Sempra Energy CEO Jeff Martin at the Sempra Energy corporate headquarters earlier this year. (Howard Lipin/The San Diego Union-Tribune)

The San Diego Fortune 500 company’s LNG ambitions face criticism from environmentalists

By ROB NIKOLEWSKI
The San Diego Tribune  FEB. 7, 2020 5:40 AM

Sempra CEO Jeff Martin sees a big future for natural gas globally, even if its consumption in California trends lower in the coming years.

The volume of natural gas will decline in California as the state moves toward a goal of deriving 100 percent of its electricity from carbon-free sources within the next 25 years, Martin said in a recent interview with the Union-Tribune. That will occur at the same time the fuel increases its share of the power mix in developing economies such as India and China.

The dichotomy isn’t lost on Martin.

“If you want to avoid being Kodak,” Martin said, referring to the photography giant that became obsolete at stunning speed after the development of high-quality cameras inside smartphones, “it’s your job as a leadership team to keep redefining the relevancy and the resiliency of your business model. We’re here to serve the state of California. So the more we align ourselves with good and sound energy policy, I feel quite good about our future.”
A significant part of Sempra’s future is exporting natural gas. By cooling the fuel to minus-260 degrees Fahrenheit, it becomes liquefied natural gas, or LNG, that exporters can then transport by cargo ships to markets around the world that are hungry for gas and interested in shifting from coal to gas.

And Sempra is poised to become a major player in the exporting sector with the opening last year of its $10 billion Cameron LNG facility on the Louisiana Gulf Coast, the potential construction of another plant in Port Arthur, Texas and a likely expansion of the Energía Costa Azul LNG facility on the coast of Baja California that is operated by its subsidiary in Mexico.

Here’s what Martin had to say about natural gas in California, his company’s LNG ambitions and criticism from environmental groups. The interview has been edited for space and clarity.

**What’s the future of natural gas?**

Right here in San Diego County, 54 percent our greenhouse gas comes from the transportation sector.

Your best chance of interdicting that is getting faster into clean transportation. And your electric utility is a big part of solving that problem. For example, at Southern California Gas, the largest utility in the United States, they’ve made a commitment to move to 20 percent renewable natural gas by 2030 — roughly 2 percent per year. And they’re going to make 2 percent in 2020. (SoCalGas is a Sempra subsidiary.)

What they’re trying to do is take exogenous gas from landfill and dairies and make it a pipeline quality. That gas, which is not flared, it goes in the atmosphere and has a 20 (times) negative impact. If we can find a way to put that into some commercial use, that’s net beneficial to the environment. And (storing) hydrogen is taking place today in Germany and Japan.

We’re hopeful that we can do two pilot projects with hydrogen at (San Diego Gas & Electric, another Sempra subsidiary) this year. It allows you to have a more renewable supply of natural gas. So you have to look at all of these different opportunities through the lens of diversification that allows us to advance renewables more deeply. Use natural gas only to fill in the gaps. And look to new batteries and new technologies to integrate this for folks.

There’s now a bifurcated energy market. Energy demand in Europe and the United States will decline by 2040, but it’s going to skyrocket in the developing world. We need to make sure we’re doing all that we can in the OECD (high-income) nations at the same time that we’re providing solutions to developing world or we’re not serious about solving the problem.

This may be a dumb question, but California passed legislation to go 100 percent carbon-free by 2045 ...

Sign me up for that, by the way. We’re all in.

The question, though, is if California gets to 100 percent carbon-free by 2045, would natural gas companies exist in the state?

Back to the early part of the 1980s, we adopted a very progressive framework in California known as decoupling. (The policy in which utility revenues are not tied the amount of energy a power company sells).
I think over a period of time you’ll see carbon priced globally and you’ll see people making more and more carbon-neutral investments. And as you get toward the aspiration of 2045, you should expect to see new innovation, new technology, progressive regulation, a rebalancing of more renewables and batteries instead of natural gas. You will still have carbon being burned as part of energy in 2050. The question becomes, what is the mix? What is the innovation between now and then?

So it’s not mutually exclusive that natural gas cannot exist in a carbon-free environment?

That’s exactly right.

Even in California?

That’s correct. If you asked me, do I believe that natural gas, over a long period of time, will decline in volume of consumption in the state? Yes, I do. Do I believe that natural gas carbon intensity will also decline of that period of time? Yes, I do. And do I believe that will be accelerated with innovation technology? Yes, and we want to be part of that.

