
James Riley

Awkward Questions

As the Californian Energy Market reshuffles, potential conflicts of interest may arise.

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Welcome to California

My journey to California began in New York in September 2017 with a call from a former colleague asking if I was interested in helping San Diego Gas & Electric (SDG&E) transform their customer information systems. This was followed almost immediately with a comment about how good the weather is in San Diego.

SDG&E is an investor owned electric and natural gas utility providing energy to 3.6 million consumers in San Diego and southern Orange Counties. I started advising SDG&E that October, now live in San Diego, and yes the weather really is good.

I first heard about something called Community Choice Aggregation (CCA) not long after I arrived on site. Community Choice Aggregation allows local governments to procure power on behalf of their residents, businesses and municipal customers from alternative suppliers. Although CCA had been enabled in California by Assembly Bill 117 back in 2002, in October 2017, SDG&E did not have a single CCA in its territory. That was scheduled to change in 2018 with the City of Solana Beach.

It seemed to me that widespread formation of CCA's might have a profound impact on my new client's business. At the time, I admit to walking around trying to find people who would listen to my prediction of a new normal. A prediction emboldened by what was happening in Northern California where the formation of CCA's, in PG&E's territory, was significantly more advanced.

It is now January 2020. The City of San Diego has announced it is moving forward with CCA. Within months of going live on a new billing system in January 2021, around 65 percent of SDG&E's customers will be served by CCA's. The new normal is rapidly approaching for my client.

By September 2019, California had 19 CCA's serving more than 10 million former customers of investor-owned utilities (IOU's). With 9 more expected to launch in the next 2 years, it is no wonder that the California Public Utilities Commission (CPUC) expects CCA's to serve over 80 percent of current IOU customers by the mid-2020s.

California's new normal is rapidly approaching.

The Renewables Portfolio Standard

California's Renewables Portfolio Standard (RPS) was established in 2002 by Senate Bill (SB) 1078 with the initial requirement that 20% of electricity retail sales must be served by renewable resources by 2017.

Jointly implemented by the CPUC and the California Energy Commission (CEC), as a result of SB 100 being signed into law in 2018, the program now requires the state's load serving entities (LSE's) to procure 60 percent of their total electricity retail sales from renewable sources by 2030, and requires all the state's electricity comes from carbon-free resources by 2045.

This revised RPS, is intended to provide a number of unique benefits to California that include

- Displacing fossil fuel consumption.
- Reducing air pollution, particularly criteria pollutant emissions and toxic air contaminants.
- Meeting climate change goals by reducing greenhouse gas emissions.
- Promoting stable retail rates for electricity.
- Meeting the need for a diversified and balanced energy generation portfolio.
- Contributing to the safe and reliable operation of the electrical grid.

Or put another way - deliver a clean, reliable, affordable and sustainable energy future for California.

Competition Among Load Serving Entities

Who are the state's LSE's and what roles are they playing?

Investor-Owned Utilities (IOU's) - The large IOU's serving electric load in California include Pacific Gas & Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E).

IOU's purchase electricity to meet the needs of its customers, maintain and operate the transmission and distribution lines to deliver the electricity, and handle all billing and customer service. They serve residential, commercial and municipal customers in their territory.

In 2018, IOU RPS procurement was 40 percent, far in excess of the target of 29 percent. SDG&E led the way with 44 percent, followed by PG&E with 39 percent and SCE with 36 percent.

With more and more of their customers being served by CCA's, IOU's will be able to focus on building, maintaining and operating a safe and reliable electric grid that will connect an increasing diverse and distributed set of energy resources across the state.

Electric Service Providers (ESP's) - Direct Access (DA) service is a retail electric service where customers purchase electricity from a competitive provider called an Electric Service Provider

(ESP), instead of from an IOU. The IOU delivers the electricity the customer purchases from the ESP to the customer over its distribution system.

In 2018, ESP RPS procurement was collectively 29 percent, meeting the target of 29 percent but considerably below IOU's at 40 percent and CCA's at 46 percent.

The DA program is governed by Senate Bill 695 which allows non-residential customers to purchase electricity from an ESP up to a maximum limit within each IOU's territory. In other words, ESP's compete with IOU's and increasingly CCA's for some of the most valuable commercial customers. Today, 20 ESP's serve approximately 13 percent of the entire electric load within the CPUC's jurisdiction.

Community Choice Aggregators (CCA's) - When a CCA is formed, the IOU still maintains and operates the transmission and distribution lines, and handles all the billing and customer service, but the purchasing of power is done by the CCA.

In 2018, CCA RPS procurement was 46 percent, far in excess of the target of 29 percent. Marin Clean Energy led the way with 62 percent, closely followed by Clean Power Alliance at 60 percent and Pico Rivera at 59 percent.

Wholesale energy markets are complicated. Local government officials typically lack the expertise to operate successfully in these markets and look to hire third parties to forecast and procure the electricity needed by their customers. These third parties must leverage the aggregate demand to secure competitive rates, but most importantly be fully aligned to the priorities of the CCA with respect to increasing the percentage of electricity coming from renewable carbon-free resources.

To prevent the customer receiving two bills, the IOU does the billing, with each bill containing a line item or two for the CCA charges. These charges must be calculated by the CCA and sent to the IOU in time to be included on the bill. Calculating these charges requires a utility billing system capable of handling interval meter data, time of use rates, electric vehicle rates, proration, and other complexities. As a result, most Californian CCA's outsource billing and customer management to Direct Access Electric Service Providers.

In California, CCA's have prioritized the transition to highly renewable and/or greenhouse gas-free sources of generation.

Awkward Questions

CCA's are leading the pack, accelerating California's progress toward the RPS targets for 2030 and 2045. With 9 more CCA's expected to launch in the next 2 years, third parties will be needed to assist them with procurement, billing and data management services.

But what if one of the most prominent third parties, offering to help these new CCA's with billing and data management services, was part of a corporation with massive investments in the generation and sale of electricity from non-renewable sources, and owned ESP's competing for some of the most valuable customers?

Surely this would raise some awkward questions, including:

- *What if the billing and data management service provider had access to sensitive CCA wholesale contract information? Could that provide their colleagues selling wholesale energy in the same market with an unfair competitive advantage?*
- *What if the billing and data management service provider was in a position to limit the types of rates and demand side management programs a CCA could offer to its customers? Could that be used to maintain the grip of the non-renewables their corporation is so heavily invested in?*
- *What if the billing and data management service provider had access to sensitive contracts a CCA has with its commercial customers? Could that provide their ESP colleagues competing for those customers with an unfair competitive advantage?*

The Future

My journey to California started with a phone call I received in September 2017. California's journey to 100 percent of electricity coming from carbon-free resources started back in 2002 with Senate Bill 1078.

CCA's are leading the charge towards the Renewables Portfolio Standard - a clean, reliable, affordable and sustainable energy future for California.

This is a future I care about and therefore important to me that the third parties needed to support CCA's, are free from conflicts of interest that might jeopardize it.

About the Author

James Riley has spent 25 years providing business and technology consulting to across multiple industries including financial services, high tech, discrete and process manufacturing, consumer packaged goods, hospitality and local government.

He has spent the last 15 years, in North America, working with utilities such as TXU Energy, Centerpoint Energy, Oncor, Union Gas, SMUD, Southstar Energy Services, and JEA. Since October 2017, he has been advising San Diego Gas & Electric on the transformation of their customer information systems.

Currently independent, he was previously Chief Strategy Officer at Vertex and Global Head of Solutions and Innovation at HCL EAS.