of phase two, among other topics,  
9 is to understand this better because ultimately we're  
10 going to design the project with a certain throughput  
11 which has several dimensions to it, some are technical,  
12 some are market dimensions, and is important to  
13 understand. Our intent in exploring this up to date was  
14 to establish whether there's a technical visibility from  
15 various market and technical aspects, if that make sense.

16 CHESTER BRITT: Yuri, when we've said 1.5 to 1.5  
17 throughput in the pipeline -- 0.5 to 1.5 I mean, is 1.5  
18 considered the cap of what the pipeline is capable of  
19 delivering?

20 YURI FREEDMAN: It is not a cap. It is something  
21 which in our assessment based on what we know about other  
22 markets, if you look at the total addressable size of the  
23 markets, you can never expect that to be covered by one  
24 asset one pipeline, whether that's oil, gas, multiple  
25 assets that it takes. So we believe based on what we know

1 about other markets that that relationship between the  
2 market side, which at the upper end is about 6 million  
3 tons per year within the large pipeline given how much of  
4 this demand is concentrated to the Los Angeles area, we  
5 believe that 1.5 is a reasonable upper end, but it's not a  
6 technical cap that cannot be surpassed.

7 CHESTER BRITT: Okay. Great. We're going to go now  
8 to Roy online. Roy, if you can unmute yourself, we'll do  
9 the same, and you should be able to introduce yourself.

10 ROBERT ROY VAN DE HOEK: Hello, my name is Roy, Robert  
11 Van De Hoek and I'm with Defend Ballona Wetlands. Can you  
12 hear me okay? I'm keeping my Zoom -- my video off in  
13 order to hopefully make the audio better.

14 CHESTER BRITT: We can hear you perfectly.

15 ROBERT ROY VAN DE HOEK: Okay. Great. So thank you  
16 for the summaries. Happy holidays, again. I see festive  
17 lights of Christmas there behind you and around and it  
18 looks good. I wanted to ask a kind of a question about  
19 evaluating, now I'm not saying I'm a friend of diesel fuel  
20 or gasoline engines and that, but before we were using  
21 methane gas and now maybe hydrogen gas as generating --for  
22 generating, making electricity through generators that  
23 make electricity. I know Edison in the old days we say,  
24 we could call it old diesel and gasoline motors to run --  
25 to generate -- run the generators to make the electricity

1 for Edison, and now as I understand it methane is used to  
2 make the electricity for generators with Edison. And the  
3 maybe green hydrogen is the next place to go. Diesel has  
4 now been made a lot cleaner so has some particulates, I  
5 guess, but were comparisons made? I know it's the  
6 competition from methane and green hydrogen if we were to  
7 go back to diesel or gasoline for running generators to  
8 make electricity, and then by the way Chevron used diesel  
9 motors and that too. Anyway, focused on Edison in  
10 particular is one of my particular thoughts. And then  
11 secondly -- can you hear me?

12 CHESTER BRITT: Yeah. We heard your question, Roy,  
13 but Yuri was starting answer it. Were you able to hear  
14 him?

15 ROBERT ROY VAN DE HOEK: Yes, I was. I had one  
16 secondary for the one speaker who spoke on the pipeline  
17 route. Should I say that at same time, or do that  
18 afterwards?

19 CHESTER BRITT: It's up to you.

20 ROBERT ROY VAN DE HOEK: Okay. Well, I'm curious  
21 about an explanation again about why they are running down  
22 the freeway pathways. Not that I'm opposed to that, but  
23 what is the -- were there economic reasons, health  
24 reasons, safety reasons to run it down the freeways and  
25 which freeway routes to use through the San Fernando

1 Valley whether it's the 405 freeway, the Interstate 5  
2 freeway, it looks like maybe even the 210 Freeway has been  
3 considered as the routes to bring the gas into the Urban  
4 LA region. And there's a little zigzag in the line.  
5 There's Santa Clarita as it's coming down the highway 14  
6 from the Mohave Desert. I was curious about why it does a  
7 little zigzag as it comes close to Interstate 5. Thank  
8 you.

9 YURI FREEDMAN: Thank you, Ray. Let me touch up on  
10 your first question. And, again, to the extent that I  
11 don't cover it fully, I'm happy to connect offline to  
12 continue the conversation because that's a deep and  
13 complex topic. But maybe in a nutshell, if we step back  
14 and ask ourselves how we are producing power generation,  
15 obviously coal is in the past. Liquid fuels were used at  
16 some point to make electric power. It largely moved from  
17 liquid to gaseous fuels except on occasions where it's  
18 physically impossible, for example Hawaii, but by large  
19 gasses have been found more effective and efficient way to  
20 make electric power and power plants. And that's why, of  
21 course, the large -- the capacity in California of the  
22 fossil fuel generation today is almost entirely based on  
23 natural gas -- and that's what Angeles Link aims to  
24 replace with clean renewable hydrogen. So, that's part of  
25 the answer. Maybe not a part as that clean fuels don't

1 really compete with each other as much as they complement  
2 each other because each of them uniquely feeds some, what  
3 we call, NU Sectors. For example, if we talk about some  
4 sectors such as aviation or others, oftentimes people talk  
5 about sustainable aviation fuels which renewable diesel  
6 will be a logical precursor. There are some sectors that  
7 call for little fuels and they use them as aviation today.  
8 And there are other sectors which historically have  
9 largely converted to gaseous fuels and that's what power  
10 generation where ultimately it's gas today, but is  
11 hydrogen tomorrow. I'm hoping that that high level answer  
12 makes sense. Again, happy to continue the conversation.

13 CHESTER BRITT: Amy, did you want to add anything?

14 AMY KITSEN: Yeah. So I'll -- thank you, Yuri. I'll  
15 touch on your question on routing, Roy. A bit of a  
16 reminder with the report because kind of where we are in  
17 phase one versus where we're going to be in phase two is  
18 in phase one we looked at a wide range of initial  
19 corridors that were identified. It was in that map of  
20 over 1300 miles, and then in phase two we're going to  
21 further refine that into, when you were talking about how  
22 the rout was jetting over at certain positions, that and a  
23 more detailed granular analysis will be done in phase two.  
24 The corridors as they are today leverage potential  
25 opportunities for routing that include energy corridors on

1 federal lands, federal interstate corridors, alternative  
2 fueling corridors in industrial areas with high demand to  
3 minimize the impacts to the community and the environment.  
4 Adding to your point about why we chose the ones we did  
5 coming into the LA Basin is coming into the LA Basin is  
6 constrained by geology including several mountain ranges,  
7 Sierra Madre Mountains, San Gabriel Mountains and Santa  
8 Rosa Mountains. Additionally, there are multiple national  
9 forest that surround the LA Basin. Given these features,  
10 there's a limitation of potential pathways to enter the  
11 basin and lands that surround it.

12 CHESTER BRITT: So safe to say there's a lot of work  
13 to do in phase two still to get to those detailed  
14 questions. All right. We're going to come back in the  
15 room --

16 7:

17 ROBERT ROY VAN DE HOEK: Thank you. I just wanted to  
18 say thank you for both of them answering the questions and  
19 didn't hear the bigger picture point of view liquid fuels,  
20 I'll say it because Freedman used the term "liquid fuels,"  
21 but I'm referring to natural gas I know was getting used  
22 or methane gas was being used because it was considered  
23 cleaner, but is methane gas still cleaner, or some data  
24 on now that green diesel is out there and all the other  
25 suggestions, I'm still interested to hear more about that

1 at some point. Thank you.

2 YURI FREEDMAN: I'll say in two words, again, I think  
3 the scalability of hydrogen is what drives the interest of  
4 power generators in that particular fuel. Again, at some  
5 point Los Angeles Department of Water and Power as they  
6 keep releasing the materials that they've developed in the  
7 course of their analysis, they've looked at all the  
8 options. They left no stone unturned, and so they ended  
9 up with hydrogen because they thought more feasible, more  
10 cost efficient, more particularly appropriate option.  
11 But, again, that's something we can talk significantly  
12 more given the complexity of the issue, Roy.

13 CHESTER BRITT: All right. Thank you, Yuri. Raul,  
14 we're going to go over to you. If you can introduce  
15 yourself.

16 RAUL CLAROS: Raul Claros, Reimagine LA Foundation.  
17 As we're here in the holiday season, we're here at the end  
18 of the year, and we're reflecting, and I can't help but  
19 reflect on where we're at. When I was driving up here I  
20 was excited because we're wrapping up a lot of hard work.  
21 A lot of work that SoCalGas brought us all to the table,  
22 and I've said it before and I'll say it again, they didn't  
23 have to. These are tables that black, brown, indigenous  
24 folks where I grew up in South Central, Pico Union, West  
25 Lake, McArthur Park usually don't get invited to. So

1 first of all, thank you SoCalGas for your leadership.  
2 Thank you for, and to everyone that hung in, came to these  
3 meetings whether it was virtually sometimes, sometimes you  
4 didn't, but you're still here, right. And the fact that  
5 we made it this far is historical, and where we're going  
6 is what I was really excited to, and I'm still excited, to  
7 look forward to.

8 But I got to point out the pink elephant in the  
9 room. And I know the pink elephant just left, but this  
10 type of stunt is why we don't get invited to these types  
11 of tables. And then even when we do, a lot of people  
12 don't come back. So I'm glad this happened. I wish it  
13 would have happened sooner, because the overtaking of  
14 meetings that we had to put up with, and then at the end,  
15 for a tantrum, a tantrum to happen. Well, vaya con dios.  
16 God bless you. Keep it pushing. But I want to make sure  
17 that the focus here comes back to what we were brought  
18 here to do was problem solvers, solution based, have  
19 healthy debate, to be educated, each one teach one, and a  
20 whole lot of thing things that I put SoCalGas through,  
21 personally, through the ringer, you guys answered the  
22 bell. And I got to give you guys my hat, right, and we  
23 represent communities of color and historically  
24 disenfranchised areas, so those folks that just said that  
25 they and their people got up and left, is a very small

1 minority into who the people that the company of SoCalGas  
2 represents. So I just wanted to make sure -- hello? I  
3 just want to make sure that this thing is working, this  
4 thing is on the record, and that once again, we are here  
5 talking about the facts. The fact of the matter is we're  
6 not going to get it perfectly straight. But we're going  
7 to make progress and I think that's where we're at. And  
8 I'm looking forward to getting into phase two. I thank  
9 everyone that's put in the work to get us this far. Thank  
10 you.

11 CHESTER BRITT: Thank you for that comment, Raul.  
12 I'll just say as the facilitator that I've appreciated, we  
13 created some guiding principles at the very beginning of  
14 decorum and how we're going to treat each other, and i  
15 would say that the last two years these meetings have been  
16 very protective, we have had robust conversations, there  
17 have been challenges to some of the data, and that was the  
18 purpose of these meeting. I think Yuri and others who  
19 have presented have done a great job of listening to your  
20 comments, trying to answer questions. It's not always a  
21 perfect relationship of how that pressure comes together,  
22 but these meetings have been very protective. So I thank  
23 you for echoing that, and I would just acknowledge as a  
24 facilitator I feel like you guys, for the most part, have  
25 done your part to play that role and be respectful of

1 other people. So thank you for that.

2 Tim, we're going to go to you next. If you could  
3 grab the microphone and introduce yourself.

4 TIM KAMERMAYER: Thank you, Chester. You're doing a  
5 great job, by the way. Good morning, everyone. Tim  
6 Kamermayer, Director of Policy and Regulatory Affairs of  
7 Green Hydrogen Coalition. Little new to this, but GHC is  
8 not new to these discussions. While this is my first  
9 time, I know that Janice and GHC have been prominently  
10 trying to be a part of this and engaging in a way that I  
11 just want to express utter appreciation and gratitude I  
12 know that SoCalGas and leadership has really taken a lot  
13 of time to not only incorporate the feedback and guidance  
14 and really hear it out, but bring it into the actual  
15 documents. As the final summaries note, it's clear that  
16 you all have taken a thoughtful approach to listening to  
17 the feedback provided by this group and ensuring that it  
18 actually gets brought up, too.

19 With that, I also want to take a moment to thank  
20 Maryam for taking the time to be here in person. It is  
21 one thing to listen to it, to read a summary of it, to  
22 gain a recap and have meetings afterwards, it's another to  
23 be here for these direct real engaging communication, and  
24 I think it demonstrates how interested you are in not only  
25 getting this Angeles Link launched and really successful,

1 but doing it in a way that the community understands.  
2 It's not just for the benefit of a gas company, it's for  
3 the benefit of all the residence of Southern California.  
4 With that, the GHC, as you know, believes in clean  
5 renewable hydrogen delivered by the Angeles Link can  
6 provide a critical and cost-effective mechanism of both  
7 reliability and resilience for rate pairs across Southern  
8 California, particularly in long duration as noted and in  
9 ways of enabling repurposing of existing power line  
10 infrastructure. As the public advisory group continues  
11 into phase two, GHC would as that the taxpayer and  
12 environmental benefits that come from converting biomass  
13 to clean renewable hydrogen also be included. Obviously,  
14 this is a discussion we've asked a couple of times, and I  
15 know it's a little bit more ancillary benefit that may not  
16 seem as direct, but when you're talking about being able  
17 to address the fact that Los Angeles spends over \$700  
18 million per year processing solid waste for landfills this  
19 is an opportunity to use that pipeline to not just create  
20 real economic benefits as the studies have notes, but also  
21 address climate change in these indirect ways. Reducing  
22 landfills and being able to take some of that waste that  
23 is just sitting there and turn it into biogas is a really  
24 unique opportunity that I think the Angeles Link pipeline  
25 has a chance to cement. So GHC just thanks you for the

1 opportunity to be a part of this and looking forward to  
2 the discussions throughout phase two.

3 CHESTER BRITT: Thank you for that, Tim. You just  
4 pass the microphone, we're going to go all the way around.

5 HYPEPIN IM: Again, Hyepin Im with Faith and Community  
6 Empowerment. So, I do appreciate Raul's comments. Good  
7 to see you. I want to acknowledge, as Raul said, SoCalGas  
8 doesn't have to. Community groups can be upset, but you  
9 don't have to. So, again, thank you for setting the  
10 table. As just a third-party and nonprofit whose core  
11 focus is not in this space, this is a lot of information,  
12 and so I'm kind of sad that left actually the table.  
13 Because I think whatever points that they raised, I would  
14 hope that we could all work together on it. So they did  
15 raise questions, and the one thing that I do remember  
16 about contamination of water. And, again, I don't know  
17 those questions are valid or invalid or inconsequential, I  
18 just don't know, but because they did raise the question,  
19 is there some kind of a way that you might be able to  
20 address it? At least for now on this one, the  
21 contamination of water, is that something that you could  
22 at least respond to at this moment? Whatever the other  
23 points, I don't know.

24 RAUL CLAROS: Can I interject real quick? So, I been,  
25 respectfully what I would say we should try to avoid

1 because we had to put up with that, what is it, two years?  
2 It was just the same questions, the same points, you know,  
3 those of us that attended multiple meetings we had to let  
4 that happen and all that. So, they chose their method, we  
5 got to respect it, I just really want to encourage this  
6 group to move forward.

7 FRANK LOPEZ: I'll just say, I don't recall  
8 specifically the question that they had. I'll reach out  
9 to Andrea and see if she's willing to provide us with a  
10 copy of the letter and we'll review her statements and her  
11 questions, and happy to discuss with her. I just don't  
12 recall specifically what she asked about.

13 RAUL CLAROS: I mean, she made comments about  
14 contamination of water is one thing that I did recall.  
15 She made out a few points. Again, I'm not the expert, so  
16 maybe these questions are irrelevant or inconsequential, I  
17 just don't know. And that's why I'm asking.

18 YURI FREEDMAN: I think it's an important question. I  
19 think water is obviously in California. I think it's an  
20 important question. I think the big finding among others  
21 we have established in phase one is that the water needs  
22 to address demand for clean renewable hydrogen is between  
23 0.02 and 0.1% of total water use in California. Just to  
24 put in the context what the needs are today as what we use  
25 as a state. Now, that does not mean we should waste that

1 water. What it doesn't mean is that first, the amount of  
2 water that we need for the project is relatively small  
3 compared to overall grand scheme of things; and second,  
4 what it means is that that water purification is something  
5 which California has been doing for a long time. Of  
6 course the source is going to be protected and purified  
7 and used, and fortunately, water is such a small component  
8 of the cost of delivered hydrogen that if we find water  
9 and increasing its cost to a factor of zero actually it's  
10 not going to make it much more expensive. So we have  
11 looked at that and analyzed it, but again, the report is  
12 out there, and we would be been happy to continue  
13 engagement.

14 CHESTER BRITT: All right. Rashad, you're up.

15 RASHAD RUCKER-TRAPP: I just want to echo what my  
16 friend, Raul, said about this process and engagement. I,  
17 too, thank you guys, thank SoCalGas for setting this type  
18 of engagement in this process. It does not happen, it  
19 should happen more often, and I hope that going forward,  
20 this becomes an ongoing process where more and more and  
21 more community engagement continues to happen. And not  
22 only this project as we go into phase two, but into other  
23 projects to come. There are going to be much more  
24 innovative projects that I know the great people at  
25 SoCalGas are going to come up with, and we'll be going

1 through this process again. And I think that this was a  
2 good opportunity, not only to engage, but to also learn.  
3 I mean, this has been definitely a learning experience for  
4 me, personally. A lot of material that I'm still going  
5 through and still learning, and I'm excited to know what  
6 the future is going to look like for us as we talk about  
7 environmental changes and the concerns of an environment.  
8 We're not going to say that these things are always  
9 perfect. Innovation is never perfect, but they are going  
10 to happen, and the fact that we are engaged and involved  
11 is a huge win, not only for us around this table, but for  
12 the community as well. And so, again, I echo my friend's  
13 words in saying thank you to you guys. Disappointed that  
14 opposition did leave because we can always learn from them  
15 too, that is not always the best practice because, again,  
16 in order for innovation to work, we all have to engage  
17 with each other no matter how much we disagree, how much  
18 we may have a difference of opinion, whatever. We all  
19 should remain at the table, regardless. I even thank --  
20 thank you guys because I know there is reservations about  
21 the project around the table, different concerns, but the  
22 fact that you're still sitting here and still engaging is  
23 a plus and a win for all of us. So thank you guys again.  
24 Thank you to all of my colleagues here at the table.

25 CHESTER BRITT: Thank you. If you could pass the

1 microphone to Enrique. And before you start, Enrique, I  
2 just want to do a time check. We're a little bit behind  
3 schedule now. We want to get to lunch, but we do want to  
4 take the questions of people who have not spoken, and then  
5 Tyson, you've raised your hand online so we're going to  
6 get to you as well. So we'll do that, and we'll break for  
7 lunch. Actually we have one more presentation then we'll  
8 break for lunch. Again, we're going to be here all day,  
9 we'll have the reception as well. The staff can answer  
10 your questions if we don't get to all of them during the  
11 actual member discussion.