You’ve seen these natural gas bans on new homes in Berkeley and other places, mostly in Northern California. What’s your reaction to that?

I’m in favor of anything that allows us to be responsive to consumers. I think natural gas has a role to play. We’re not going to be combative about what our customers want. We just want to make sure we get to the right decision.

A couple of Democratic presidential candidates (Bernie Sanders and Elizabeth Warren) have called for a ban on hydraulic fracturing. Of course, they can’t do something like that by edict but what are Sempra’s thoughts on that?

We’re not political. We’re bipartisan and we would work with any administration that is in the White House to make sure that we’re following good sound energy policy.

So a fracking ban…?

I think the goal is always to get to good, sound policy for our country. This has a very important overlap with economic activity. If today you overlaid the states that have the highest economic activity, it would correlate with states that have a high degree of oil and natural gas production. I would remind you that California is ranked No. 3 in the United States in oil production.

An LNG export terminal on the Pacific Ocean could head to China, Japan and South Korea in less time than shipments from companies with sites on the Gulf of Mexico. It could also bypass tolls at the Panama Canal. Would an export component at ECA (Energía Costa Azul) be a boon to Sempra?

ECA is really interesting for two reasons. One is Cameron’s coming online and Cameron’s a very big project. The first phase of ECA is a relatively small project. Cameron is 12 million tons (of LNG exported per year). ECA is 2.4 (million), but it’s important because it’s Sempra’s step to move beyond being a one project company to a portfolio LNG player. And point No. 2 is it unlocks more of a West Coast option, which allows us to differentiate ourselves as we market the company.

Does the recent China agreement with the Trump administration help you guys?

Interview with Sempra’s CEO by Nikolewski, San Diego Tribune 2-7-20 Page 3
Phase 1 of the agreement has circled $50 billion in energy purchases for China to the U.S. over two years, which does include some coal. It obviously commits the Chinese to be larger buyers of LNG. Like all the other American infrastructure providers, we’re in conversations with the Chinese. There still needs to be some adjustments to Chinese tariffs on LNG imports. Those have not dropped yet. But listen, natural gas growth in the world will go up about 25 percent over the next five years. Natural gas demand from China will go up by 60 percent. Very soon they are going to be the largest buyer of LNG in the world. So they are going to be the 600-pound gorilla long-term in this space.

By 2040, over 70 percent of China’s natural gas will come from LNG. There’s a lot more LNG supply in the global marketplace, a lot more infrastructure coming online. You’re looking at 5 percent annual growth in natural gas demand through 2025. That’s pretty impressive. And over that five-year period, we (the U.S.) will become the largest LNG exporter in the world.

Environmental groups have criticized LNG. A recent story from Bloomberg News estimated if all the U.S. export projects OK’d thus far were in use, simply operating them could spew 78 million tons of CO2 into the air every year. That’s comparable to the emissions of 24 coal plants.

One of the reasons we participated in the World Economic Forum (in Davos, Switzerland) this year is because the energy transition is well underway.

There is clearly a loading order that’s taken place market by market as people try to move to lower carbon intensive fuels. Natural gas is the lowest of all the carbon intensity and it will play a role of allowing you to integrate more renewables. And think about this from Sempra’s perspective: We’re the only American utility on the Dow Jones Global Sustainability Index. We rank higher than all other utilities in terms of our commitment to sustainability here in the U.S.
If you go market by market, LNG will be displacing coal in India. It will be displacing coal in China. But you’re on a good point, which is it starts with a commitment to run your operations in the way that is most environmentally sound. So as we build out Port Arthur, as we build out Cameron, you should expect us to have the latest containment technologies so that you’re not creating leaks.

As one example, at San Diego Gas & Electric, they finished December with no known leaks on their system. SDG&E is an innovator. And I think part of our commitment as operators is if you want to be in this space, as you invest in infrastructure, make sure you operate in a way which is the most environmentally friendly. Then market by market, make sure you give consumers choice to move down the loading order of lower carbon intensity.

The Bloomberg article said Cameron has one of the largest potential carbon footprints in the analysis, 37 percent higher than the average of 18 facilities Bloomberg reviewed.

