MusickPeeler

Related Professionals

Nathan D. O'Malley

Related Practice Groups

Construction

Environmental, Land & Resources

Oil & Gas / Energy

Real Estate

Water Law

February 24, 2022

California hydrogen proposal met with skepticism and excitement

By Henrik Nilsson

Hundreds of millions of dollars at play

A new hydrogen proposal in Southern California is being met with both skepticism and excitement after the nation's largest natural gas utility submitted a proposal last week.

SoCalGas, a subsidiary of Sempra Energy, submitted a proposal to the California Public Utilities Commission (CPUC) on Feb. 17 to develop a green hydrogen pipeline system that would provide energy to the Los Angeles region. The company is asking CPUC for approval to track costs related to the development of the so-called Angeles Link.

The Link would deliver green hydrogen equivalent to almost 25% of the natural gas the utility delivers today, according to a SoCalGas release. There are approximately 1,600 miles of operating hydrogen pipelines in the U.S. The Angeles Link would be the largest green hydrogen energy infrastructure system in the nation.

Sara Gersen, an attorney with environmental nonprofit Earthjustice, is concerned that SoCalGas' definition of clean hydrogen could include some fossil fuels for hydrogen production. Gersen referenced a previous filing from SoCalGas in which the utility advocated in favor of CPUC adopting a federal definition of clean hydrogen that is less strict than in California.

SoCalGas argued that a restrictive definition of clean or renewable hydrogen could discourage investment in clean hydrogen research and development. CPUC has deferred the question to a later date.

Gersen said green hydrogen could play a significant role in a carbon-free economy.

"But there needs to be a clear condition from the Commission that SoCal Gas is not going to be allowed to charge its captive customers for any hydrogen infrastructure unless that infrastructure is exclusively used for green hydrogen," Gersen said.

"Because that's the only kind of hydrogen that's actually consistent with California's climate policy."

SoCalGas did not return a request for comment, but the utility has previously stated that it would use 25-35 GW of 100%renewable energy from wind, solar or batteries to provide power to the electrolyzer that splits water into hydrogen and oxygen.

California's climate goals

The project proposal has already received support from local lawmakers and business leaders.

Nathan O'Malley and Jane Usher, attorneys with the California-based law firm, Musick, Peeler & Garrett LLP, said the project fits California's goals to achieve 100% clean and renewable energy by 2045.

The application is an excellent first step, Usher said.

“In California, we require environmental analyses for any project of this nature,” Usher said. “So as exciting as it is to see that we are embracing clean energy, it’s also exciting to see that we will be doing it in a transparent public process.”

O’Malley said it will be interesting to see whether two proposed offshore wind projects in Northern and Central California would feed into the hydrogen project as a potential energy source.

The project might run into some issues, especially regarding keeping the project 100% renewable, O’Malley said.

“Renewable energy can pose issues with consistency and intermittency in the sense that the wind doesn’t always blow, and the sun doesn’t always shine,” O’Malley said. “Being able to run the facility at the level that you would desire in order to recoup the cost means you may need to backfill some of the energy requirements for the project with referral to conventional energy sources.”

But Usher said that the proposal is clearly defined as a green hydrogen project.

“It is most assuredly asking to conduct studies so that they can bring forward a detailed green hydrogen project. They do make reference to decarbonizing to meeting our energy goals to reducing greenhouse gas emissions. These goals are all music to our ears. They’re all things that we all want worldwide,” Usher said.

Hurdles

In its application, SoCalGas says that the system’s foundation would be one or more trunk transmission pipelines that would run from green hydrogen generation sources, including the Central Valley, Mojave Desert or Blythe area, into a delivery point in the Los Angeles Basin. A compressor station would support the project.

SoCalGas claims that the project could displace up to 3 million gallons of diesel per day and allow four natural gas power plants to convert to green hydrogen.

It could also help speed up the retirement of the Aliso Canyon natural gas storage facility. In 2015, the facility was the subject of the largest natural gas leak in U.S. history. Last September, the company paid $1.8 billion to settle suits from more than 35,000 victims of the leak.

The first phase of the proposed project includes working with stakeholders to define the project and will likely take 12 to 18 months. Phase two includes design, engineering and environmental studies for the proposed green hydrogen transport system.

Phase three would further refine design plans and develop a formal certificate of public convenience and necessity application. According to SoCalGas, it would take approximately 18 to 30 months, but some activities can be done in parallel with phase two.

“However, SoCalGas expects that completing Phase 3 activities would cost several hundreds of millions of dollars. A cost estimate for Phase 3 would be developed when the pipeline system length and complexity are more defined,” SoCalGas states in its filing with CPUC.

“When it’s time to do the environmental assessment, I’m sure that’s going to be highly contentious,” Gersen said. “Because it will be important to avoid significant environmental impacts from a project of this scale.”