12 ENRIQUE ARANDA: Thank you, Chester. I just want to  
13 echo the sentiments of my colleagues to my right, and I  
14 think one of the biggest takeaways from the last two years  
15 is that we didn't come here as friends. A lot of us came  
16 here with very opposed -- first of all, being very  
17 critical of any regulatory agency of any project of this  
18 magnitude, and of any public engagement mechanism because  
19 we were sceptical of how it's gone wrong in the past. I  
20 remember saying two years ago how we didn't want another  
21 scoping session where we have people color just agreeing  
22 with the agency and being brought in last minute. So with  
23 that challenge, and with Frank, I remember giving Frank  
24 and so many of you such a hard time, but we've gotten to a  
25 point where we -- one of the takeaways that is tangible is

1 that we have a public engagement mechanism that is robust;  
2 that has been inclusive, like it has been pointed out; and  
3 is really reflective of even where we are today. I grew  
4 up two blocks away from here, and I grew up in the middle  
5 of the crack pandemic. I grew up in Lynwood. Lynwood  
6 today we still have -- one of the biggest issues, of  
7 course, is still crime. I happen to work with Soledad  
8 Enrichment Action, one of the largest gang intervention  
9 agencies, and we are here as advocates for the environment  
10 because we also know that along with the lead and bullets,  
11 comes the lead in the air, stationary and mobile sources  
12 of pollution, that we know too well. We know why our  
13 children have asthma in my family. We know the 710  
14 freeway in proximity of that. And that's why we are here  
15 today. So without preaching to the choir, it is important  
16 to point out where we are today and how we walk away today  
17 not a stranger, but as a coalition. We're not -- I  
18 remember somebody calling me a yes-man in one of the  
19 sessions I attended when I had COVID, and couldn't believe  
20 that because I've been critical of every institution. And  
21 we became activists out of self-preservation and that's  
22 why we've gotten into the work we do, and I look around  
23 the room and I see so many, from my brother here on the  
24 red road to Dr. Cid with MAOF, varying sizes of  
25 organizations that are advocates to improve the quality of

1 life for all California. So, I think if anything it  
2 around this festive time of Christmas and the holidays  
3 it's important to celebrate and be festive of walk away  
4 with today, it's really the culmination of such hard work.  
5 But also creating, again, public mechanism that can be an  
6 example for other public works projects. And we talked  
7 about the corridor where it failed, we talked about Prop  
8 EB and so many other labor projects that have gone wrong.  
9 But we are not there. So brother Raul, brother Rashad, I  
10 agree with you. I'll pass on the mic because it's very  
11 important to just recognize the staff and recognize the  
12 staff of SoCalGas being at a point where even though you  
13 have other staff, Andy, you brought in the experts. You  
14 brought in two public engagement firms that just wonders  
15 and really set an example for other public works projects  
16 going forward.

17 So thank you.

18 CHESTER BRITT: Thank you. Cid, you're up.

19 CIRIACO PINEDO: Thank you. Again, I'll echo what  
20 you've already heard, and thank you for leading those  
21 comments in the manner in which you did.

22 CHESTER BRITT: Cid, I'm sorry, could you say --

23 CIRIACO PINEDO: I'm sorry. Ciriaco Pinedo,  
24 Presidency of the Mexican American Opportunity Foundation.  
25 Thank you for the reminder. I think it's also important

1 to highlight that, and it was just said, we come into this  
2 with intention to cooperate, intent to cooperate. We know  
3 that whenever you engage in a large-scale project like  
4 this, there's going to be opposing views and comments, and  
5 that's okay. We welcome them. We can learn from them,  
6 but I also want to say that outside of these meetings, you  
7 have also been open and receptive comments and to  
8 feedback, and I've had them. I've shared them with Frank  
9 and Andy and whoever, and that for me also demonstrates  
10 your commitment of engaging the community. My concerns  
11 have always been the environmental impact, the routing and  
12 the cost. Those are the top three and extremely important  
13 because without fail, when things like this happen, and  
14 the community isn't engaged, it's underresourced  
15 communities that take on the brunt of the impact of these  
16 types of things. So we will hold you up accountable, we  
17 will remind you of what was said and what we talked about,  
18 and the fact that we can have and be engaged in a  
19 conversation like that I think is a testament to your  
20 commitment to truly be community engaged. And so, thank  
21 you, again, to everyone at the table that chose to  
22 participate, that chose to be engaged, even when we  
23 perhaps didn't want to or we had to bring up these  
24 difficult topics, you create a safe environment which  
25 allowed us to be brave then in our comments. And so,

1 please, please continue to do that, and continue to engage  
2 us so we have an opportunity to be open, honest and  
3 participate in a process that will ultimately impact our  
4 lives, our health and our wallets. So thank you.

5 CHESTER BRITT: Thank you, Cid. Ricardo, we're going  
6 to go to you next, and then go online.

7 RICARDO MENDOZA: Hey, everyone. Ricardo Mendoza  
8 again, with CRCD, Coalition for Responsible Community  
9 Development. I want to echo what's already been said. I  
10 want to reemphasize a few more things. One is any time  
11 we're going to have a shift or change in any type of  
12 energy, there's going to be concerns, and there's going to  
13 be issues. It speaks back to the issue of innovation,  
14 right? And it's a matter of being heard as a community.  
15 I want to commend SoCalGas and the entire team because you  
16 brought a broad spectrum of nonprofits that serve the  
17 region throughout. Voices that have concerns and issues  
18 on multiple fronts and you've done the best you can to  
19 adjust them so far, and we are pleased to have as many  
20 people here at the table as we do today.

21 I think on our end, we echo all the other  
22 comments. The only sentiment I haven't heard so far is  
23 projects will get built irregardless. We see that  
24 throughout the state, throughout the County. This process  
25 has been different because it's really incorporated public

1 comment through these convenings, and you also look at  
2 what does the workforce look like. And for us as an  
3 organization that's focused on workforce, that's been a  
4 critical issue and you've elevated that continuously. So  
5 we look forward to having that conversation. We're ending  
6 the year off with a great, I think, conclusion and paving  
7 a path for how we can continue this conversation moving.  
8 So thank you.

9 CHESTER BRITT: All right. Thank you. Tyson Siegele,  
10 we're going to go over to you next. If you could unmute  
11 yourself, we're going to unmute you as well. Tyson? It  
12 looks like you're turning your video on, thank you for  
13 that.

14 TYSON SIEGELE: Yes. Sorry, it was taking me a second  
15 to get everything unmuted and working. So my name is  
16 Tyson Siegele. As Chester mentioned in the beginning, I  
17 work for Clean Energy Strategies and in this particular  
18 form, I am speaking on behalf of The Utility Consumers  
19 Action Network. There were a couple things that have been  
20 said so far that I wanted to just provide the input from  
21 the Utility Consumers Action Network on -- UCAN for short.  
22 One of the things is a few people mentioned that SoCalGas  
23 did not have to do this process, did not have to bring us  
24 all to the table, and that's not true. SoCalGas was  
25 ordered by the Public Utilities Commission to convene

1 these meetings. And so I'd like to express my  
2 appreciation for the commission for its requirement that  
3 SoCalGas do this. Like folks have mentioned, this process  
4 has led to some interesting conversations, and it has  
5 allowed us to share our thoughts with SoCalGas. It's also  
6 been a little bit disappointing for UCAN. One of the  
7 things that was disappointing was the bifurcation of the  
8 Planning Advisory Group with a community -- from the  
9 community groups. And so when we have been providing our  
10 feedback, one of the things that would have been great is  
11 if all of the groups were able to meet together to be able  
12 to hear input from each other so that more technical  
13 organizations like UCAN would be able to hear the feedback  
14 provided by the communities and vice versa. The other  
15 couple of things that I want to mention before I get into  
16 my general thoughts on the process, one of the things that  
17 I am really concerned about is the comparisons that  
18 SoCalGas has been making between the baseline and where  
19 we're going from here. So SoCalGas has typically used as  
20 a baseline to make their hydrogen project look better than  
21 what it does is the current industry options that we have,  
22 diesel, methane etc. And then comparing the, for instance,  
23 the reductions NOx emissions based on using hydrogen  
24 instead of using methane. UCAN doesn't believe that that  
25 is an accurate depiction of the way that we can move

1 forward as a state, as the State of California. For  
2 instance, solar and wind do not emit NOx, hydrogen does  
3 when hydrogen is burned in order to produce electricity.  
4 Diesel is currently used in many medium and heavy-duty  
5 trucks in order to move things around the state. Some  
6 thing that we absolutely need, we have to have  
7 transportation. We can do that in a cleaner way with  
8 battery electric vehicles than we can with hydrogen  
9 vehicles. Hydrogen uses substantially more energy than  
10 producing electricity from battery and -- producing  
11 electricity from solar and wind, and then using that  
12 through battery electric vehicles. So, just from a  
13 high-level perspective, I don't want to get into the  
14 details that we and other stakeholders have provided in  
15 feedback to SoCalGas, but those are some very high-level  
16 considerations that SoCal -- that UCAN was disappointed  
17 that were not better included in the overall process. So,  
18 in terms of Planning Advisory Group process --

19 CHESTER BRITT: Tyson. I'm sorry. Frank was going to  
20 address one of your comments. I just want to make sure --  
21 I wasn't sure of any other questions or thoughts you might  
22 have.

23 TYSON SIEGELE: Frank can go ahead and answer.

24 FRANK LOPEZ: Go ahead Tyson. Sorry to interrupt you,  
25 go ahead.

1 TYSON SIEGELE: No problem. So in terms of the  
2 Planning Advisory Group process, like I said, it has led  
3 to some interesting conversations. I appreciate that  
4 about the process. However, UCAN's high-level thoughts on  
5 the PAG process can be summarized as disappointment.  
6 Disappointment that SoCalGas has refused to use accurate  
7 inputs and reasonable assumptions for its calculations and  
8 forecasts. Disappointment in the minimal updates and  
9 revisions to SoCalGas' phase one reports after receiving  
10 UCAN's feedback and other PAG member's feedback.  
11 Disappointment with SoCalGas withholding data or papers  
12 and other important inputs that SoCalGas used as the basis  
13 for its phase one reports. For example SoCalGas -- I'm  
14 sorry, UCAN has asked for and has not received all of  
15 spreadsheets and work papers used for the phase one  
16 studies, and has not received computer modeling used for  
17 the studies, has not received SoCalGas' contracts with the  
18 Angeles Link's consultants that it has used, has not  
19 received recordings used as input for the studies. Now,  
20 UCAN was told that those recording don't existed, yet  
21 SoCalGas still claims those interviews as a basis for some  
22 of the conclusions that it makes in its final -- final  
23 report. Disappointment that SoCalGas has refused to  
24 commit to delivering clean hydrogen produced in a process  
25 adhering to the three pillars of clean hydrogen, which is

1 hydrogen that is produced using renewable electricity  
2 generation facilities that are close to the electrolyzer,  
3 and with renewable energy matched hourly. Those are the  
4 three pillars. The date on this is clear, without using  
5 the three pillars of hydrogen production, hydrogen will  
6 not be as clean as it could be. Numerous companies that  
7 are producing hydrogen and/or plan to produce hydrogen  
8 support the three pillars. UCAN find SoCalGas' continued  
9 opposition to three pillars extremely disappointing.  
10 Disappointment that SoCalGas gave PAG meeting that were --  
11 sorry, scheduled PAG meetings that were suboptimal in  
12 terms of the amount of time between the release of the  
13 reports, draft reports, materials and when then the  
14 meeting is held. For example, today's meeting. Today we  
15 are meeting one business day after the release of the  
16 final reports. That's not enough time for us to review  
17 these reports in order to provide meaningful feedback to  
18 SoCalGas during these discussions. So because of these  
19 issues with the PAG process, UCAN anticipates that its  
20 review of the phase one application will take more time  
21 than if UCAN had been able to receive the data and work  
22 papers and if SoCalGas had responded to the feedback that  
23 UCAN has provided through the process. Having said that,  
24 we look forward to continued participation in the overall  
25 process, and we will continue to review SoCalGas' filings

1 within phase two. Thank you.

2 CHESTER BRITT: Thank you, Tyson. Frank, did you want  
3 to --

4 FRANK LOPEZ: Yes. But you know what -- first of all,  
5 thank you, Tyson. That was all valuable feedback. I'm  
6 going to be talking about the PAG and CBOSG process next,  
7 so I'll -- I'll just --

8 CHESTER BRITT: Include that in your remark. Okay.  
9 We're going to go to Katrina Fritz. You have your hand  
10 raised. If you could unmute yourself.

11 KATRINA FRITZ: Hi, everyone. I'd like to thank the  
12 SoCalGas team for including such a broad group of  
13 stakeholders in the community and project advisory teams.  
14 I would also say that as the largest hydrogen trade  
15 association in the country, we represent and include over  
16 110 hydrogen stakeholders across industry as well as  
17 public agencies, community groups and tribal  
18 organizations. I also learned a great deal throughout the  
19 process and hope to be included in the phase two advisory  
20 process. The phase one analysis has established that  
21 there's tremendous long-term community benefits that can  
22 be released by Angeles Link, and the studies also  
23 demonstrate that there is a requirement to decarbonize the  
24 gas system alongside electrification, and that hydrogen is  
25 the best option to serve many end uses including

1 hard-to-electrify sectors consistent with global research  
2 and studies from academia, national labs and government  
3 agencies. I also encouraged SoCalGas to conduct further  
4 analysis in phase two on cost effectiveness and establish  
5 a more direct connection to the affordability discussion  
6 that is currently a top policy priority in California.

7 Thank you.

8 CHESTER BRITT: Thank you, Katrina. And Marcia, we're  
9 going to end with your comment for this section, and then  
10 we're going to move on to the next presentation. So if  
11 you could make your comment. We can get your microphone  
12 --

13 RAUL CLAROS: What group was Tyson from? Because I  
14 don't think I've ever seen him at the meetings. I want to  
15 be clear what group that was. Did he say CPAK?

16 FRANK LOPEZ: He's with UCAN and actually he's been at  
17 -- he's been at every single meeting we've had, just he  
18 joins remotely.

19 RAUL CLAROS: Remotely.

20 CHESTER BRITT: He's part of the PAG.

21 RAUL CLAROS: UCAN is --

22 FRANK LOPEZ: He's part of the PAG and you're PAG with  
23 CBOSG. So different group.

24 RAUL CLAROS: Utility Consumers what?

25 CHESTER BRITT: Action Network.

1 RAUL CLAROS: Okay. UCAN. Thank you.

2 CHESTER BRITT: Thank you. Marcia?

3 7: Thank you so much. Marcia Hanscen with Ballona  
4 Wetlands Institute, and I think your question goes  
5 actually goes to what he said that it's been challenging  
6 that we've had the two different groups and we haven't  
7 always been together, so that may be part of why there are  
8 different perceptions. And I just want to say, I haven't  
9 seen meetings being taken over, not in the community --  
10 what are we called? Community-Based Organizations Group.  
11 I haven't seen that. I did see some people stand up and  
12 say some things and then walk out, but that hasn't been  
13 done before, but I just like to suggest that we, you know,  
14 we have some real divisions in this country, and we need  
15 to not be having these divisions in my view. We need to  
16 be figuring out how we can work together, especially for  
17 the planet, which we all rely on. And I just want to say  
18 that I participate with Physicians for Social  
19 Responsibility, Communities for a Better Environment, Food  
20 and Water Watch on a state-wide environmental justice  
21 coalition called Last Chance Alliance, and they have been  
22 successful at persuading the legislature and the governor  
23 to require 3200ft setbacks buffers from oil wells in  
24 people's backyards. We're not going to have oil wells in  
25 people's backyards soon in California and that's a good

1 thing. And these environmental justice groups, I think we  
2 need to listen to, because they are environmental justice  
3 leaders. Katrina Fritz just mentioned a requirement to  
4 the decarbonize energy, and I think we need to figure out  
5 how to have common language here because fossil gas that  
6 is brought in by pipeline from other states to California  
7 to put in the ground at Aliso Canyon, Playa Del Ray and  
8 other places, fossil gas. That's what it is. I know a  
9 lot of people call it natural gas, like natural oil, but  
10 it is a fossil fuel. It is a carbon. If we're going to  
11 decarbonize, we need to get off of fossil gas. So, I know  
12 that's your name, SoCalGas, I've talked about changing  
13 that. But the point we need to figure out how to have the  
14 same language so we're not talking past each other and  
15 having things that are confusing to people, and that's  
16 maybe, from what I heard, maybe some of the frustration.  
17 Anyway, thank you for listening to people. Thank you for  
18 letting them speak because I do have a lot of respect for  
19 everybody in this room. That includes all my friends at  
20 SoCalGas that I've gotten to know.

21 CHESTER BRITT: Thank you so much, Marcia. We are --  
22 ironically a lot of the comments are about our subject  
23 matter, which is a summary of the PAG and CBOSG process.  
24 Roy, I see your hand raised. We're going to take -- we;  
25 re going to go to this presentation with Frank, it's only

1 three slides. We'll pick up your comment and any others  
2 before we wrap up for lunch. So I'm not going to turn it  
3 over to Frank, he's the Regional Public Affairs Director  
4 for SoCalGas and he's going to make a presentation on the  
5 summary of the PAG and CBOSG process.

6 FRANK LOPEZ: Thank you, Chester. Those were really,  
7 really good comments and some great feedback, I really  
8 appreciate that. I want to spend the next couple of  
9 minutes just recapping and discussing the 20+ months that  
10 we spent together working on these phase one activities.  
11 I want to clarify a couple of things. So, Tyson is  
12 correct that we were directed by the Public Utilities  
13 Commission to put together a Planning Advisory Group, but  
14 that was our idea. We proposed to assemble a Planning  
15 Advisory Group to advise us through this process, so it's  
16 something that we actually included in our application.  
17 It was a good idea and proved to be very worthwhile. We  
18 were also directed to put together a Planning Advisory  
19 Group, we were not required to do a CBOSG. That something  
20 that we came up with, and we thought it was important to  
21 put together. I heard some really good feedback about the  
22 reasons why we should have combined the two. We chose to  
23 do them separately for different reasons, but it's  
24 something that we were going to include in our phase two  
25 outreach that I will speak to in a bit. And then we were

1 required to meet quarterly. We ended up meeting 27 times  
2 over a 20 month period. We ended up meeting, at some  
3 point, more than monthly. That's not taking into account  
4 the one-on-one meetings that we had. Nonetheless, this is  
5 all really, really helpful feedback. I'll kind of just go  
6 over really quickly, I want to acknowledge that this type  
7 of stakeholder engagement process that allows for diverse  
8 points at the beginning of the development process is  
9 really unprecedented for SoCalGas, and I think it might  
10 even be unprecedented for a California investor owned  
11 utility. We made a conscientious decision when we filed  
12 the application in phase one to create this stakeholder  
13 advisory group to advise us at every step of the way  
14 because we knew that stakeholder input early in the  
15 process was necessary if we were going to be successful in  
16 developing a large complex project like Angeles Link. I  
17 was personally involved in creating the PAG and CBOSG and  
18 having participated in dozens of advisory groups myself in  
19 my career, I knew this process was not going to be easy.  
20 Nothing worthwhile usually is. It wasn't going to be easy  
21 for us and I'm sure at times it hasn't been easy for some  
22 of you as well. I think we heard that in the critical  
23 feedback and we welcome that feedback. But I knew that in  
24 order to be successful, we were going to need help and  
25 that's why we went out and hired Arellano and Associates

1 and Lee Andrews Group to help us facilitate these advisory  
2 group. For those of you who are familiar with them, you  
3 know that they have a lot of experience facilitating these  
4 types of stakeholder engagement activities for other large  
5 public infrastructure type projects. We've never done  
6 anything like this so we really needed their help and we  
7 needed your help along the way. We had some challenges  
8 along the way. We had some critical feedback, and a lot  
9 of that was warranted, but I think what I'm proud of is we  
10 were really open to that feedback, and we were open to  
11 doing things differently even through the process in  
12 making things better. And I think with Arellano and  
13 Associates and Lee Andrews Group and with all of your help  
14 along the way I think we put into place a process that  
15 allowed for meaningful input.