I don’t know where those facts are sourced from. I can tell you that our commitment around sustainability and being environmentally conscious is at a very, very high level. That plant is being commissioned currently. Let’s get to the commission stage, but we’re quite confident we can operate it in a very environmentally sound manner.

So what would you say to those who would criticize Sempra and say, on the one hand you talk about being sustainable, but on the other hand, you’ve got a major commitment in LNG that, at least according to the Bloomberg analysis, has a carbon footprint that seems to run counter to that?

The most important takeaway in this conversation is to always remind people that we live in an open system. We’re making infrastructure investments that allow other countries to have the choice to move down the carbon intensity curve. Let me give you an example. In meeting with some CEOs at Davos, India is forecasting that 50 percent of its incremental demand will be met by coal. Ninety percent of the incremental electricity demand between now and 2040 will only occur in the developing world, not the OECD countries.

So you can’t lock yourself into “what is best for California is best for every country in the world.” You’ve got to make sure that we’re making investments today that create optionality right now to displace other countries from making the wrong choices around higher carbon intensity — burning wood, burning spent fuels, burning coal, burning lignite. And in a lot of those countries, that’s the only economic choice they have today.

We live in this open system and we need to have an approach that allows us to accelerate reducing carbon in the entire energy value chain. And natural gas has a role today, it will have a role in the future. It probably has a declining role in California and other states in the United States. But it’s very, very important that we take a global view toward accelerating the transition to cleaner fuels globally.
CaliforniaGeo Responds—
Interviewer Nikolewski asked all the right questions, but a polished CEO danced across and around them faster than hoofer Jimmy Cagney. Jeff Martin (no relation) is a clever man. That's probably par for the course with a multi-national corporate CEO, especially one dealing with extracted resources in this climate-sensitive age.

He talks of natural gas as a "fuel," and as if it had a personality with its own free agency to spread itself across the globe. While Martin acknowledges California's goals with one gesture, he's piping and pumping gas as fast as possible to LNG (Liquified Natural Gas) terminals where it's exported out to other countries. But not until lots of energy is expended to compress and cool it, and then transport it by burning dirty bunker oil in tankers for thousands of miles across oceans. Then, when burned, it adds carbon to distant atmospheres which mixes to raise the global warming potential everywhere. Localized renewable energy at the destination could render this trip unnecessary.

"Natural" gas is pure methane, which has 80 times the global warming power of carbon dioxide. So when it leaks from wellhead to point of use (currently 7-9% by volume) that doesn't seem to match Martin's statement, "We're here to serve the state of California."

No, Sempra is serving itself by incorporating locally extracted fracked gas into its pipelines—not exclusively for the benefit of Californians or the U.S. Market. We continue to accept the millions of gallons of fracking wastewater dumped without restriction into deep wells. We accept the local and regional leakage into our air—and Sempra is the one that gave us the unprecedented blowout at Aliso Canyon in 2016. That safety record is part of their business model, too.

This makes Sempra's concern for California simply lip service, while the Public Utility Commission nods and the Legislature shrugs. If our policies were solidified into hardened statutes, we'd be winding down Sempra's dreams. New housing would always be all-electric. Heat pumps (both air and ground source) would provide and remove thermal energy to/from buildings without transporting carbon to them and burning it—thus eliminating localized emissions.

The cost of damage from carbon emissions continues. Combustion emissions hurt our citizens in the short term with increased asthma and respiratory treatment costs, along with serious pulmonary complications that increase death rates.

Rising seas, stronger storms, less stable weather and climate patterns—these are all science-based and have nothing to do with ideological choices or politics except for the following. Witnessing the increasing evidence, knowing the cause, but doing little about carbon is suicidal ignorance.

Continued bad decisions from decades ago are what threaten us—and Martin talks like we've got a hundred years to divert from worldwide coal—all while he sells gas to many nations so they can become dependent on a different type of carbon. Any threat to stop that addiction will be met with the weak, self-serving argument of utility companies' "stranded assets" and they want compensation.

We are now at a point where something must be done, or else. Politicians, policy wonks, and the voting public have the earth's future in their hands. Will they continue to blow it? If Sempra has its way, everyone will remain committed to its version of a fossil future.

Beneficial Electrification and geo heat pumps are the best path to stop carbon emissions and climate change sooner, before it is impossible.

—Bill Martin

Interview with Sempra's CEO by Nikolewski, San Diego Tribune 2-7-20 Page 6