16 On this slide here, I just want to start up the  
17 process and say that we didn't know where Angeles Link was  
18 going to start, but we knew where it was going to end up  
19 and that would be to serve hard-to-electrify sectors in  
20 Los Angeles. We got together at the beginning of this  
21 whole thing, we were thinking who should we invite to be a  
22 part of this process? We had some interveners that we  
23 wanted to join, but from the Community Based Organization  
24 stakeholder process, we wanted to really cast a wide net.  
25 I think at some point we ended up inviting over 200

1 organizations to participate. So we went far and wide  
2 trying to, you know, make sure we had some good geographic  
3 diversity, we were getting organizations from different  
4 sectors, different perspectives, and ultimately we ended  
5 up with 70 organizations participating in the PAG and the  
6 CBOSG combined. Forty on the Planning Advisory Group and  
7 twenty -- eight in the CBOSG. There's a complete list  
8 there -- I know it's small. We'll show the materials with  
9 you if you want to see everyone who joined, but we want to  
10 acknowledge that we need more feedback from communities  
11 from along the four potential routes. You notice this is  
12 a very LA centric advisory group. Especially on the  
13 CBOSG, I think we acknowledge that -- especially now that  
14 we have a better sense of where these potential routes  
15 could go, that we would want to expand membership to  
16 include organizations from the San Fernando Valley,  
17 Antelope Valley, the San Joaquin Valley, including more  
18 organizations -- more representatives from the tribes.

19 In terms of the process, next slide please, I  
20 mentioned earlier that when we first started this process,  
21 we intend to hold quarterly meeting. I think we proposed  
22 to do this phase one project in about 18 months. That  
23 have been total of five meetings. And the PAG and CBOSG,  
24 I know that -- just full transparency, this ended up being  
25 a lot more work than we expected. I think it was

1 definitely worthwhile. You know, we had some challenges  
2 and we learned a lot from you about how to improve our  
3 process and I kind of want to just highlight some of the  
4 things that we did differently that we learned for you  
5 when we started. We heard you loud and clear that you  
6 wanted more opportunities to receive and provide feedback.  
7 You wanted more flexibility on how to participate in these  
8 meetings. You wanted more representation from other  
9 organizations that you felt were not included in here,  
10 including include tribes. You wanted more notice and time  
11 to review and comment on materials. You wanted more  
12 meetings in non-SoCalGas facilities throughout the region,  
13 as much as we love the Energy Resource Center. We made  
14 these changes along the way, right. I'm going to  
15 highlight some of those changes. We created -- we had  
16 virtual meeting options. We love seeing you in person,  
17 and we want to thank all of you who take the time to  
18 commute out here and take time out of your day to here, we  
19 know that not everybody can, and so we wanted to make sure  
20 we had an option that folks could still continue to  
21 contribute virtually. We expanded membership. When we  
22 first started, we realized that even though we invited 200  
23 organization, that there are folks that we might have  
24 missed and you had some really good suggestions on what  
25 folks to invite and we were open to extending additional

1 invitations to people. We wanted to make sure we were  
2 getting materials to you in advance so that you can review  
3 those materials and come prepared to provide feedback.  
4 And we extended of the comment period. We acknowledged  
5 that -- we did release a lot of the studies, especially on  
6 the back end and it was a lot of materials for folks to  
7 digest. We tried to stagger it, but nonetheless, it was  
8 still a lot of material, and so I want when a focus group  
9 freaked out and said, "Hey, we need more time to comment,"  
10 we were happy to grant extensions to make sure to give  
11 people time to weigh in.

12 Those are just some of things that we changed,  
13 and I just want to close on this, by the number slide to  
14 really recap. I want to take a moment to just acknowledge  
15 the amount of time and effort that all of you put into  
16 this. This was a lot of work, not just for us, this was a  
17 lot of work for you too. We ended up meeting more than  
18 quarterly, as I mentioned, 27 times in total. I really  
19 want to thank the folks took opportunities to actually  
20 submit written comments to us. It was a lot of material  
21 to digest. I know sometimes it was very technical  
22 maternal. I want to let you know that we spent countless  
23 hours reviewing your materials. We had teams that we  
24 would meet and we read every single document that you  
25 submitted line by line. Sometimes more than once. And we

1 had a lot of healthy discussions about it, but all of you  
2 had some fantastic ideas, you had -- ultimately our work,  
3 our phase one studies benefited from your contributions.  
4 I'm sorry to hear that some of you may be disappointed,  
5 but I think ultimately we did the best that we could, you  
6 know, creating this new process for us and getting all of  
7 your information, reading all your materials and  
8 responding in a timely fashion. So thank you for all  
9 that.

10 In total, we ended up getting over a hundred  
11 comment letters that totaled more than a thousand pages of  
12 feedback, and we read every single one. So thank you for  
13 the folks who took time to submit those comments. We  
14 learned a lot of -- and incorporate this into the next  
15 phase when Shirley does the phase two overview after  
16 lunch. I'll make sure to kind of highlight what we're  
17 proposing first, our stakeholder engagement activities for  
18 phase two, and actually that included a lot of the  
19 feedback that you provided earlier, so I'm -- sounds like  
20 I might have gotten it right this time, but I do want to  
21 acknowledge participation. We were meeting with the team  
22 and I wanted to know who attended most of the meetings  
23 that we had. We had some perfect attendance from some  
24 folks and I just want to acknowledge -- we printed out  
25 through some certificates. It's a really small thing, but

1 look, we know that participating in this thing took time.  
2 So I just want to acknowledge the folks that really went  
3 above and beyond. I think we only had two people that did  
4 not miss one meeting, right? The person that didn't miss  
5 one meeting, made every single meeting and actually  
6 submitted comments on most of the studies, was Tyson. So  
7 I want to acknowledge Tyson. So, Tyson, thank you so  
8 much. I know you were disappointed, but I'm not  
9 disappointed in you. I appreciate all of your feedback.  
10 You're not here presently, so we're going to mail you your  
11 certificate. The other person that had, I'm going to say  
12 perfect attendance, but they one meeting, but not really  
13 because they attended virtually so technically they've  
14 made it to all meetings, and this person attended the most  
15 amount of meetings in person is Enrique from Soledad  
16 Enrichment. Thank you. We had a couple of folks who had  
17 near-perfect attendance. They only missed one meeting. I  
18 want to acknowledge those folks, too. The other one is  
19 Katrina Fritz from California Hydrogen Business Counsel.  
20 Thank you, Katrina, I think you only missed one meeting.  
21 I'm sad this person isn't here, because he also made it to  
22 almost all of the meetings and he had wonderful feedback,  
23 it's Norm Peterson from Southern California Generation  
24 Coalition. I felt like something was missing, and it was  
25 because Norm wasn't here. So sorry Norm, you couldn't

1 make it. And then a couple of CBOSG members who only  
2 missed one meeting. One was Roy Van De Hoek. Thank you,  
3 Roy for your near-perfect attendance. You can give Roy a  
4 round of applause. Rashad Rucker-Trapp from Reimagine LA,  
5 thank you so much. Michael. Michael Berns --

6 ALMA MARQUEZ: Rashad was late, but he was here.

7 FRANK LOPEZ: He was late, but he still made it so he  
8 gets credit. It wasn't a timely award, it was a  
9 participation award. Michael Berns, thank you for only  
10 missing one. Really appreciate that. And then of course,  
11 Marcia Hanscom. Really appreciate -- you attended a lot  
12 of them in person as well. I really appreciate -- you  
13 had a far commute so I really appreciate that. All in  
14 there, this is an opportunity -- I did receive some  
15 feedback from you, but if you have additional feedback  
16 about the PAG and CBOSG process, things that you thought  
17 that worked well, things that you thought we could've done  
18 better. I've already heard some, but I'm open to other  
19 suggestions. Like I mentioned, I'm also going to go over  
20 our proposed stakeholder engagement for phase two a little  
21 bit later today, so you will have another opportunity  
22 later as well.

23 CHESTER BRITT: Great. We'll be passing out your  
24 certificates, and I'm assuming you will frame them in your  
25 house. We are a little bit behind schedule here, we have

1 lunch for you in person here, so we're going to take the  
2 time to left get our lunch. We want to try to get back  
3 here by 12:20, so maybe we can make it a working lunch,  
4 and we are going to have a reception afterwards. So if  
5 you are online, we're to reconvene at 12:20 to start the  
6 second half of our agenda. If you're here in person, go  
7 grab your food and we'll start in about 20 minutes from  
8 now. Thank you so much.

9 (A recess was taken after which the meeting  
10 continued as follows:)

11 CHESTER BRITT: Okay. We are going to turn it over to  
12 Shirley Arazi, the Angeles Link Director Regulatory and  
13 Policy. And she is going to actually make a presentation  
14 on the phase two update, which should be very interesting.  
15 So I'm going to turn it over to Shirley, and we'll --

16 SHIRLEY ARAZI: Thank you so much, really happy to be  
17 here today. Can you all hear me okay? Great. So we  
18 talked a lot about phase one and that whole process and  
19 kind of our conclusions from phase one studies and as  
20 Yuri, Amy, and Frank discussed, in phase one, SoCalGas  
21 conducted over a dozen studies to assess the feasibility  
22 of Angeles Link, focusing on demand, production, pipeline  
23 configurations, and an alternative to a hydrogen pipeline  
24 system. Now that we've reached the end of the feasibility  
25 phase, we have a better understanding of what Angeles Link

1 could be and a more specific product description has been  
2 developed. Based on where we are today, Angeles Link is  
3 envisioned as an open access pipeline system dedicated to  
4 public use for the transport of clean renewable hydrogen  
5 at scale. A nondiscriminatory open access pipeline system  
6 would be regulated by the California Public Utilities  
7 Commission and consistent with California hydrogen  
8 strategy encouraged continued investments in clean  
9 renewable hydrogen and development of the state's hydrogen  
10 economy. Particularly, via future producers and end-users  
11 who could take advantage of an open-access pipeline  
12 system. System would have regulatory oversight  
13 facilitating the delivery of large volumes of hydrogen  
14 over long distances. Angeles Link would connect  
15 third-party production sites to demand centers or  
16 end-users across Southern California including in the Los  
17 Angeles basin. Considering the estimated projections of  
18 demand for clean renewable hydrogen in our service  
19 territory, Angeles Link would serve a portion of that  
20 demand, and based on current projections, be sized to  
21 support annual throughput of up to 1.5 million metric tons  
22 per year, which will be further determined in phase two;  
23 have pipeline diameters of up to 36 inches; and operate at  
24 pressures ranging from approximately 200 to 1200 pounds  
25 per square inch. It would serve some of the most

1 hard-to-electrify sectors, such as power generation,  
2 medium and heavy-duty transportation, and high-heat  
3 manufacturing or industrial processes. These sectors make  
4 up over half of the total GHT emissions in California. As  
5 you may recall, two segments of Angeles Link are detailed  
6 in the Alliance For Renewable Clean Hydrogen Systems, or  
7 ARCHES, successful federal application with the Department  
8 of Energy, or DOE. Our pipeline system is expected to  
9 play an instrumental role in the California hub being  
10 operational around 2033. The two segments would be  
11 connected by broader Angeles Link system, which is  
12 expected to be 450 miles and constructed in stages with an  
13 aim for the hub segments to remain in alignment with the  
14 DOE and ARCHES expectations.

15 Let's go ahead and move on to the next slide. Of  
16 your writing there phase two application. You're already  
17 there, okay. Phase two application. So to reiterate,  
18 what you heard early this morning, phase one was all about  
19 figuring out whether Angeles Link is feasible. Based on  
20 the results of phase one, SoCalGas determined that Angeles  
21 Link is technically feasible, viable, cost effective, and  
22 could offer public-interest benefits. That is, Angeles  
23 Link is ready to move on to phase two. Phase two will  
24 build on this work and is anticipated to cost  
25 approximately 266 million of ONM, could examine

1 approximately 451 miles of pipeline and compression  
2 requirements. These activities will progress us to scope  
3 our option selection to then scope definition where  
4 pre-front and engine designed to project definition or  
5 feed; and include routing optimization via siting,  
6 technical and design work, environmental desktop review,  
7 and surveying, and other program design. To dig a little  
8 bit deeper on this work, SoCalGas proposes to build off  
9 the activities conducted during phase one to gather  
10 additional data, stakeholder input, and refine initial  
11 findings. For example, the siting analysis that will help  
12 SoCalGas identify a preferred system route for Angeles  
13 Link. And upon selection for that preferred system rout,  
14 SoCalGas will further advance engineering and operations  
15 evaluations and plans to 30% design including compression  
16 requirements.

17 The Angeles Link system evaluation will look at  
18 new available information concerning clean renewable  
19 hydrogen producers and users, technology developments,  
20 location specific details, and specific operability  
21 constraints including evolving information from the  
22 California Hub Network as it progresses. This work would  
23 include transient hydraulic modeling to evaluate pipeline  
24 system operations, design and capabilities under a variety  
25 of scenarios that considers things like scalability,

1 performance and reliability, building off of the  
2 feasibility analysis we did in the production and design  
3 studies. They phase two feed study will also look at  
4 environmental land right-of-way information and ultimately  
5 result in engineering being advance to define the scope  
6 and technical requirements of Angeles Link as well as a  
7 production of a more detailed cost estimate and a detailed  
8 project schedule. Advancing feed at our proposed schedule  
9 is necessary to align with ARCHES and DOE's timeline which  
10 envisions the hub to be operational by the end of 2033.  
11 The two segments of the Angeles Link in the San Joaquin  
12 Valley and Lancaster areas would need to meet that  
13 schedule. In phase two, we would also conduct activities  
14 in addition to the feed study that support further  
15 analysis of Angeles Link, and also have broader benefits  
16 that support the hub in California market development.  
17 Examples of this work would be in our development of an  
18 enterprise safety plan addressing hydrogen safety  
19 regulations, risk management, as well as economic analysis  
20 that would help inform a future proposal and potential  
21 future proposal for cost allocation and rate design  
22 including identifying the potential assets, anticipating  
23 operating lives, and variables such as material selection,  
24 end-user requirements and expected appreciation  
25 methodologies. These topics are important for us to

1 advance Angeles Link, but also bring a broader benefit to  
2 help answer some important questions for the industry and  
3 the state around hydrogen as one of the many  
4 decarbonization tools to solve multiple decarbonization  
5 pathways. We also intend to expand stakeholder and  
6 community engagement for phase two. Specifically we plan  
7 to engage with tribal communities and local communities  
8 near potential preferred routes. These include San  
9 Joaquin Valley, Antelope Valley, and in-line areas. We  
10 propose to expand PAG to include these stakeholders and  
11 hold a public meeting to solicit input from communities  
12 along potential routes. All of this work will take  
13 approximately 30 months to complete once we have received  
14 CPC approval. It's important to emphasize that phase two  
15 is not seeking procurement of materials, construction,  
16 permitting or completing California Environmental Quality  
17 Act, or CEQA, or National Environmental Policy Act, or  
18 NEPA, review. The goal of phase two is to identify the  
19 potential alignment that SoCalGas will pass through to the  
20 permitting process. In other words, phase two activities  
21 are expected to generate the deliverables and information  
22 necessary to advance the Angeles Link concept to be a  
23 defined proposed project scope, generate system design  
24 data in support of a potential future CBCN application and  
25 other lead permit applications.

1           For phase two, we plan to request authorization  
2 of a revenue requirement to be recovered in rates based on  
3 forecasted expenditures to complete these activities.  
4 This approach is anticipated to avoid approximately 30  
5 million in accrued interest over the course of phase two.  
6 If phase two is approved as we proposed, an average  
7 residential monthly bill is expected to increase by about  
8 \$0.35 per month over 36-month period. It's important to  
9 note that any decision on cost allocation for the ultimate  
10 project would be reserved by the commission for a future  
11 decision on any potential CPCN application that we may  
12 file. We still have a lot to determine in terms of  
13 ultimate customers and beneficiaries of the project and  
14 that's part of what we want to ascertain in phase two.

15           Next slide, please. This slide shows you a  
16 conceptual timeline about where we started on Angeles Link  
17 on the left, and where we are going towards the right.  
18 You can see the Angeles Link phases delineated at the top  
19 and the overlapping ARCHES and DOE timeline and the  
20 bottom. This is all based on current know information as  
21 we've received further updates on the hydrogen hub, we'll  
22 progress that through. The timeline depicts that we are  
23 rapidly approaching the end of phase one and we posted our  
24 final feasibility work last Friday. We plan to file our  
25 phase two application before the holidays. To best

1 position SoCalGas to meet the project development timeline  
2 as shown here and to advance the state's clean energy  
3 goals, phase two activities need to commence as soon as  
4 possible, as it will take around 30 months following a  
5 commission decision to complete. Once phase two is  
6 complete, we may choose to seek a CPCN as the next step.  
7 Angeles Link plays a critical part of the California  
8 hydrogen hub, so it is essential that we do the work to  
9 advance bringing the initial segments into operation and  
10 alignment with DOE and ARCHES timelines, which is around  
11 the 2033 which is the right hand side.

12 Next slide, please. Once we file the phase two  
13 application, it would go through CPUC review and follow a  
14 regulatory process for interested parties can regularly  
15 participate. Following the application, there's a 30-day  
16 protest or comment period, and then the assigned  
17 administrative law judge will set a prehearing conference  
18 to discuss the proposed scope and schedule. We are also  
19 recommending a public workshop and a process that would  
20 enable us to receive decision by the end of 2025.

21 Although we are sunseting phase one stakeholder  
22 engagement activities, we want to emphasize that  
23 stakeholder engagement remains a key component of the  
24 Angeles Link engagement process. Before we conclude for  
25 an overview of phase two, I will hand it over to Frank to

1 provide additional details on our stakeholder engagement  
2 proposal for the next phase.

3 FRANK LOPEZ: Thank you, Shirley. So I'll provide an  
4 overview of the stakeholder engagement activities that we  
5 are planning to propose as part of our phase two filing.  
6 Some of you may be wondering, "What about us? What does  
7 this mean for us?" So, we got a lot of value, as we  
8 mentioned earlier, from this year from this advisory group  
9 process, so we're going to continue with proposing a  
10 Planning Advisory Group in phase two. However, I think we  
11 heard pretty loud and clear from all of you that you  
12 didn't like the fact that we had two distinct groups, that  
13 we had a Planning Advisory Group and that we had a CBOSG.  
14 Originally with that idea, if you recall we invite over  
15 200 entities, and we thought it'd be good to have a  
16 planning group that was more technical in nature and have  
17 a separate group that was more interested from the  
18 community-oriented issues associated with that. But I  
19 think we got a lot of feedback from you that you want to  
20 be the same room together, and there was actually a lot of  
21 really good debate and discussion when we would have those  
22 joint workshops. So, moving for phase two, we are not  
23 going to have two distinct groups, we are just going to  
24 have one Planning Advisory Group, but we are going to  
25 expand membership in that group. As you've seen from the

1 routing study, some of these potential routes they're up  
2 in the San Joaquin Valley, Antelope Valley, so we're going  
3 to be expanding membership to include more organizations  
4 for this Planning Advisory Group in phase two, and we're  
5 also going to be reaching out to tribes to have a bigger  
6 presence and bigger presentation from tribes in this  
7 process. We're going to continue to meet at least  
8 quarterly. That was the intention for phase one and we  
9 ended up meeting about monthly, so we're going to propose  
10 to meet quarterly. We're also going to try to tie the  
11 meetings to major projects and milestones. So when we hit  
12 a major milestone in phase two, we're going to try to have  
13 a meeting either before or soon after so that the  
14 information is fresh. All of the meetings will continue  
15 to be hybrid and I think the biggest difference between  
16 the stakeholder engagement activities in phase one and  
17 phase two is that we are going to be proposing to do  
18 public meetings as part of our phase two outreach  
19 activities, and do our stakeholder engagement activities.  
20 Not have them just be limited to our PAG and CBOSG, that  
21 was one of the messages that we received from many of you  
22 through this process is that you wanted us to go out and  
23 solicit input from communities themselves directly. So we  
24 are proposing to do more public engagement activities and  
25 public meetings, not just in Los Angeles, but throughout

1 potential routes as part of phase two.

2 In terms of how to stay engaged, this is our  
3 final meeting, so we will be sunseting the Planning  
4 Advisory Group and CBOSG, but there are a couple of ways  
5 that you can stay engaged. Three ways you can stay  
6 engaged phase two application process. The first one is  
7 that you can subscribe to the proceedings. So when we  
8 file our application some time this month, they'll be  
9 assigning a proceeding number, and we'll make sure to  
10 reach out to you and send you an e-mail in case you want  
11 to subscribe for those of you who follow City Council,  
12 it's a very similar processes. You subscribe, and as new  
13 information become available, they push that out. So you  
14 can track that progress. If you want to provide comments  
15 on the proceeding when we file it, there's a way of also  
16 submitting comments on the docket. So if you want to  
17 submit a letter, there's a QR code there for that as well.  
18 There's also a QR code for subscriptions. And then the  
19 final way is if you want to be party to the proceeding --  
20 we have a lot of organizations here that were parties to  
21 the proceedings of phase one. If you want to get more  
22 involved and engaged in that process, you can intervene  
23 and there's a QR code there that you can scan and it can  
24 walk you through the steps on how to do that. Of course,  
25 of any of you have questions on any of these, you can

1 always reach out to us and we can give you more  
2 information on how to engage and stay informed.

3           And then finally, I'll just mention that we're  
4 going to have our website up. So you heard earlier that  
5 we are going to be dissolving the Living Library. It will  
6 be up and available to all of you, up till December 27.  
7 So you have 10 more days to access information from the  
8 Living Library. All of the materials are still available  
9 there. After the 27th, we will dissolve that, but all of  
10 the information that is in the Living Library right now  
11 will actually be available in the quarterly reports. So  
12 when we present information here or in that quarter, it's  
13 all appended to the quarterly reports and all of the  
14 quarterly reports will remain on our Angeles Link website  
15 in addition to all the studies, the consolidated report,  
16 the affordability framework, and of course the phase two  
17 application will also be available on our website. If you  
18 click that QR code, it'll take you to the website and  
19 you'll have access to that information post Living  
20 Library. And I believe that's it.

21           CHESTER BRITT: All right. So do we have any  
22 questions, comments, clarifications about the phase two  
23 presentation? Anyone want to raise their placard, and I  
24 will call on you.

25           ALMA MARQUEZ: You have Michael over here. And we

1 have a microphone --

2 CHESTER BRITT: We'll start on the right and work our  
3 way around. So, we have two Michaels actually who raised  
4 their had, but we'll start here.

5 MICHAEL BERNS: Thank you, very much. Michael Berns  
6 with California Greenworks. I just wanted to know about  
7 the phase two process from the environmental justice  
8 perspective. It may not be appropriate during that phase,  
9 but at least getting the groundwork so that way when you  
10 do apply for the implementation and you've designed it,  
11 I'm just wondering for your community-based outreach and  
12 public outreach, do you guys have a methodology or process  
13 of analysis yet? How are you deciding?

14 FRANK LOPEZ: Well we have our ESJ plan that was  
15 developed in partnership with all of you, right, where you  
16 gave us mechanisms to go out and start doing outreach, how  
17 do we raise individual's awareness and inform individuals  
18 in communities about the project so they can engage in  
19 different ways to provide input. So we're going to be  
20 using that as our framework for our phase two process,  
21 that's why we did it. Once we get a decision, we're going  
22 to need a plan in place. That's not the only thing we're  
23 going to rely on, but it will serve as kind of a guiding  
24 document for our outreach efforts. And then we also have  
25 our ESJ screening as well, right, which helped identify

1 where the communities that are disadvantaged communities  
2 that live near or along potential routes, so that we know  
3 those are areas that we need to prioritize and make sure  
4 that we engage. So we'll make sure to have kind of a  
5 concerted effort just to focus on getting those  
6 communities to engage in the process during phase two.  
7 And that's why we don't want to limit ourselves to the PAG  
8 and CBOSG. This is really, really good feedback back, but  
9 once you start getting to that 30% design, we're going to  
10 need input from the communities themselves so we want to  
11 have those public meetings in the communities themselves  
12 that are open to the public.

13 MICHAEL BERNS: One thing that I think is missing from  
14 all the mechanisms, like CalEPA and EPA Justice 1,  
15 historical context of communities also. So I would  
16 suggest and recommend highly suggest and recommend that  
17 you guys look at that also because I think that is a huge  
18 concept of addressing environmental justice, looking at  
19 historical injustices in the community.

20 FRANK LOPEZ: Do you have suggestions on how we go  
21 about doing that? I mean, I know it's part of our public  
22 meetings we would make them open ended, too, where folks  
23 can bring up issues that are not necessarily rooted in  
24 data, but that have stories. But I'm open for suggestions  
25 on how to best do that work.

1           MICHAEL BERNS:  So, like you said, one is listening to  
2 the community.  And I another would be looking at city  
3 ordinances and redlining -- I'll do more research.

4           FRANK LOPEZ:  You don't have to share it all right  
5 now.  There will be a phase two and they'll be a PAG.  One  
6 thing I did fail to mention, is that every organization  
7 that participated in phase one, will be invited to  
8 participate in phase two.  So when we get to that point,  
9 helpfully we get a good outcome, we convene the group,  
10 we'll re invite you and we'll probably solicit input from  
11 the organizations on how to best go out and do those  
12 engagement opportunities.  So you'll get another bite at  
13 the apple, Mike.

14          CHESTER BRITT:  Alright.  Michael, we're going to go  
15 over here now to you.  There you go.  Go ahead and  
16 introduce yourself.

17          MICHAEL COLVIN:  Michael Colvin with Environmental  
18 Defense Fund.  Shirley and Frank, thank you for the really  
19 thoughtful presentation.  I think I'm directing this to  
20 what Shirley had up and I do have a couple of follow-ups  
21 with Frank as well.  Shirley, as you're framing the scope  
22 for phase two, and I know that the application is probably  
23 all but finalized at this point.  I know you guys have  
24 been working hard.  I know how complicated it is to put  
25 these things together.  I would encourage you to ask a

1 couple of more micro questions that may be there but just  
2 weren't outlined in your presentation. The first one is  
3 why does the -- the form for the PEC -- obviously SoCalGas  
4 is a regulated entity. Why should SoCalGas be one, as a  
5 regulated entity, do Angeles Link as a regulated line of  
6 business? I think that's a really fundamental question  
7 because you're talking about leveraging the power of the  
8 pipeline that you have and doing this in a new -- you're  
9 talking about opening up a new line of business. I think  
10 the commission would very naturally ask some people could  
11 do this as an affiliate, why are we doing this as a  
12 regulated line of business? And I think there may be an  
13 answer there, but I don't think it is presented in those  
14 list of bullets that you have right now, and I think just  
15 saying and justifying, "Here's why we're doing this," and  
16 then not talking about the CPCN process that would come at  
17 phase three. I'm not talking about the individual  
18 justification of an individual line. I'm talking more  
19 about the macro question. Phase one, what the commission  
20 basically said by granting a memorandum account was a very  
21 threshold, "We don't know if we have regulatory  
22 jurisdiction yet. We don't know if this is the right  
23 thing for you to do yet. We don't presume any of that."  
24 Shareholders are still at risk for all of this and by  
25 making additional progress, you're saying, "Look, we think

1 there is a role for Southern California Gas Company as a  
2 regulated business is going to make forward," and I think  
3 that's a question that needs to be answered and given a  
4 lot of thought to. You've probably already thought about  
5 that, but I just didn't see it in your list?

6 SHIRLEY ARAZI: Michael, you're definitely spot on and  
7 we definitely address this topic in the application, so  
8 you'll get to see it.

9 MICHAEL COLVIN: So excited.

10 SHIRLEY ARAZI: So I'll just back up to say, you know,  
11 from our perspective, the CPC has jurisdiction. We  
12 believe that a public utility model is the most effective  
13 way of really doing this at the scale that we're talking  
14 about. And, you now, as far as being able to do an open  
15 access pipeline system, which I talked about a little bit,  
16 but that does get to the fact that we're also a regulated  
17 utility model with regular reporting and transparency and  
18 all those types of things are important to us. So we do  
19 believe that just that regulatory model is really the best  
20 way to help bring this market to where it needs to be for  
21 California, but also the commission, oversight,  
22 transparency, consumer protection, all of those things  
23 come with it being at the utility --

24 FRANK LOPEZ: Yeah, if I can add to that, too. There  
25 are three reasons, at least for me. One is scale. In

1 order for California to reach its decarbonization goals,  
2 hydrogen playing a key role, we're really going to need to  
3 produce hydrogen at scale. I think that's a unique  
4 strength for us. And also our talents. We have a lot of  
5 wealth of expertise and world-class workforce that we know  
6 that can do this work and do it well. And finally, one of  
7 the reasons why we think regulated utility like this  
8 should do this is because of process. This meeting is a  
9 demonstration of that, right? We have an open process,  
10 not just through this, but through the regulatory process  
11 where folks can have an open process, make our case, have  
12 an opportunity to weigh in. And I think for those three  
13 reasons it makes sense for us to do it.

14 MICHAEL COLVIN: Sure. And to be clear, I'm not  
15 asking you to answer these questions right now. I just  
16 wanted to make sure the answers are teed up in the  
17 application. I think it's sort of a cornerstone. I  
18 understand fully that you think the commission has  
19 jurisdiction, I've read the PU code pretty closely, I  
20 think it does also. But we've also filed some motions of  
21 the PUC to say, "Hey, do you? Do you not?" We're asking  
22 these questions and they very specifically sidestep them a  
23 couple of different times. And that's fine that they  
24 haven't had to reach those yet, but they're probably going  
25 to have to reach them in this phase two application. I

1 think the more we put those front and center and figure  
2 out does the commission actually have the jurisdiction to  
3 do this? If not, do we need to go to the legislature and  
4 get them the jurisdiction? Is that appropriate or is that  
5 not? And there are nonregulated entities in California  
6 who are providing hydrogen pipeline service. Not at the  
7 scale that Frank just mentioned. Not at the scale that I  
8 think is being proposed with Angeles Link, but they are  
9 out there and they are not regulated entities. So we need  
10 to reconcile that of why should SoCalGas be the one to do  
11 that and not an affiliate. So I just want to make certain  
12 that from that first order of magnitude we're thinking  
13 that through.

14 The other -- I apologize, Chester, I see that  
15 you're trying to move this along --

16 CHESTER BRITT: That's okay. I thought you were  
17 finished, but go ahead.

18 MICHAEL COLVIN: Two other brief observations that I  
19 want to go through. Again, on Shirley's schedule, the  
20 proposed schedule for the regulatory proceeding, I have  
21 been doing commission work for a long time, so have a lot  
22 of people in this room, I think that schedule is highly  
23 unrealistic and ambitious. I love ambition. I love  
24 moving things fast. I want things to move fast. I'm not  
25 going to be the one trying to slow stuff down. I think

1 there's a 0% chance that you will get a decision done by  
2 Q4 of 2025. So I just want to make certain that we  
3 recognize that going into it. As you are updating your  
4 final things, I don't want you not passing the laugh test  
5 by an ALJ or by anyone else, and you might want to revise  
6 that schedule to realize that every commission decision is  
7 by statute is an 18-month proceeding.

8           The third kind of bigger issue and this is going  
9 into Frank's point on the role of the PAG, the role of the  
10 community-based organizations. I think the power of the  
11 PAG has been, since we had the phase one decision, but  
12 before we launched into phase two, is amazing dialogue.  
13 We are going to be going into this really understanding  
14 with all the caveats what your studies did, why making  
15 sure the scope of those studies were accurate, it's been  
16 extraordinarily productive. It's a little bit different  
17 in a proceeding to have that kind of dialogue because  
18 you're almost forced into litigation mode. And so  
19 thinking through what is the role of a PAG or a community  
20 based organization as sort of a parallel track versus  
21 people who are parties to the proceeding, are those  
22 settlement conversations, are those other things? I think  
23 you might want to think that through of what does that  
24 look like and how does that fit into sort of proceeding  
25 world versus post phase two when you want to continue to

1 have the informal learning and dialogue. I just want you  
2 to recognize that there is, by definition, harder  
3 information flow once a proceeding is up and running, and  
4 so we want to make certain that we're hitting those boxes  
5 in the right way so we can continue the dialogue. And I  
6 didn't hear you say some of that. I think you've probably  
7 already thought of it. I just want to make certain it's  
8 being flagged. I have some other nuance points that I'll  
9 save for an e-mail later, but I just --

10 FRANK LOPEZ: We're here. You took the time to travel  
11 down here, you might as well. If you want to share, by  
12 all means. These are all really good questions though.

13 MICHAEL COLVIN: I tried for you. I know my chicken.  
14 The last micro question that I'll make the observation on,  
15 Shirley, I think the numbers you quoted on the bill  
16 impact, \$0.50ish per month, I think that's spreading the  
17 cost --

18 SHIRLEY ARAZI: \$0.35. It's \$0.35.

19 MICHAEL COLVIN: I apologize. I rounded up, I  
20 apologize. The \$0.35 per month, I'm almost certain that  
21 that is spread out across all the core and non-core  
22 customers, and I think there is a fundamental question of,  
23 when you look at the end uses for Angeles Link, they are  
24 almost all concentrated on core customer end uses. And so  
25 we should think through is it reasonable to spread that

1 cost to both core and non-core, customers, and if so, why?  
2 I want to see the pipe decarbonized. I want to see  
3 emissions reduced. I want to see hydrogen succeed. I am  
4 not saying this from a place of antagonism, but I want to  
5 make sure we are thinking through the ratemaking principle  
6 that if you use it, you pay for it. If you don't use it,  
7 you don't pay for it. Right now as you are framing  
8 Angeles Link, it is not a frame for residential and other  
9 core customer end uses. They might have the benefit of  
10 it, saying, "Hey, look, we are all benefiting from a  
11 decarbonized pipe," but I don't think we have made that  
12 case yet. That might be what this part of the processing  
13 is all for, but I would encourage you on the front end to  
14 do the calculation to say, "If we are limiting the cost of  
15 this to just non-core customers, the monthly bill impacted  
16 for them= would be something far north of \$0.35 monthly.  
17 So that way the commission can just start off by  
18 understanding, "Wait a second. In order for us to be able  
19 to do this, we're going to have to think through the  
20 limited number of customers who are going to be able to  
21 take advantage of this," even from a phase two  
22 perspective, might be limited in there might be benefit it  
23 doing the cost share in this way, and just understanding  
24 the initialization of those costs. I think that we might  
25 want to then have, during preceding, a conversation of

1 what is appropriate for core customers to be paying and  
2 not paying for. We'll have that conversation, but I think  
3 we should present the information both ways.

4 SHIRLEY ARAZI: Thank you for your comments. I want  
5 to clarify one point, just to make sure it's clear. When  
6 we're usually discussing an average bill, the \$0.35 that  
7 we talked about, that is just for the residential  
8 customer. So non-core has a pretty wide use of usage  
9 depending on what type of non-core. It is kind of  
10 difficult to do an average monthly bill for a non-core  
11 customer. So the way we usually present it, there is  
12 going to be a detailed rate schedules that you get to see  
13 the application is the \$0.35 is for the residential  
14 customer. But the way that we have proposed to do the  
15 phase two work, and, again, I want to emphasize that the  
16 ultimate cost allocation of Angeles Link itself is going  
17 to be something in the future. Absolutely. But the way  
18 we see Angeles Link as a project is really the broad  
19 benefits that you kind of alluded to. So, based on those  
20 broad benefits, we felt like the -- it's called equal  
21 cents per therm cost allocation methodology. This is a  
22 similar methodology that we used for other types of  
23 programs like Yoruba, SGIP. It's like public goods  
24 related programs. And the reason we thought this was a  
25 good one would be it is more in alignment with gas

1 consumption, and it does end up resulting in lower  
2 residential bill impacts comparatively. So, like, it's  
3 probably more like 60/40 where the non-core would pay the  
4 higher amount, but I understand what you're saying about  
5 end use and those are the types of things that we're  
6 hoping to determine little bit more in the next phase for  
7 the ultimate project itself.

8 MICHAEL COLVIN: Sure. Excited to have that  
9 conversation. I think it is -- if I were advising  
10 decision-maker at the PVC or when I go to advocate before  
11 the PVC, because we're intending to be a party to this,  
12 spoiler alert. I think there is a question on that kind  
13 of basic ratemaking of is reasonable to do this work, and  
14 is it reasonable for all customers to pay for this on a  
15 nonbypassible basis? Is it reasonable to pay for this in  
16 another creative way? Or do we limit it to  
17 nonresidential, non-core customers because they are the  
18 ones most prime to be able to benefit from it on a direct  
19 basis. And then if there's a missing money component, and  
20 do we try to figure out how to recover that from customers  
21 like a public goods charge or something else.

22 So, I'm very open to having the conversation  
23 about how the recovery occurs, but I want to make certain  
24 that we're going into it eyes wide open because if we try  
25 to peanut butter it across all customers, it sure doesn't

1 look like that much money, but I think it puts us into an  
2 awkward place where we're saying that customers are paying  
3 for something that they're not going to receive a direct  
4 benefit from, and that might not be where we want to  
5 start.

6 SHIRLEY ARAZI: Thank you.

7 MICHAEL COLVIN: I'll hand the mic over to somebody  
8 else.

9 FRANK LOPEZ: Hey, by the way, can I ask you a follow  
10 up question just on -- so you're talking about the  
11 constraints of doing outreach when you're in litigation  
12 and a proceeding, and that's a real thing. And the phase  
13 one, as you know, really constrained our ability to do  
14 outreach outside of this PAG and CBOSG process. But  
15 assuming that it does take a year or 18 months, we have a  
16 lot of momentum here. We did a really good job. Folks  
17 feel more knowledgeable about the project, and we want to  
18 socialize more of that information to communities and not  
19 necessary wait until we get a decision, right, two years  
20 from now to go out and do that. Do you have any  
21 suggestions? You don't have to answer this now, but  
22 thinking through since you're giving us some homework,  
23 give you some homework. How can we go out and do some of  
24 this work?

25 7: So there's a couple of things that can be done.

1 One is, since you said you wanted to be doing thee as  
2 publicly noticed meetings, just include in your schedule  
3 that we are going to be requesting to host publicly  
4 noticed meetings, and get them noticed on the  
5 Commissioner's daily calendar and everything else. Just  
6 do them as all-party meetings, that way, anyone that wants  
7 to show up can. Then you are fine. You might not be able  
8 to have more of that frank conversation of more frank  
9 conversation of individual party one-on-ones. And then  
10 you might have to say, "Look this more of a settlement  
11 conversation now, or now this is something else," but if  
12 you're just looking to do a quarterly update meeting, fill  
13 that into your procedural schedule and ALJ with either say  
14 "yes. This is a workshop. Go for it," or this is  
15 something where we don't need the decision-makers to be in  
16 attendance or we don't need everybody else, and so you can  
17 do it in whatever cadence you want, that's fine. But I  
18 just want to recognize that part of the power that this  
19 PAG has, and I would assume that the community-based  
20 organizations have had some very frank conversation  
21 exchange because were not in litigation mode. Once you  
22 are in litigation mode, then if you want to have some of  
23 that, then you might have to save, "Well, look, we're in  
24 settlement mode. We're in something else." You just kind  
25 of have to check some boxes. I see the regulatory folks

1 getting what I'm trying to say.

2 SHIRLEY ARAZI: Absolutely. And we've been struggling  
3 with that too because, as you know, when we're in a  
4 regulatory proceeding it is a very different form, and we  
5 don't want to lose the momentum that we've had with these  
6 groups as well, but --

7 MICHAEL COLVIN: And note that I'm not trying to  
8 stifle it in any way, I just want to make certain that we  
9 are minding our Ps and Qs, so that way --

10 SHIRLEY ARAZI: Absolutely. Yeah. And the intent,  
11 too, just to clarify is that we would commence PAG  
12 following a phase two decision. So during the regulatory  
13 process, we won't be having a formal PAG set up, it would  
14 be following the commission decision for a lot of the  
15 reasons you stated.

16 CHESTER BRITT: All right, thank you, Michael. We're  
17 going to go online to was becoming more. Online to a few  
18 people that have had their hands raised for a while, and  
19 then we'll come back into the room again. We're going to  
20 start with Lain Fisher.

21 LAIN FISHER: Hi there, this is Lain Fisher, Public  
22 Advocates Office. I think Michael just raised most of my  
23 points, frankly. So thanks, Michael, for doing my job for  
24 me. I really appreciate that. But I actually just heard  
25 two contradictory things there, so can you clarify that

1 for me? Are you going to having meetings during the  
2 commission preceding process with the public or not? That  
3 just wasn't clear because I just heard two things from  
4 you. One was saying -- please help clarify that.

5 SHIRLEY ARAZI: That's a really good question. So we  
6 are proposing a public workshop during phase two that be  
7 part of the formal proceeding, but we are not planning on  
8 conducting PAG meetings specifically during the regulatory  
9 process. We would restart that up again after phase two  
10 is approved.

11 LAIN FISHER: And the community meetings.

12 FRANK LOPEZ: We would not be holding any community  
13 public meetings while this thing is being litigated, just  
14 the public workshop will be the opportunity. We will  
15 notice it far and wide.

16 LAIN FISHER: As currently designed, there's going to  
17 be a 12- to 18-month hiatus on public outreach. That's  
18 the implication.

19 FRANK LOPEZ: Yes. In this capacity in holding formal  
20 meetings. Obviously, you know, we're a service provider,  
21 and if someone reaches out to inquire about it, we will  
22 share information about our proposal.

23 7: Okay. Thanks for that. I have one more. My  
24 other comment would be to reiterate Michael's comments  
25 regarding the timeline that I think 12 months is going to

1 be absolutely infeasible and really should consider  
2 extending it by at least another 6. Other than that,  
3 that's my comments. Thanks.

4 CHESTER BRITT: All right. Thank you. Roy, we're  
5 going to go to you next. If you could unmute yourself and  
6 introduce yourself before you make your comment.

7 ROBERT ROY VAN DE HOEK: Hello. Yes. Can you hear me  
8 okay?

9 CHESTER BRITT: Yes, we can.

10 ROBERT ROY VAN DE HOEK: Okay. This is Roy, Robert  
11 Van De Hoek, Defend Ballona Wetlands. I put a lot of  
12 comments in the chat. One of the things I was thinking  
13 about when you mentioned you've done a lot of good work,  
14 and you have in reading all the written comments, you  
15 might want to consider -- I think you should consider all  
16 the public comments that we've done orally because they've  
17 been transcribed by a court reporter, and you can address  
18 those questions. That's how I do most of my questions  
19 rather than putting in written comments, for example.  
20 Also -- well I'm going to keep it short because we want to  
21 keep going here, and I'm just going to say see all, my  
22 chat. I spent a little time putting that up there.

23 I want to say thank you to Alma. She has been  
24 very positive in helping me to be involved, and I  
25 appreciate the Andrews Group. I want to say happy

1 holidays again, and thanks to all of you for being  
2 involved. I look forward to the next phase. Yeah. I'll  
3 keep it short like that. Thanks.

4 FRANK LOPEZ: Thanks, Roy. This is Frank. I will say  
5 we actually do reference the transcription quite a bit.  
6 Obviously we're here in the meetings, and we do have the  
7 benefit of hearing them directly from you and others. And  
8 then we get the written comments, we review those  
9 line-by-line, and then we also go back to the transcript  
10 to clarify things and look at the materials. So we do  
11 make use of the transcripts.

12 ALMA MARQUEZ: Thank you, Roy. I really appreciate  
13 your engagement throughout these two years. Isaac is  
14 here, and he's called you and reminded you about every  
15 meeting, so he wants to say thank you for your attendance  
16 and listening to him when he calls. Thank you.

17 CHESTER BRITT: Thank you for attending. All right.  
18 We have Hyepin who was in person, but now she's online.  
19 That was a trick. You can unmute yourself, and we should  
20 be able to hear you.

21 HYPEPIN IM: Can hear me?

22 CHESTER BRITT: Yes, we can.

23 HYPEPIN IM: I do also want to say thank you to Lee  
24 Andrews Group for continuing reminders of meetings. So,  
25 that's that. But I just want to go back on the outreach.

1 As a member who works in the Asian-American community, a  
2 lot of times when data is seen, because there's over 50  
3 groups and 100 languages under the API umbrella, and when  
4 it's not disaggregated, it actually masks the suffering of  
5 many of the subgroups. Again, I'm not as familiar with  
6 some of the tools that you'll be using to protect the  
7 underserved communities that are going to be impacted, but  
8 I want to advocate and raise awareness that when you are  
9 looking at some of those data points, particularly with  
10 the AANHPI group, that you also consider looking at  
11 disaggregated data as well.

12 FRANK LOPEZ: Okay. Thank you for that comment. Do  
13 you have any tips on terms of the type of data,  
14 disaggregated data that you would like us to look at, and  
15 if you want to share that, you can.

16 HYE PIN IM: Well, just a couple of examples that I  
17 want to highlight, for example, the housing data. In  
18 aggregate you'll see that Asians are wide adjacent to wide  
19 homeownership. This data is maybe four years old, but  
20 you'll see that Asian data 61% to 66% wide homeownership  
21 rate, where with black and brown it's like 42 or 48. But  
22 when you disaggregated, for example, you'll see that  
23 Korean and black homeownership rate is the same, and  
24 there's seven other subgroups below the black and Korean  
25 homeownership rate and 12 under the Hispanic homeownership

1 rate. So, I'm just giving that as an example. Even with  
2 the Federal Reserve Bank, this one you don't even have to  
3 disaggregate, they looked at the financial conditions of  
4 businesses by ethnicity, and they're actually -- Asians  
5 had the largest share of the worst category. Even the  
6 next category Asians had the largest share. So, again, I  
7 think the model minority myth definitely hurts and robs  
8 the Asian community of needed investment,  
9 attention/solidarity with other communities of color. So,  
10 and also I know that President Biden has put an executive  
11 order that requires federal agencies to disaggregate API  
12 data as well. I'm just giving some examples that when you  
13 looked a little closer, it tells a completely different  
14 story. If and when you need to come, I'd be happy to try  
15 to be a resource as well.

16 CHESTER BRITT: Thank you. We're going to come back  
17 in the room now. We'll go over to Tim.

18 TIM KAMERMAYER: Thank you. Appreciate it. Just two  
19 comment --

20 CHESTER BRITT: If you could -- I'm sorry. Introduce  
21 yourself for the court reporter.

22 TIM KAMERMAYER: Tim Kamer, Director or Regulatory  
23 Affairs for Green Hydrogen Coalition, GHC. Just two quick  
24 points. One, I want toto follow up on Michael Colvin's  
25 point about jurisdiction and a possible legislative

1 vehicle. I think he's right in saying that the PUC does  
2 have jurisdiction and it's not an issue; however, an off  
3 chance that a legislative vehicle is necessary, I just  
4 want to encourage you all to really start planning and  
5 preparing for that as soon as possible because the amount  
6 of effort it takes to get something passed in the  
7 legislature these days, it's tremendous. And that's  
8 because it requires a lot of coordination, a lot of  
9 collaboration with a diverse set of stakeholders, many of  
10 which are in this room or were in this room earlier today.  
11 So that type of legislative lift is one that probably  
12 needs to get started sooner than later, and not one that  
13 comes at the end of the clock. I know the GHC would be  
14 very interested in assisting however we can, and others  
15 would be, too. But I just want to encourage you to try  
16 and get in front of that if you think you need it.

17 The second thing, highlighting the positive  
18 momentum, Frank, that you specifically talked about, and  
19 then hearing about this 12- to 18-month hiatus, I guess  
20 you can speak to is there anything that you guys view that  
21 the stakeholders can best do to prepare during this hiatus  
22 or is there something we can provide in the interim while  
23 you're waiting for this decision. I know there's the  
24 public workshop that you all plan on doing during it, but  
25 is there anything else that you might want to see from the

1 stakeholders here that would support or just help  
2 throughout this process?

3 FRANK LOPEZ: So while we are constrained in the type  
4 of outreach that we can do, all of you are not. So I  
5 would hope -- all of you are here representing  
6 organization, and you want to share it with the people  
7 that you serve all the great work that you did. If want  
8 to share information about your experience, obviously you  
9 want to share information about the studies themselves and  
10 all of those materials, I think that would be helpful  
11 because that will help us, kind of, amplify the voice and  
12 this process and reach more people while we get a  
13 decision. So, yes. Socializing the studies themselves  
14 would be helpful.

15 CHESTER BRITT: All right. Michael, did you still  
16 have your placard up? Introduce yourself, please.

17 MICHAEL BERNS: Michael Berns with California  
18 Greenworks. This is just a quick, I guess, when you asked  
19 what data. Sort of what you did just now, ask the  
20 community. So when you go into the communities, ask as  
21 much as you can, what data do you want, and get very  
22 different perspectives if you can, and then go from there.  
23 Also probably a transparent open library like how you have  
24 now. But really, it's just listening to the community in  
25 and of itself.

1 CHESTER BRITT: Thank you. All right. We're going to  
2 keep going now. We're almost through our agenda, but  
3 we're going to go to the next topic which is next steps.

4 FRANK LOPEZ: Yeah. Just to wrap things up here, in  
5 terms of next steps, this will be our final meeting.  
6 We're going to send you an e-mail communication when we  
7 file our phase two application so you know that's taking  
8 place. We're also going to do a quarterly report for Q4.  
9 So hopefully that will go out when you get another  
10 communication then. And then we'll follow up with you  
11 when we get a decision from the PUC phase two application.  
12 That might take some time, but when we do, we'll be sure  
13 to follow up with you at that time. You have all of our  
14 contact information so if you need to get hold of us for  
15 anything, please reach out. I think with that, we'll turn  
16 it over to --

17 CHESTER BRITT: We're going to turn it over to Alma.  
18 We're going to do a roundtable discussion.

19 ALMA MARQUEZ: As we move forward with today's agenda,  
20 we're almost close to the end, just want to give a shout  
21 out to our caterer who's actually local to Lynwood,  
22 Carrera Cuisine, and staff. I think they did a great job  
23 trying to feed all of us today. So thank you for that.

24 So to wrap up with the roundtable, we really want  
25 to hear from you all on what you'll be up to, what you're

1 doing and your perspective organizations for the next  
2 12 to 18 months so that we can be involved. You all  
3 having each other's contact information that we sent with  
4 the summary reports. So you have each other's information  
5 for those who gave your permission to share your e-mail  
6 with the rest of the group because you all have been a  
7 part of this process for the past 20 months or so, and we  
8 want to make sure that you all stay in touch with  
9 yourselves if you so choose to. So with that, we just ant  
10 to go ahead and pass it around the table and have anyone  
11 share what their organization is doing, and we can stay in  
12 touch, basically, since as Frank said, we can't  
13 technically reach out to you, but that way we know what  
14 you're all up to in the next 20+ years. So with that, if  
15 you want to just move your card -- name tag sideways, so  
16 we can start going around or I could maybe just start with  
17 Marcia because I know you're not shy. And share what you  
18 or your organization will be up to, and if you'd like to  
19 invite anyone to a gala that's coming up, this is a free  
20 space to share that.

21 MARCIA HANSCON: Great. Thank you. Marcia Hanscon,  
22 Ballona Wetlands Institute. First, great to be with you  
23 all. And if you haven't been to the Ballona Wetlands  
24 Ecological Reserve, which is the only state ecological  
25 reserve in all of Los Angeles County. We'd love for you

1 to come and check it out. So be in touch with me and  
2 we'll figure out a way to get you to have some time in  
3 nature because that's important for all of us. And, of  
4 course, we're going to continue to try and stop a very  
5 misguided 9-year project that would bring bulldozers in  
6 and start everything over at Ballona. That's not a good  
7 idea in our view. I know Neil and I don't always agree on  
8 that, and also I can't wait for Maryam Brown to also  
9 include the Playa Del Ray gas facility when she talks  
10 about Aliso Canyon not being needed in the future for  
11 fossil gas storage. Playa Del Ray really -- when it was  
12 first opened, to give a little history, that gas storage  
13 was the first one. There weren't a lot of people living  
14 around it. There weren't schools, churches, an ecological  
15 reserve, and now there is. We'd love to see, you know,  
16 one day maybe we can figure out a way to get your gas  
17 storage somewhere else until we're not using it. Playa  
18 Del Ray really needs to close down too, or just stop  
19 injecting the gas and let the animals be without it, and  
20 all of the people that live around it.

21 So that's a lot of the work we do is that, and  
22 teaching people about how wonderful a place with 7  
23 endangered species, and two more on the way; U.S. Fish and  
24 Wildlife Service just said this week that the Monarch  
25 butterfly should be put on the endangered species list;

1 and last month, the Fish and Game Commission said that the  
2 burrowing owls should be put on the endangered species  
3 list for the state and we have those at Ballona. So it's  
4 important for us to respect and be with and honor the  
5 other species that we live with on this planet in our  
6 view, and I hope that we can impart that to all of you as  
7 well.

8 ALMA MARQUEZ: Okay. Thank you, Marcia. Tony?

9 TONY FOSTER: You know, I don't really have any  
10 prepared comments, but I just can say that Long Beach  
11 utilities, which includes our municipal gas, is a little  
12 tiny spec in the sea of SoCal service, and we really just  
13 want to be cooperative and collaborative as this comes to  
14 the court and all their wish list, as was his city's  
15 climate action plan. I just want to note that we stand  
16 willing and ready to do whatever we can to further the  
17 decarbonization efforts, and we're very excited about the  
18 future. That's it.

19 ALMA MARQUEZ: Thank you. Michael?

20 MICHAEL COLVIN: Michael Colvin with EDF. When you  
21 ask what are we going to be up to, obviously be a party to  
22 this proceeding. We're excited for that. But I guess I  
23 focus on the five words that I think about every day when  
24 I do advocacy whether it be in formal or informal areas.  
25 I think about equitable access to an affordable clean and

1 safe energy system and trying to figure out what's the  
2 right balance between what's affordable, what's clean,  
3 what's safe and how do we ensure everybody has access to  
4 that because that's not necessarily the case. And so  
5 whenever you have trade-offs between major important  
6 concepts like that, that's when you need good policy, good  
7 advocacy. The sweet spot we try to live in. And so I'm  
8 going to be asking over the next year how is this  
9 affordable, how is this clean, how is this safe.

10 ALMA MARQUEZ: And we're listening, Michael, thank you  
11 for that. Joon?

12 JOON HUN SEONG: At the risk of being redundant, our  
13 bread and butter, as you can probably guess, is getting  
14 involved in these types of regulatory proceedings trying  
15 to find practical and natural solutions. I think for that  
16 sometimes we agree, sometimes we disagree, but dialogue is  
17 obviously important. Both of us are based in San  
18 Francisco, so if you're ever up, hit us up. Thank you.

19 ALMA MARQUEZ: Okay. So Joon is inviting us to San  
20 Francisco. Thank you for the invite, Joon. We will be  
21 there. Darian? I'm sorry if I mispronounced your name.

22 DREW PENAGRA: No worries. Drew. Drew Penagra with  
23 Green Hydrogen Coalition. I'll let Tim cover some of the  
24 more policy work, but speaking to some of the more  
25 technical initiatives, for the coming year we're working

1 on biomass to clean hydrogen effort evaluating the  
2 potential for converting biomass and organic waste to  
3 clean hydrogen in the area as a potential -- from existing  
4 sources otherwise going to landfills and not composted.  
5 That's one big effort we have going on, and potentially  
6 that could be a feedstock for the energy pipeline. So  
7 just doing a technical study on that. We're also working  
8 on some potential electrolytic hydrogen, clean hydrogen,  
9 understanding the tariff and energy costs protective cost  
10 around electrolytic clean hydrogen production, also very  
11 relevant to the Angeles Link effort, and continuing work  
12 on highlighting the potential for clean and green hydrogen  
13 within the state and the economic value and the technical  
14 potential for its production.

15 ALMA MARQUEZ: Thank you. Luis. We missed you, Luis.

16 LUIS PENA: Thank you. Luis Pena with the Los Angeles  
17 Indigenous Peoples Alliance. Wasn't really prepared for  
18 this question. Right now, what comes to my top is that  
19 we're working on developing a network of communities and  
20 youth groups where we can implement some of our  
21 curriculums, likes rights of passage curriculums, and  
22 since we work with youth, and even in my full-time work we  
23 work with youth. Badly needed because there's a lot of  
24 different confusing messages that they're receiving  
25 especially through social media. So we're just seeing how

1 we can impact that in a healthy way. And also working  
2 with a few different community gardens. I think it's  
3 important that communities have access to a healthy way of  
4 letting go of -- destressifying. Many times growing and  
5 planting and working with the land is very healing. But  
6 also, at the same time, learning how to learn some self  
7 sustainable practices where we can get away from all the  
8 technical -- this technical life that we are surrounded  
9 by, kind of, get back to nature. We have a few other  
10 things going. Working with fellowships and trying to --  
11 just bring up the capacity of community. I wouldn't say  
12 organizing per se, but community involvement within an  
13 indigenous world view framework and see what creative  
14 things we can come up with.

15 ALMA MARQUEZ: Well it sounds like you were prepared  
16 for the question, Luis. You did a good job. Thank you.  
17 Michael?

18 MICHAEL BERNS: Michael Berns California Green Works.  
19 I guess I'm in the main or biggest projects that'll be  
20 taking up my time. We have a green infrastructure program  
21 that we're doing a feasibility study this upcoming year  
22 along the Ballona Creek and the West Adams Channel. Sort  
23 of like a community green belt with a lot of water quality  
24 and quantity benefits. Planting more trees in LA County,  
25 the newest, I guess, urban canopy that we've added to has

1 been the City of Carson. We're also implementing a number  
2 of our curriculum courses in classrooms including a media  
3 and information literacy course because social media is  
4 bad for information. And then community cleanups. If  
5 anybody needs a community cleanup in their neighborhood,  
6 we'd be more than happy to stop on by. Thanks.

7 ALMA MARQUEZ: Thank you, Michael. Enrique?

8 ENRIQUE ARANDA: Thank you, Alma. Happy holidays to  
9 everyone. On behalf of Soledad Enrichment Action, I think  
10 we walk away today with a very defined coalition. We're  
11 actually working with Reimagine LA, with CRCDC in doing a  
12 capacitor analysis of opportunity youth, matching them  
13 with job creation, matching them with job creating,  
14 matching them with project labor agreements, green jobs in  
15 particular. With that said, we're looking at more  
16 involvement with ARCHES and the overall new hydrogen  
17 economy.

18 ALMA MARQUEZ: Thank you, Enrique. Rashad?

19 RASHAD RUCKER-TRAPP: Definitely with that as well as  
20 Reimagine LA, we're closing up the year with our toy  
21 drives. We've actually been on a blitz this year doing  
22 multiple -- throughout the different parts of the city.  
23 Our last one is actually going to be on the 21st where  
24 we're actually going to hit multiple spots, sort of like  
25 they Santa tour, throughout the East Los Angeles area just

1 distributing toys to different communities throughout East  
2 LA area. Looking forward to next year as we continue the  
3 work of some of our annual programs, such as our first  
4 cleanup which we like to do along the Martin Luther King  
5 corridor. So I definitely would like to make new  
6 connections with my friend over at California Greenwork.  
7 And then also just continuing great work of, not only  
8 advocacy of bringing organizations together, which is  
9 something with Reimagine LA we take enjoy and pride  
10 ourselves of doing, especially in the neighborhoods that  
11 we work in. So, once again, we thank you guys for this  
12 opportunity and space, and look forward to continuing the  
13 great work, not only on this project, but many more to  
14 come.

15 ALMA MARQUEZ: Thank you, Rashad. Tim?

16 TIM KAMERMAYER: Thank you again. Tim Kamermayer with  
17 Hydrogen Coalition. I got to say as a top line, Drew  
18 probably covered everything in a much better way than I'm  
19 going to do, so I'm going to try to add to it while still  
20 being articulate. I think that there are certain  
21 initiatives that GHC has really focused on this year.  
22 One, as Drew has noted, the biomass to hydrogen. We've  
23 been working on a study with some of our partners that  
24 really lays out some of the unique benefits and  
25 opportunities for biomass literally in Los Angeles. The

1 report is going to show how a lot of how our has been in  
2 LA and studies they've done, which I think can really help  
3 this group during phase two if you think about some of the  
4 other ancillary benefits that are going to be brought to  
5 the table. Additionally, from a policy making standpoint,  
6 GHC views itself as an educational nonprofit really  
7 focused on advocacy around clean renewable hydrogen. So  
8 our focus this year, as you're probably aware, there's 36  
9 new legislatures in the California Legislature.  
10 Thirty-six new spots and those are 36 new opportunities to  
11 kind of break down the myths of renewable hydrogen. We  
12 talk a lot about affordability, and I think with most of  
13 us in this room understand you have to look at  
14 affordability, not just as the status quo, but in the long  
15 term. Because if you're just looking at it in the near  
16 term, it's not always going to pencil out, there probably  
17 is a cheaper resource available. But when you're talking  
18 about reaching the state's 2045, 2050 decarbonization  
19 goals, it's going to take planning and preparation that  
20 economically does make sense when you get to later on down  
21 the road, and so some of that return on investment, you  
22 know, GHC's really going to be working on explaining what  
23 seems maybe less affordable in the now becomes a lot more  
24 affordable if you build the foundation and bring it to  
25 scale. Scale green hydrogen really has an opportunity not

1 just for long duration storage, not just for addressing  
2 landfills, but also providing displaceable firm capacity  
3 in a way that if we're going to get to those 2045 goals,  
4 we really need to address that last 10- to 15%. It's easy  
5 to address climate change when you're picking the low  
6 hanging fruit, but once you start trying to get to the  
7 very top of it, it requires a lot of resources and a lot  
8 of tools. So I think our efforts this year are going to  
9 be not only breaking down some of those myths, educating  
10 about the powers of renewable hydrogen, but also working  
11 on a legislative side that creates a better, I would say,  
12 framework and regulatory certainty so that as y'all are  
13 doing your stuff in the commission, there's being that,  
14 kind of, assistance on our side as well.

15 ALMA MARQUEZ: Thank you, Tim. Just to keep us going  
16 with the agenda, if folk that are joining through Zoom  
17 could just put in the chat anything that you want to  
18 highlight, what you have going on in your organization,  
19 that would be very helpful. And with that, we're going to  
20 go ahead and send it over to -- I'm sorry. We have a  
21 question from Tyson.

22 CHESTER BRITT: We're going to unmute Tyson and let  
23 him ask his question.

24 TYSON SIEGELE: Hi, Tyson Siegele. Today I am  
25 representing the Utilities Consumers Action Network. I

1 appreciate the opportunity to share what we're working on.  
2 Sort of like what Michael and Joon said, we at the  
3 Utilities Consumers Action Network represent communities  
4 and customers at the commission, and so we have numerous  
5 proceedings that we work on. We're going to be  
6 participating in phase two. What we really have been  
7 seeing recently is that cost-effective and clean are often  
8 times going hand-in-hand and we really see -- all of our  
9 analysis has pointed in the direction of electrification  
10 or most, if not all, end uses as the most cost-effective  
11 way to decarbonize. We are, of course, going to continue  
12 to complete additional analyses, calculations and advocate  
13 for customers. We are really concerned about the cost of  
14 electricity, the cost of gas in California right now.  
15 SDG&E, SoCalGas' sister company is charging 2.2 times more  
16 for electricity than Sacramento customers are charging.  
17 So that's one of the things that we are hoping to address  
18 in the upcoming coming year. Making sure that all  
19 customers in California, all energy customers in  
20 California have reasonable rates. So, thank you.

21 CHESTER BRITT: Thank you. All right. We are now  
22 almost done. I'm going to pass it over to Neil. He's the  
23 Chief Clean Fields Officer for SoCalGas, and he should be  
24 familiar to you. He's visited many of our meetings and  
25 made many presentations and answered questions, but we're

1 going to turn it over to him to give us some closing  
2 remarks.

3 NEIL NAVIN: Okay. Great. Thanks very much,  
4 everybody. I'm just going to go through a few things  
5 here, and mostly it's to thank you. As it's been  
6 mentioned, we've spent 18+ months together going through  
7 multiple meetings. Many of you, again, have been at each  
8 and every one of these meetings. I've had an opportunity  
9 to speak to most of you. We've spent over 100 hours  
10 together talking through these issues, and if you multiply  
11 that by the numbers of people in the room and online,  
12 that's a great deal of collaboration and collaborating  
13 time to think about the issues and think about them from  
14 perspectives. We produced over 3200 pages of reports.  
15 We've had seven quarterly reports that, again, not only  
16 detail the work we've done, abut it memorialized the  
17 comments that you made and these efforts. We appreciate  
18 the advocacy that you've undertaken for your community as  
19 you've sat in these meetings, and it's important,  
20 especially as Michael reminds us, we need to ask questions  
21 of the community as we think about the way we start to  
22 deliver energy in the future. We believe firmly that  
23 Angeles Link has the potential to be the cornerstone for  
24 Southern California's clean energy economy to decarbonize  
25 those parts of the economy that are most difficult, and I

1 think we mentioned earlier on that all of the low-hanging  
2 fruit is already been decarbonized. And it's time now to  
3 concentrate on those things that are a little more  
4 difficult.

5 I'll close out with a few more statements  
6 including one more quote from Rumi, who's a Persian poet  
7 many of you know. Rumi said, "Trade expectations for  
8 appreciation and the world changes." And I think we all  
9 came into this process with certain expectations. We  
10 exchanged frank and direct views of our perspective, but I  
11 think we really have started to change the conversation  
12 about energy. So I am really confident that this last 18+  
13 months has helped the company, SoCalGas, think about the  
14 work we do in a different way. And we remain committed to  
15 taking SoCalGas towards a decarbonized future along with  
16 significant electrification in the economy, but using  
17 Angeles Link as a way to help southern and central  
18 California decarbonize those hardest-to-electrify and  
19 hardest to abate parts of the economy. Again, I want to  
20 thank you for your time. These have been long meeting,  
21 but I personally have gained from this, and I know that  
22 all of the folks on my team and my boss, Maryam Brown,  
23 have gained significantly from the input you've provided.  
24 Again, thank you to our coordinators. You guys have done  
25 a great job, both of you. And I wish you well for the

1 holidays and a safe 2025.

2 FRANK LOPEZ: Thank you, Neil. If you don't mind,  
3 I'll piggyback off your comments. I also want to thank  
4 all of you for taking the time to participate in this  
5 process with us over the last 20 months. Most of you here  
6 today and those of you online you tend to interact with  
7 all of us up here, but I want to acknowledge the dozens of  
8 people behind the scenes who made this entire phase one  
9 process possible. On Chester and Alma's team several  
10 folks that are back there that you see at meetings they do  
11 a great job. Thank you for doing a fantastic job of  
12 facilitating these meetings and making everyone not want  
13 to fall asleep. And then to the SoCalGas family, too. We  
14 have dozens of people who never get to be up here but do  
15 tremendous work to do all of the studies work, to review  
16 all of the materials to prepare us for these  
17 presentations. So thank you to the SoCalGas family who  
18 help support this as well.

19 CHESTER BRITT: All right. Now comes the party,  
20 right? So Alma, if you want to explain what we're going  
21 to be doing.

22 ALMA MARQUEZ: Yes. We have a mini reception for  
23 those who are able to stay back and speak to our amazing  
24 subject matter experts that are here as Frank mentioned  
25 that made all the presentations possible. We have some

1 homemade flan and cake in the back. Unfortunately,  
2 SoCalGas could not pay for libations because they are a  
3 public utility commission, so they are not able to. Just  
4 think in your mind that you're having -- instead of  
5 horchata, it's horchata and rum, and water is something  
6 else. Just kidding. Thank you all again for being here  
7 with us and to the City of Lynwood for providing us this  
8 space. Apologies for the heater. I hear it clonked out a  
9 bit earlier today, so it's a 1950s building, so we have to  
10 bear with it. Thank you again for your time, and I hope  
11 some of you are able to stay back and hang out with us.  
12 Thank you.

13 CHESTER BRITT: At the very end it disconnects after  
14 we give them all the credit. I just want to say thank  
15 you. I've been a part of all the meetings, and as a  
16 facilitator you never know what kind of reception you're  
17 going to get, how they're going to treat you, if you're  
18 going to follow the rules or not, and you guys have been  
19 nothing but gracious to us. We have, I'll speak for Alma  
20 and I, have had the great privilege of being part of these  
21 two groups and doing this process with you guys. And so I  
22 just want to give you guys credit for, again, being  
23 respectful of each other and having the conversations we  
24 needed to have. Let's enjoy ourselves. Let's enjoy the  
25 holidays. You guys be safe with your families and friends

1 and this concludes our phase one meetings. Again, thank  
2 you for being here in person. Those of you who are  
3 online, we are going to miss you in saying goodbye to you  
4 in this celebration, but we thank you for participating  
5 online as well. Thank you very much.

6 (The meeting concluded at 1:37 p.m.)  
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1 REPORTER'S CERTIFICATION.

2  
3 I, Stephanie Nelson, a Hearing Reporter of the  
4 State of California, do hereby certify:

5  
6 That the foregoing proceedings were taken before  
7 me at the time and place herein set forth; that a record  
8 of the proceedings was made by me, which was thereafter  
9 transcribed under my direction; that the foregoing  
10 transcript is a true record of the testimony given.

11  
12 I further certify I am neither financially  
13 interested in the action nor a relative or employee of any  
14 attorney or party to this action.

15  
16 Dated: December 24, 2024

17  
18   
19 Stephanie Nelson  
20 Hearing Reporter

<hr/> <b>\$</b> <hr/>	<b>12%</b> 21:25	<b>250</b> 9:20,21	<hr/> <b>6</b> <hr/>
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## **Appendix 5 - PAG and CBOSG Meeting Materials**

## DECEMBER MEETING AGENDA

### 10:00 AM – 2:00 PM

- Arrival and Continental Breakfast
- SoCalGas Safety Moment, Land Acknowledgement, & Roll Call
- SoCalGas Executive Welcome
- Angeles Link Phase 1 Summary of Studies
  - Member Discussion
- Summary of PAG & CBOSG Process
  - Member Discussion
- Lunch
- Angeles Link Phase 2 Update
  - Member Discussion
- Next Steps
- Roundtable Discussion
- Closing Executive Remarks
- Adjourn/Reception

December 17, 2024  
10:00 a.m. – 2:00 p.m.



A N G E L E S L I N K

## **Community Based Organization Stakeholder Group (CBOSG) & Planning Advisory Group (PAG) December Meeting**

Warm welcome to our participants!  
We will be starting at 10:00 a.m.  
to make sure everyone is present.

Appendix 5: Page 2 of 38



# WELCOME FROM OUR FACILITATOR



ANGELES  
LINK



**CHESTER BRITT**

Executive Vice President  
Arellano Associates  
PAG Lead



**ALMA MARQUEZ**

Vice President Gov. Relations  
Lee Andrews Group  
CBOSG Lead

# HOUSEKEEPING



This meeting will be recorded (video and audio), and a court reporter will be transcribing the meeting. Please announce yourself before you speak



Zoom microphones are muted by the host to eliminate background noise. You will need to unmute your microphone when called on to speak. *For both in-person and on-line participants please speak directly into the microphone to ensure everyone can hear*



We encourage you to turn on your cameras so we can better engage with you



Please feel free to use the Zoom chat to provide input and ask questions throughout the meeting



If you would like to speak, please use the "Raise Hand" button at the bottom of the Zoom screen



Wireless microphones will be passed to those speakers attending in person

# AGENDA



- » Arrival and Continental Breakfast
  - » SoCalGas Safety Moment, Land Acknowledgement & Roll Call
  - » SoCalGas Executive Welcome
  - » Angeles Link Phase 1 Summary of Studies
    - Member Discussion
  - » Summary of PAG & CBOSG Process
  - » Lunch
- 
- » Angeles Link Phase 2 Update
    - Member Discussion
  - » Next Steps
  - » Roundtable Discussion
  - » Closing Executive Remarks
  - » Reception

# SOCALGAS SAFETY MOMENT



ANGELES  
LINK



**OLGA QUINONES**

Media Relations and Strategic  
Engagement Project Manager  
SoCalGas



# LAND ACKNOWLEDGEMENT & ROLL CALL

# SOCALGAS EXECUTIVE WELCOME



ANGELES  
LINK



**MARYAM BROWN**

President  
SoCalGas

# ANGELES LINK PHASE 1 SUMMARY OF STUDIES



ANGELES  
LINK



**YURI FREEDMAN**  
Senior Director  
Business Development



**AMY KITSON**  
Angeles Link Director  
Engineering & Technology

# PHASE 1 STUDIES



## VIABILITY

1. Demand
2. Production
3. Water
4. Options and Alternatives
5. Cost Effectiveness



## TECHNICAL

6. Safety
7. Sizing and Design
8. Routing/Configuration
9. Leakage
10. Permitting
11. Environmental

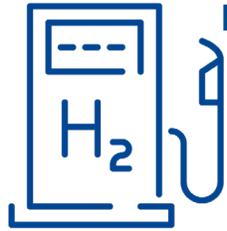


## PUBLIC INTEREST

12. GHG
13. NOx
14. Workforce
15. Affordability Framework
16. ESJ Plan



# VIABILITY



## Demand - Takeaways

Total Addressable Market (TAM) is projected to be between

**1.9 - 5.9 MMT/year**

for clean renewable hydrogen

Angeles Link is designed to transport between

**0.5 & 1.5 MMT/year of the TAM**



## Demand - Feedback

Added Section 5 to compare SoCalGas's forecasts with key studies, including

**CARB, CEC, UC Davis, and the National Petroleum Council.**

Section 6 clarifies that Angeles Link's throughput is a subset of the

**Total Addressable Market.**



## Production - Takeaways

**1.5 MMT/year** of clean renewable hydrogen throughput requires

**~39 GW**

of solar capacity and

**~240,000 acres of land**



Hydrogen production represents

**~12% (240,000 acres)** of the total land area

identified within the target production areas



## Production - Feedback

Footnote was added to address stakeholder feedback on additional land constraints for hydrogen production.





## Project Options & Alternatives - Takeaways

Angeles Link emerged as the **best suited and least cost option** to deliver clean, renewable hydrogen at scale. Clean, renewable hydrogen delivered by Angeles Link is a **competitive and viable decarbonization pathway** compared to electrification and CCS.

## Project Options & Alternatives - Feedback

In response to stakeholder feedback, the study clarified in the that Angeles Link is intended to be **scalable** and serve both the lower, near-term demand in the 2030s and higher, long-term demand post 2045. While trucking may be used for certain last mile delivery solutions, pipelines allow for **greater throughput volumes over longer distances** offering economies of scale and lower costs which increase the likelihood for adoption.

## High Level Economics & Cost Effectiveness - Takeaways



Angeles Link **offers the most cost-effective solution to transport clean renewable hydrogen** to serve Central and Southern California, including the L.A. Basin, at scale.

Found to be **cost effective** relative to electrification and CCS as alternative decarbonization pathways for certain hard-to-electrify industrial sectors, dispatchable power generation, and medium- and heavy-duty transportation.

## High Level Economics & Cost Effectiveness - Feedback

Added **Section 7.5.2** to assess using **High Voltage Direct Current (HVDC)** for in-basin electricity transmission.



Updated **Key Findings** to clarify hydrogen purification costs and explain storage assumptions from early demand to market maturity.

# GHG AND AIR QUALITY

## GHG - Takeaways



Mobility, power generation, and hard-to-electrify industrial sector GHG emissions are **significantly reduced by approximately:**

**4.5-9.0 MMT/yr**

when fossil fuels are replaced by clean renewable hydrogen.

The equivalent of the annual GHG emissions of removing approximately



**725,000 –  
1,000,000**

**gasoline passenger vehicles off the road per year**

## GHG - Feedback

- » Estimated GHG emissions reductions account for hydrogen leakage using volumetric estimates
- » Applied a range of estimated Global Warming Potential values

## NOx - Takeaways

Meaningful improvement in regional air quality due to

**~3,800-5,200 TPY**

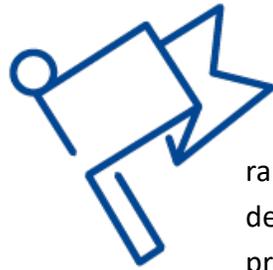
of avoided NOx emissions in addition to reductions of diesel particulates.



## NOx - Feedback

Prepared maps geographically depicting anticipated NOx emission reductions

# SAFETY AND WORKFORCE



Hydrogen Safety Panel peer-reviewed study identified

## Safety Requirements

ranging from material selection and pipeline design to monitoring and emergency response protocols, which forms a comprehensive framework to mitigate risks associated with hydrogen transport.

## Safety Management System

Incorporating hydrogen into existing framework for managing safety holistically through the integration of various safety management activities.



## Enterprise Risk Management

Expand systemic approach that is comprehensive and iterative in nature, and designed to identify, manage, and reduce risks and help prevent or mitigate safety incidents, to employees, contractors, or the public

## Applicable Safety Regulations, Codes, & Best Practices

- » Leverage existing requirements, modify, and create new safety practices according to the unique physical and chemical properties of hydrogen.
- » Incorporate and continue collaboration with the Center for Hydrogen Safety and the Hydrogen Safety Panel's expertise.



Construction could create

**75,000 jobs**

direct, indirect & induced

and existing workforce capable of safely operating infrastructure with training.

**53,000**

direct construction jobs

**23,000**

Diverse Bus Enterprise Jobs



# ESJ PLAN AND SCREENING

## ESJ Plan - Takeaways



### **2** CBOSG breakout sessions (September 2023 and July 2024)

held to inform development of Angeles Link

Developed in response to stakeholder feedback  
Provides a framework for engaging **ESJ Communities**.

Includes mechanisms SoCalGas may leverage to build relationships with important stakeholders and ESJ communities



### ESJ Plan - Feedback

- » Engagement Mechanisms vs. Strategies
- » Revision to ESJ Plan Goals
- » PAG/CBOSG membership roster added
- » Clarified federally recognized tribes and tribal organizations to be engaged in Phase 2
- » Emphasized education and direct community engagement

## ESJ Screening - Takeaways



### ESJ Screening intended to assist SoCalGas in identifying DACs/ESJ communities along preferred routes

Provides community profile; census tract statistics; disadvantaged communities; socioeconomic conditions; public services; and minority/ethnicity/languages spoken

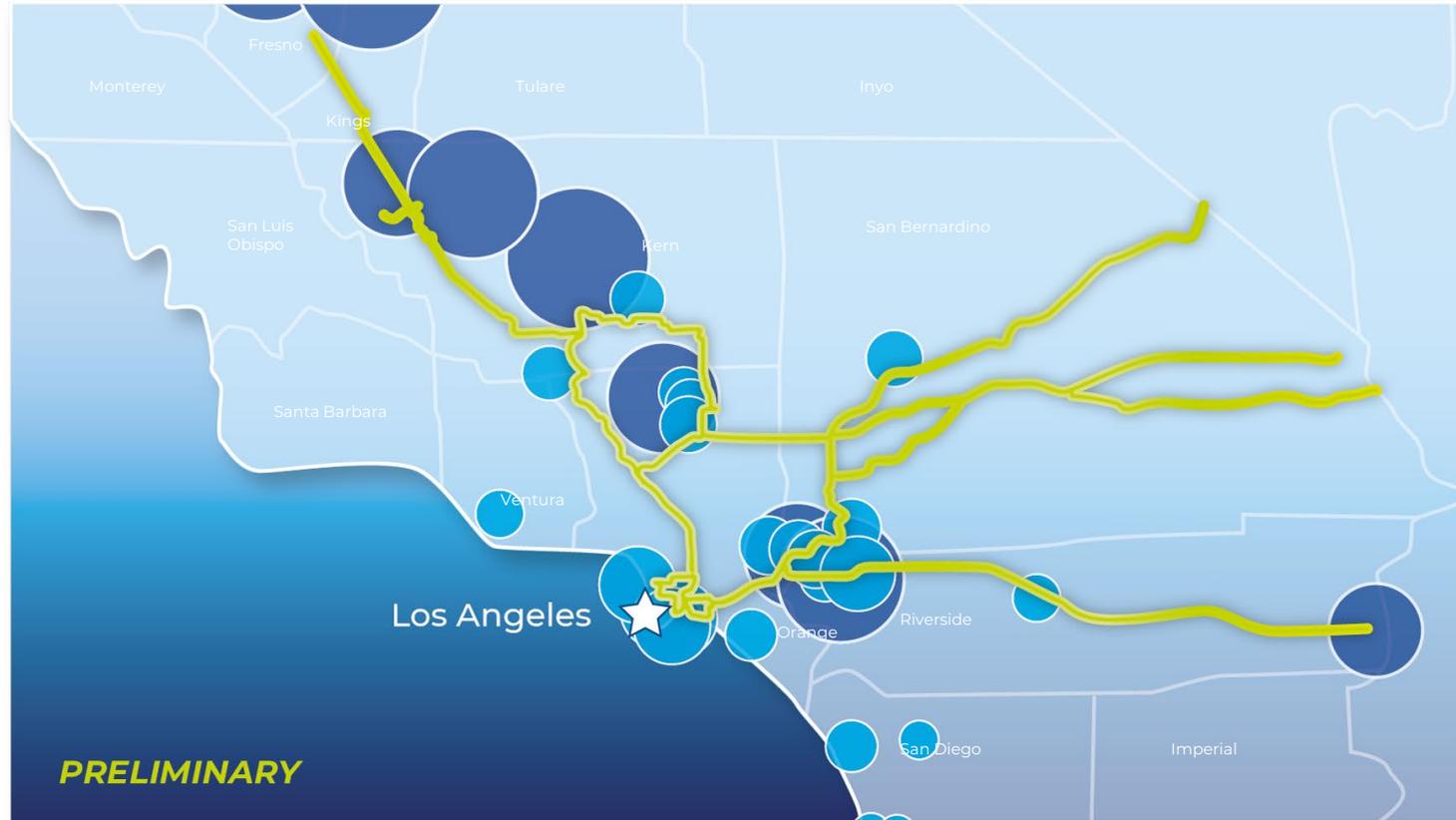
To be leveraged in **Phase 2** to support stakeholder engagement efforts

### ESJ Screening - Feedback

- » City information added to CalEnviroScreen census tract tables
- » Languages spoken in areas crossed by evaluated segments added
- » Data from the Community Development Index Tool (CRCD and USC) added for all relevant census tracts
- » Justification for indicator data used added
- » CalEnviroScreen overall percentile and pollution burden percentile added to DAC designation data tables
- » Addition of overview map of evaluated conceptual pipeline route segments

# ARCHES & ANGELES LINK: AN INTEGRATED NETWORK

## 1,300 MILES OF POTENTIAL ROUTE CONFIGURATIONS STUDIED



- » When combined, initial route configurations studied traversed approx. 1,300 miles
- » Angeles Link is anticipated to be approximately 450 miles

- ARCHES Offtake Sites
- ARCHES Production Sites

ARCHES Production and Offtake sites are from the ARCHES Fact Sheet, October 2023

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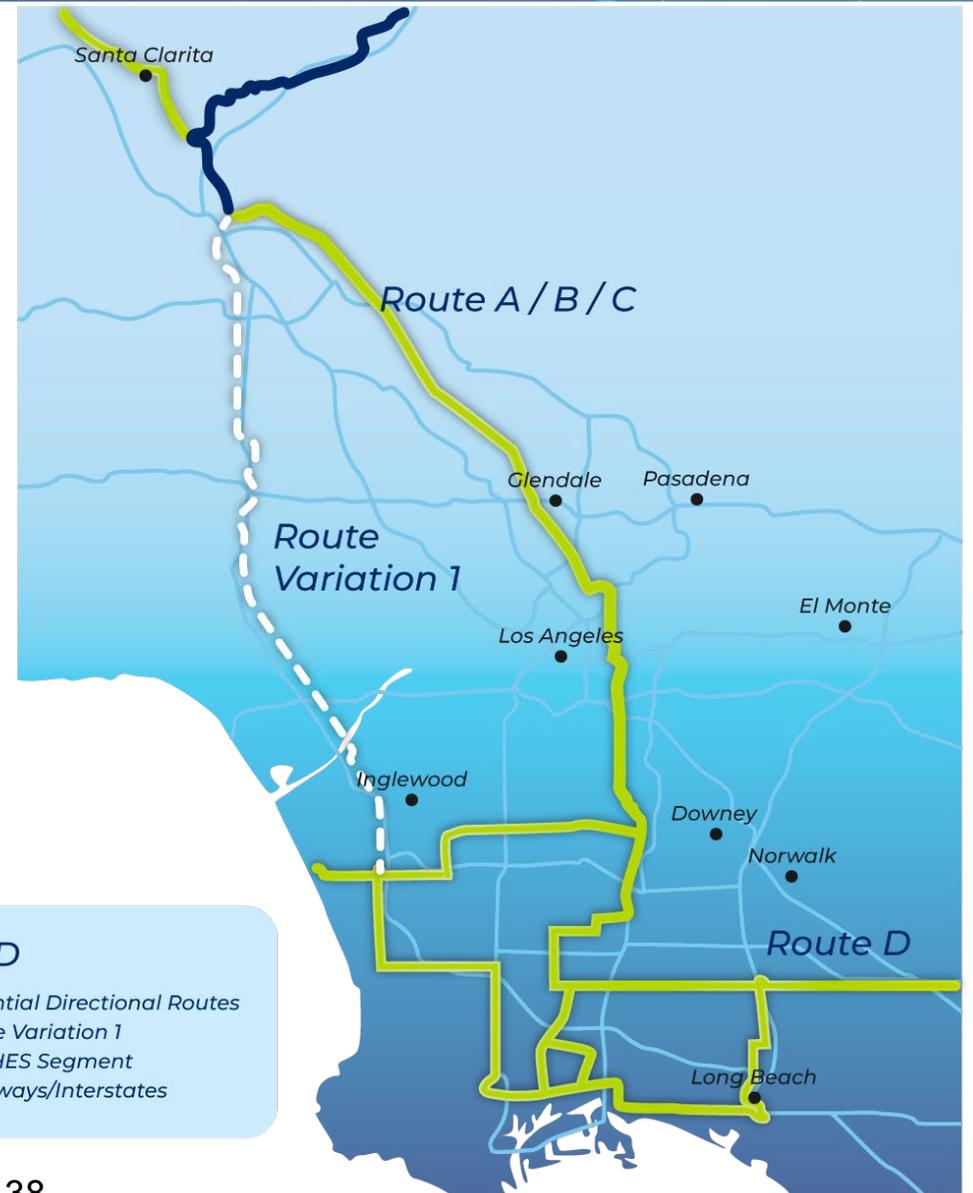
These renderings illustrate conceptual preferred route options for Angeles Link. The routing of the pipeline system will be optimized through further detailed siting analysis, considering environmental, social, and technical factors to minimize impacts and enhance operational efficiency.



ANGELES LINK

# ANGELES LINK POTENTIAL DIRECTIONAL ROUTES

Four potential directional routes and 1 route variation identified



**LEGEND**

- Potential Directional Routes
- Route Variation 1
- ARCHES Segment
- Highways/Interstates

Potential directional routes are subject to change and will be further analyzed (e.g., for hydraulics, engineering, production, demand, etc.).



## MEMBER DISCUSSION: ANGELES LINK PHASE 1 SUMMARY OF STUDIES

- Please announce your name and speak directly into the microphone
- Be concise and focus on discussion topics
- Verbal comments are not the only way to provide input, feel free to type a chat

# SUMMARY OF PAG & CBOSG PROCESS



ANGELES  
LINK



**FRANK LOPEZ**

Regional Public Affairs Director  
SoCalGas

# PAG/CBOSG Participating Organizations

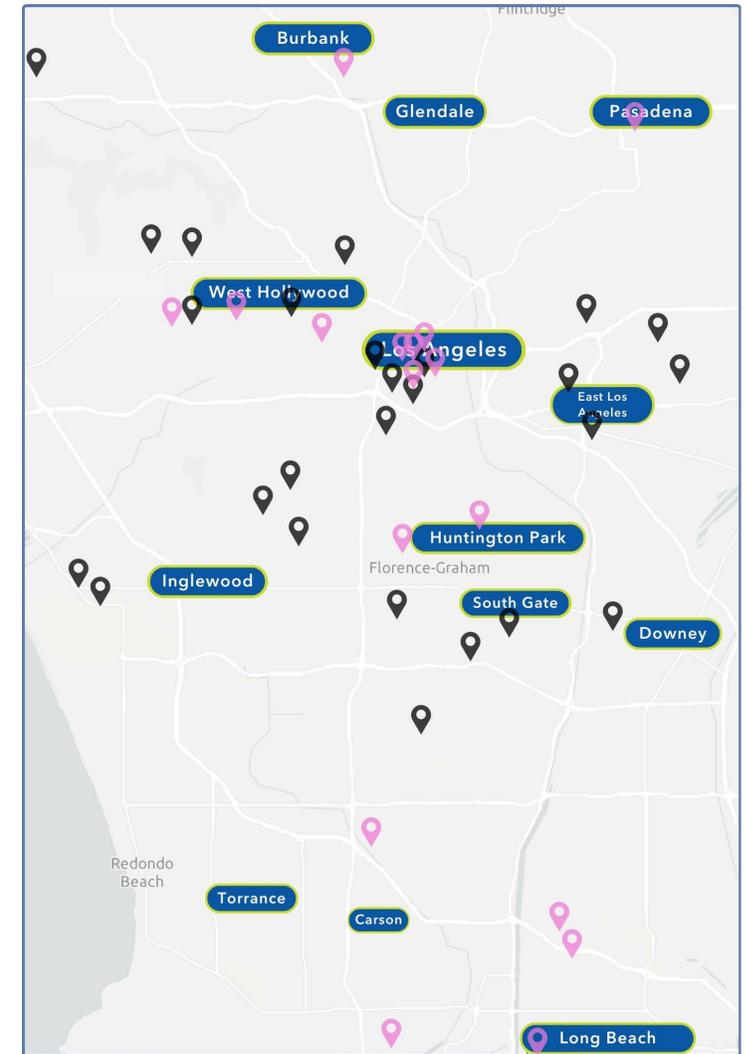
This slide highlights the organizations comprising the PAG and CBOSG, along with a map pinpointing the locations of their headquarters across Los Angeles County.

## PLANNING ADVISORY GROUP

- Agricultural Energy Consumers Association\*
- Air Products\*
- ARCHES
- Bizfed
- Bloom Energy\*
- California Air Resources Board\*
- California Energy Commission\*
- California Hydrogen Business Council\*
- California Manufacturers and Technology Association\*
- California Water Data Consortium\*
- City of Burbank
- City of Long Beach - Long Beach Water
- City of Long Beach - Utilities
- Clean Energy
- Clean Energy Strategies representing the Utility Coalition\*
- Communities for a Better Environment
- Earth Justice\*
- Energy Independence Now
- Environmental Defense Fund\*
- Environmental Justice League\*
- Fernandeno Tataviam Band of Mission Indians\*
- GoBiz\*
- Green Hydrogen Coalition\*
- Harbor Trucking Association
- Independent Energy Producers Association\*
- International Longshore and Warehouse Union Local\*
- Local Union 250
- Los Angeles Department of Water and Power
- Metropolitan Water District\*
- Natural Resources Defense Council\*
- Pasadena Water & Power
- Port of Los Angeles\*
- Protect Our Communities Foundation\*
- Reimagine LA
- Sierra Club
- South Coast AQMD\*
- Southern California Water Coalition
- Southern California Association of Governments
- Southern California Generation Coalition
- Southern California Leadership Council
- Southern California Pipe Trades
- Southern California Public Power Authority\*
- The United Association\*
- UC Davis Institute of Transportation Studies\*
- UC Davis Sustainable Transportation Energy Pathways\*
- UCI Advanced Power and Energy Program\*
- University of California, Riverside\*
- Utility Reform Network (TURN)\*
- Utility Workers Union of America 483
- Utility Workers Union of America Local 132\*

## COMMUNITY-BASED ORGANIZATION STAKEHOLDER GROUP

- Alma Family Services
- Ballona Wetland Institute
- Breathe Southern California
- California Greenworks
- California Native Vote Project
- Chinatown Service Center
- Climate Action Campaign
- Coalition for Responsible Community Development (CRCD)
- Communities for a Better Environment
- Comunidades Indigenas en Liderazgo (CIELO)
- Defend Ballona Wetlands
- Faith and Community Empowerment (FACE)
- Food and Water Watch
- Go Green Initiative
- Greater Zion Church Family
- LA Black Workers Center/Care at Work, UCLA Labor Center
- Little Tokyo Community Council (LTCC)
- Los Angeles Indigenous People's Alliance
- Mexican American Opportunity Foundation (MAOF)
- Nature for All
- Parents, Educators/Teachers, and Students in Action (PESA)
- Physicians for Social Responsibility-Los Angeles
- Protect Playa Now
- Reimagine LA Foundation
- Soledad Enrichment Action (SEA)
- Southside Coalition of Community Health Centers
- Vote Solar
- Watts Labor Community Action Committee
- Watts/Century Latino Organization
- YMCA of Greater Los Angeles



# Phase 1 Process Update

Since March 2023, SoCalGas also made process improvements to enhance stakeholder engagement and transparency in response to member requests, including:

- » **Virtual Meeting Options:** All meetings offered virtual attendance to increase accessibility.
- » **Expanded Membership:** Stakeholders were invited to suggest new group members, broadening participation.
- » **Advance Distribution of Meeting Materials** Materials were provided at least one week in advance, with a goal of two weeks.
- » **Extended Comment Periods:** Comment deadlines were extended as needed, ensuring stakeholders had ample time to review materials and provide feedback.
- » **Improved Communication:** Introduced a deadline matrix for clear communication of comment submission timelines.



# PHASE 1 ACTIVITIES

## SINCE CPUC APPROVED ANGELES LINK MEMORANDUM ACCOUNT APPLICATION (DECEMBER 2022):

Received  
**100+**  
COMMENT LETTERS  
from PAG and CBOSG

Reviewed and responded to  
**1,000+**  
PAGES  
of comments

Conducted  
**16**  
STUDIES  
includes multiple feasibility studies,  
an Affordability Framework, and an ESJ plan

**FEASIBILITY STUDIES**  
which collectively span  
**2,500+**  
PAGES  
covering a wide  
range of topics

## TOP FIVE STAKEHOLDER PRIORITIES BASED ON FEEDBACK

SAFETY

HEALTH

COST

WORKFORCE  
DEVELOPMENT

ROUTING /  
ENVIRONMENTAL

**70** PARTICIPATING ORGANIZATIONS  
**PLANNING ADVISORY GROUP (PAG)**  
offers technical advice and feedback  
**42**  
PAG

+

**COMMUNITY BASED ORGANIZATION  
STAKEHOLDER GROUP (CBOSG)**  
provides community feedback  
**28**  
CBOSG

**27** TOTAL MEETINGS

**14** Quarterly  
Meetings

**13** Workshops



## MEMBER DISCUSSION: SUMMARY OF PAG/CBOSG PROCESS

- Please announce your name and speak directly into the microphone
- Be concise and focus on discussion topics
- Verbal comments are not the only way to provide input, feel free to type a chat



# LUNCH

# ANGELES LINK PHASE 2 UPDATE



ANGELES  
LINK

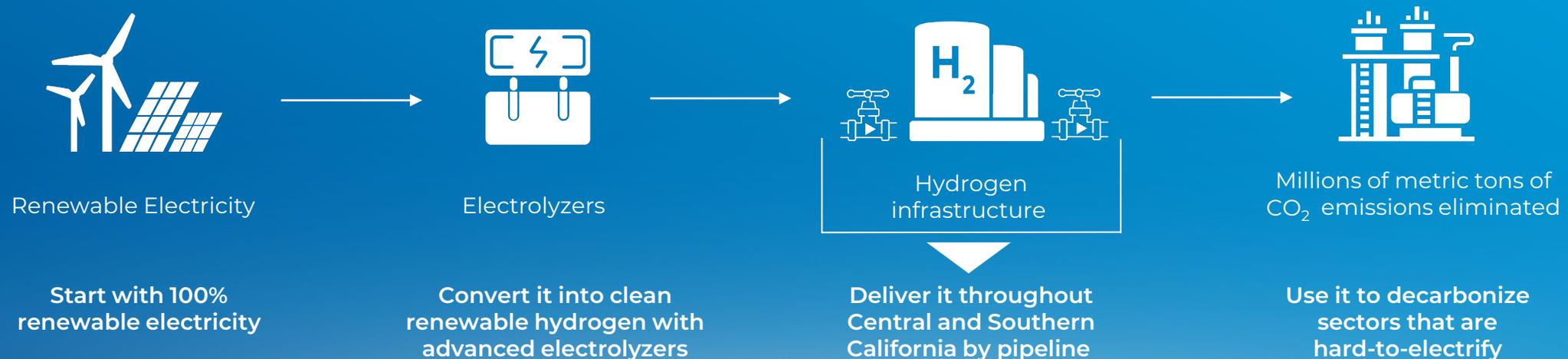


**SHIRLEY ARAZI**  
Angeles Link Director  
Regulatory & Policy

# ANGELES LINK AS ENVISIONED TODAY

- » An open access ~450-mile **pipeline system** that is dedicated to public use
- » Would transport clean renewable hydrogen<sup>1</sup> from regional third-party production and storage sites to end users in Central and Southern California
- » Includes two pipeline segments (San Joaquin Valley and North LA County) identified by ARCHES
- » Serving clean electric generation, transportation, manufacturing/industrial sectors
- » Sized for an annual total throughput of approximately 0.5 to 1.5MMT over time
- » May be constructed in stages

<sup>1</sup> For purposes of Angeles Link, per CPUC directives, clean renewable hydrogen is defined as that which does not exceed a standard of four (4) kilograms of carbon dioxide equivalent produced on a lifecycle basis per kilogram of hydrogen produced and does not use fossil fuel in its production process.



# PHASE 2 APPLICATION OVERVIEW

## What it is:

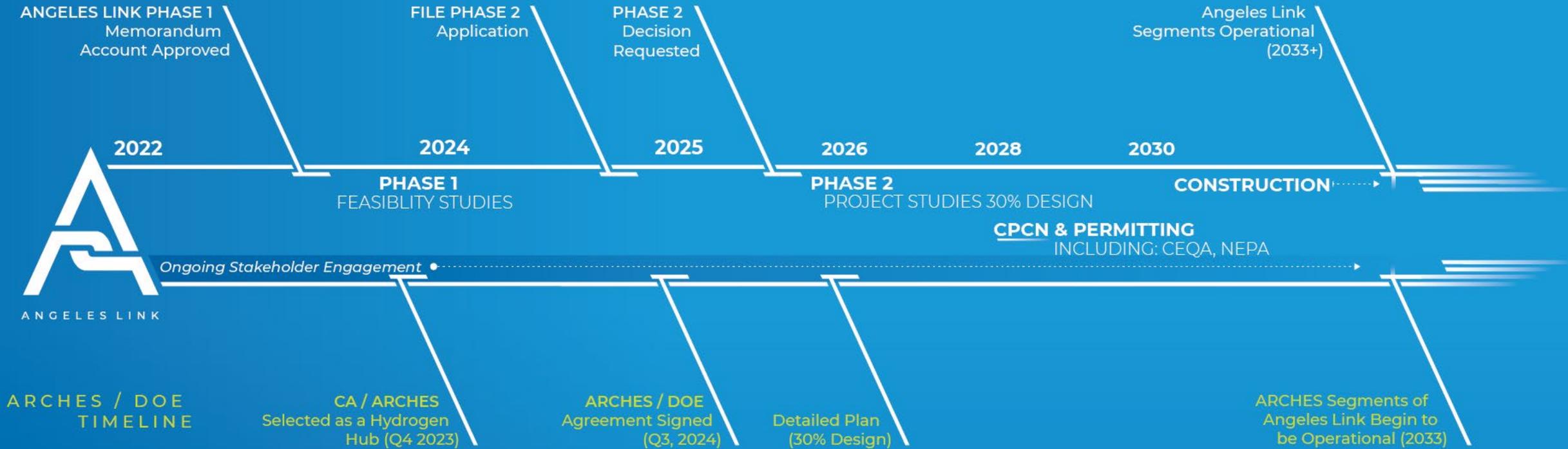
- » Build upon Phase 1 activities
- » ~\$266 million estimated cost
- » Identify preferred system route and refine engineering
  - » Siting, technical, and design analysis
  - » System evaluation and modeling
  - » 30% engineering design
- » Evaluate topics such as:
  - End user and producer requirements
  - Environmental analysis
  - Safety
  - Workforce planning
- » Advance and align timing with ARCHES' schedule
- » Expand stakeholder community outreach
- » Forecasted 30-month schedule after CPUC decision
- » Cost recovery
- » Refined analyses will inform affordability assessments and opportunities

## What it is NOT:

- » Procurement of materials
- » CEQA or NEPA review
- » Obtaining permits and entitlements
- » Construction



# CONCEPTUAL ANGELES LINK TIMELINE



ESTIMATED AS OF DECEMBER 2024



# PROPOSED CPUC APPLICATION PROCESS FOR PHASE 2

## APPLICATION MILESTONES

## ANTICIPATED TIMING

File Phase 2 Application	----->	Est. Dec 2024
Intervenor Protest Period	----->	Early 2025
Prehearing Conference	----->	Scheduled by Administrative Law Judge
Public Workshop	----->	Est. Q1 2025
Proposed Decision Issued & Intervenor Comments	----->	Est. Q4 2025
Final Decision	----->	Est. Q4 2025

# PROPOSED STAKEHOLDER ENGAGEMENT: PHASE 2



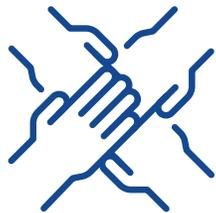
» SoCalGas will continue to meet with and solicit feedback from a PAG on Phase 2 activities at key milestones.



» Phase 1 PAG and CBOSG members would be invited to participate in Phase 2 PAG. Membership would be expanded to include broader set of stakeholders



» SoCalGas would hold hybrid and virtual public meetings to solicit feedback from communities on route selection and alignment, including EJ and tribal communities



» SoCalGas would leverage its Phase 2 stakeholder engagement activities to gather input on the future development of a community benefits plan for Angeles Link.

# HOW TO STAY INFORMED AND ENGAGED IN THE REGULATORY PROCESS

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- 4 [Speak at a Meeting](#)



Submit a Letter

Appendix 5: Page 31 of 38

## How to Become a Party in a Proceeding

### What Does it Mean to be a Party in a Proceeding?

A Party is a person or organization that is formally and directly involved in the decision-making process.

Participating as a formal party in a proceeding of the California Public Utilities Commission (CPUC) is the best way to influence decisions. Formal participation as a party comes with rights and responsibilities.

**As a party you have the right to:**

- Present evidence and witnesses to strengthen your position.
- Obtain information from other parties.
- File relevant motions, petitions, objections, and briefs.

**As a party you must:**

- Make witnesses available for cross-examination when witnesses have presented testimony.
- Serve documents on all parties.
- Respond to data and information requests from other parties.
- Fully disclose on whose behalf the filing is made, and fully disclose the interests of such persons or entities during the proceeding.
- Demonstrate that your perspective will be relevant to the proceeding's issues.



Become a Party  
in a Proceeding

# ANGELES LINK WEBSITE

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## Angeles Link



Feedback



SoCalGas plans to phase out the use of the Living Library at conclusion of Angeles Link Phase 1. The Living Library will remain accessible to all members until **Friday, December 27, 2024**.





## NEXT STEPS



## MEMBER DISCUSSION: ANGELES LINK PHASE 2 UPDATE

- Please announce your name and speak directly into the microphone
- Be concise and focus on discussion topics
- Verbal comments are not the only way to provide input, feel free to type a chat



# ROUNDTABLE

# SOCALGAS EXECUTIVE CLOSING



ANGELES  
LINK



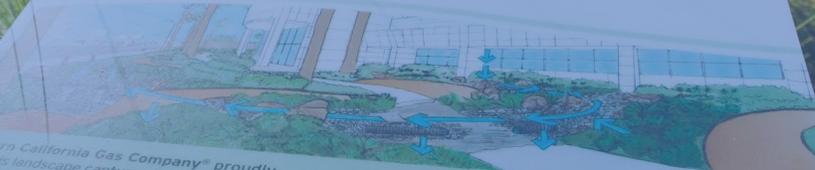
**NEIL NAVIN**  
Chief Clean Fuels Officer  
SoCalGas



ANGELES  
LINK

THANK YOU FOR YOUR PARTICIPATION

### Storm Water and Best Management Practices



Southern California Gas Company® proudly states this landscape captures tens of thousands of gallons of potentially hazardous runoff and is Ocean Friendly. Here's how it works:

- Rain is captured on the roof with drains, grates and gutters

- The runoff then is transported throughout the landscape by perforated pipes, which are filled with gravel to filter out sediment and debris

- The pipes eventually lead the water to dry streambeds where much of it will sit and infiltrate

- To minimize erosion, excessive and possibly damaging runoff from large storms is directed to overflow drains that quickly transport it to the storm drain system





# RECEPTION



## **Appendix 6 - Summary of PAG and CBOSG Meeting**

# SoCalGas Angeles Link Planning Advisory Group (PAG) and Community Based Organization Stakeholder Group (CBOSG) December 2024 Quarterly Meeting

12/17/24 PAG Workshop (10:00AM-2:00PM)  
Bateman Hall in Lynwood California & Online via Zoom

## I. Attendee Report

- PAG attendees (5 in-person; 17 via Zoom)
- CBOSG attendees (14 in-person; 6 via Zoom)

Please refer to Attachments A and B for a complete list of attendees.

## II. Purpose

- Provide information and gather feedback on the following topics:
  - Angeles Link Phase 1 Summary of Studies
  - Summary of PAG and CBOSG Process
  - Angeles Link Phase 2 Updates

## III. Presentation Highlights and Feedback Themes

- **Summary of Phase 1 Studies:** The presentation focused on providing a summary of the 16 studies released during Phase 1 of the Angeles Link.
  - Feedback Themes:
    - Member suggestions to partner with ethnic media outlets to release summary reports
    - Member concerns about the Phase 1 Angeles Link regarding the community engagement process and meeting safety, transparency, and environmental justice standards
    - Member concerns about hydrogen blending with natural gas and clarification on the reasons for running the suggested pipeline routes along freeways
    - Member comments on the actions made by members that left early and withdrew from the stakeholder group
    - Member comments on the importance of community-based organizations' involvement in the Angeles Link and gratitude for SoCalGas's invitation for stakeholders to provide feedback and recommendations throughout the process
    - Member concerns about minimal updates and revisions made in the Phase 1 studies, failure to commit to clean electrolytic hydrogen, and scheduled meeting dates following the recent release of studies

- **Summary of PAG/CBOSG Process:** The presentation focused on a summary of the PAG and CBOSG process.
  - Feedback Themes:
    - No feedback provided
- **Summary of ALP2 Update:** The presentation focused on giving members an update of what Phase 2 of the project will look like.
  - Feedback Themes:
    - Member inquiry on the methodology and process of community outreach
    - Member suggestions on using historical injustices within communities when developing outreach plan
    - Member encourages SoCalGas to ask more questions on why SoCalGas is doing AL as a regulated line of business versus Sempra developing an affiliate
    - Member comment on ALP2 schedule being unrealistic
    - Member inquiry on the role of PAG and CBOSG operating in parallel to the proceeding once it is underway
    - Member asked for clarification on whether there will be meetings with the public during the regulatory proceeding
    - Member comments on tools and data that will be used when developing a community outreach plan
    - Member suggestions on legislative collaboration
    - Member suggestions on speaking with the community when gathering data and to continue having a transparent library for information
- **Roundtable**
  - Feedback Themes:
    - Member updates on projects their organizations are working on while they wait for the launch of Phase 2

## Attachment A

### December Quarterly Meeting 2024 Attendee Roster

#	First Name	Last Name	Affiliation
<b>PAG Members</b>			
1	Miles	Heller	Air Products
2	Rizaldo	Aldas	California Energy Commission
3	Katrina	Fritz	California Hydrogen Business Council
4	Benjamin	Tang	California Public Utilities Commission
5	Christopher	Arroyo	California Public Utilities Commission
6	Matthew	Taul	California Public Utilities Commission
7	Christopher	Arroyo	California Public Utilities Commission
8	Tony	Foster	City of Long Beach – Utilities*
9	Tyson	Siegele	Clean Energy Strategies representing the Utility Consumer’s Action Network
10	Brian	Goldstein	Energy Independence Now
11	Michael	Colvin	Environmental Defense Fund*
12	Joon Hug	Seong	Environmental Defense Fund*
13	Tim	Kamer Mayer	Green Hydrogen Coalition*
14	Nathaniel	Williams	Local Union 250
15	Hector	Carbajal	Local Union 250
16	Sam	Cao	South Coast AQMD
17	William	Kunz	Southern California Pipe Trades DC 16
18	Dhruv	Bhatnagar	Green Hydrogen Coalition*
19	Ian	Fisher	California Public Utilities Commission
20	Matt	Ko	City of Burbank
<b>CBOSG Members</b>			
21	Marcia	Hanscom	Ballona Wetlands Institute*
22	Robert “Roy”	Van de Hoek	Defend Ballona Wetlands
23	Michael	Berns	California Greenworks*
24	Ricardo	Mendoza	Coalition for Responsible Community Development*
25	Hyepin	Im	Faith and Community Empowerment (FACE)*
26	Andrea	Vega	Food and Water Watch*
27	Andrew	Pezullo	Food and Water Watch*
28	Kisa	Ito	Little Tokyo LA
29	Ciriaco “Cid”	Pinedo	Mexican American Opportunity Foundation*
30	Edgar	Barraza	Physican for Social Responsibility-LA
31	Rashad	Rucker-Trapp	Reimagine LA*
32	Raul	Claros	Reimagine LA*
33	Enrique	Aranda	Soledad Enrichment Action*
34	Isaac	Gavlan	Soledad Enrichment Action*
35	Andrea	Williams	Southside Coalition of Community Health Centers
36	Faith	Myhra	Protect Playa Now*
37	Kevin	Weir	Protect Playa Now*

38	Marc	Carrel	Breathe Southern California
39	Luis	Pena	Los Angeles Indigenous People's Alliance*
40	Gerry	Salcedo	YMCA LA
<b>Non-Members</b>			
41	Maryam	Brown	SoCalGas*
42	Neil	Navin	SoCalGas*
43	Andy	Carrasco	SoCalGas*
44	Frank	Lopez	SoCalGas*
45	Amy	Kitson	SoCalGas*
46	Shirley	Arazi	SoCalGas*
47	Yuri	Freedman	SoCalGas*
48	Annie	Ng	SoCalGas*
49	Katrina	Regan	SoCalGas*
50	Chester	Britt	Arellano Associates*
51	Stevie	Espinoza	Arellano Associates*
52	Keven	Michel	Arellano Associates*
53	Alma	Marquez	Lee Andrews Group*
54	Keshanna	Wiley	Lee Andrews Group*
55	Isaac	Martinez	Lee Andrews Group*
56	Anniken	Lydon	Insignia Environmental
57	Armen	Keochekian	Insignia Environmental

\*In person attendee