Fire San Diego Gas and Electric?

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Municipal and State Energy Edge Forum

February 29, 2024

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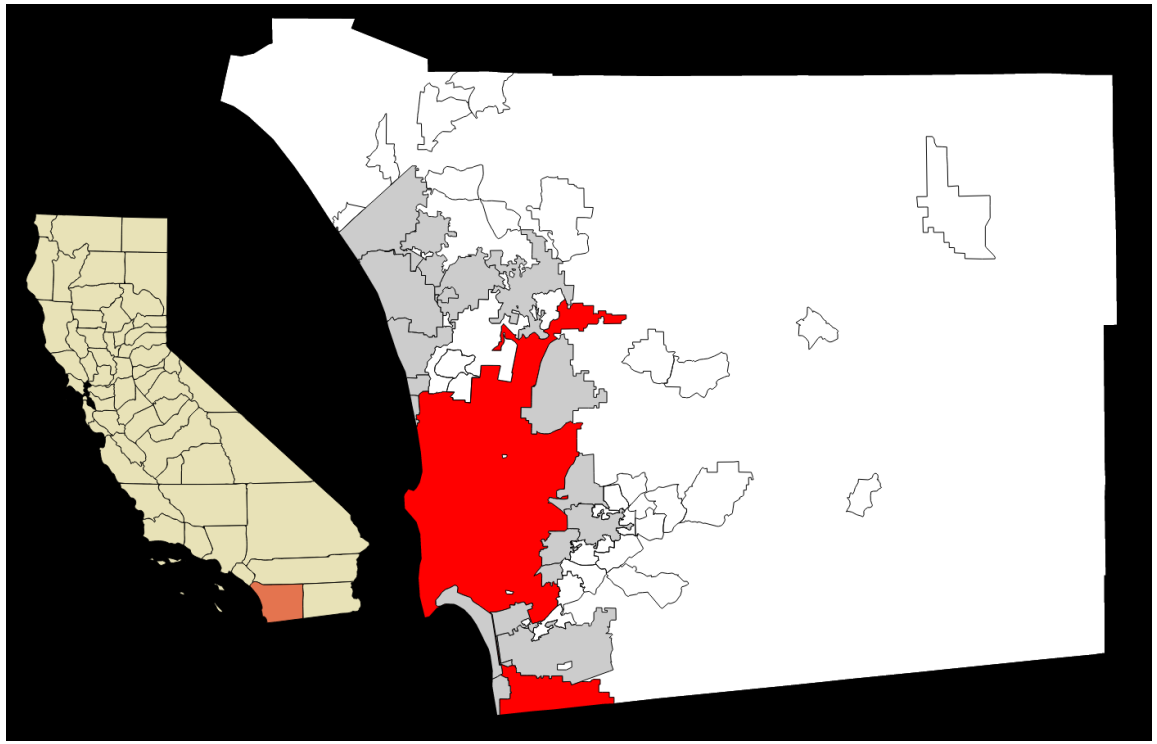
Outline

- Background
  - San Diego, SDG&E, SDCP, and CEA
  - California's Solar Electricity Supply Mix
  - Municipal Utilities
  - Municipalization Pathways
- San Diego Ballot Initiative
  - Purpose, Business Case, Goals and Status
  - Electricity Cost of Service Considerations
  - Relevant Municipalization Experience
  - Evaluation and Outlook

SDG&E and the City of San Diego

SDG&E Service Territory – population 3.7 million

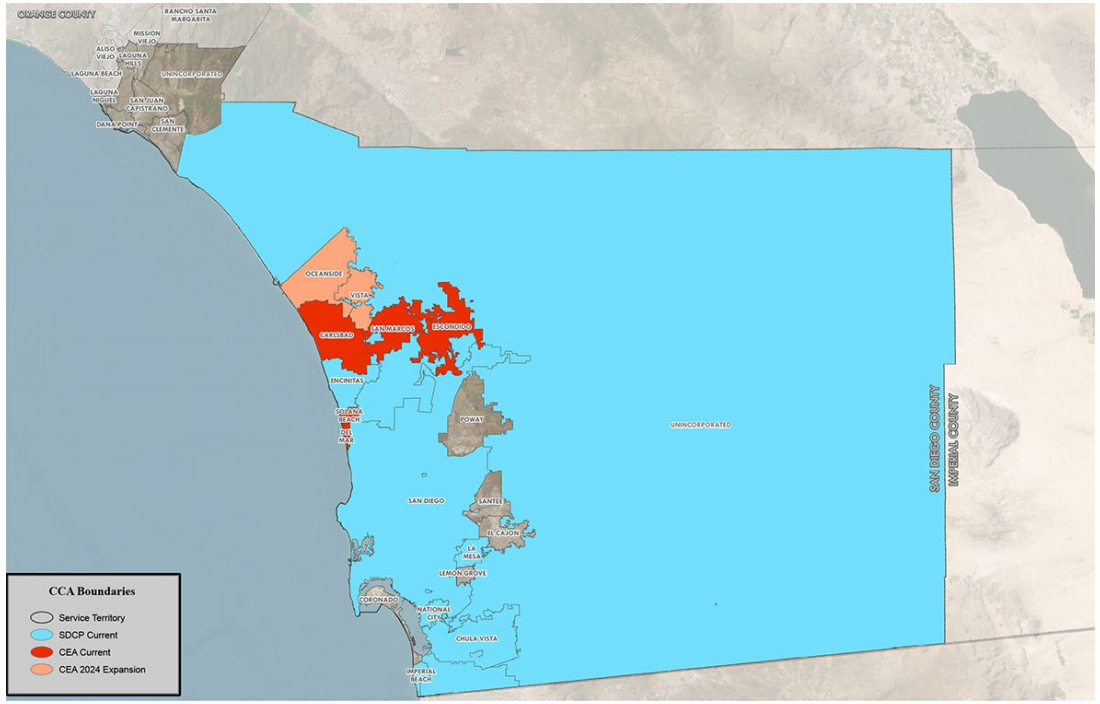
City of San Diego (red) – population 1.4 million



Community Choice – SDCP and CEA

SDG&E Service Territory – population 3.7 million

San Diego Community Power and Clean Energy Alliance Service Territories



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California is now doubling down on big solar and big battery projects.

At the other end of SDG&E's new $2B transmission line…

Inside SCE's existing electricity distribution system…

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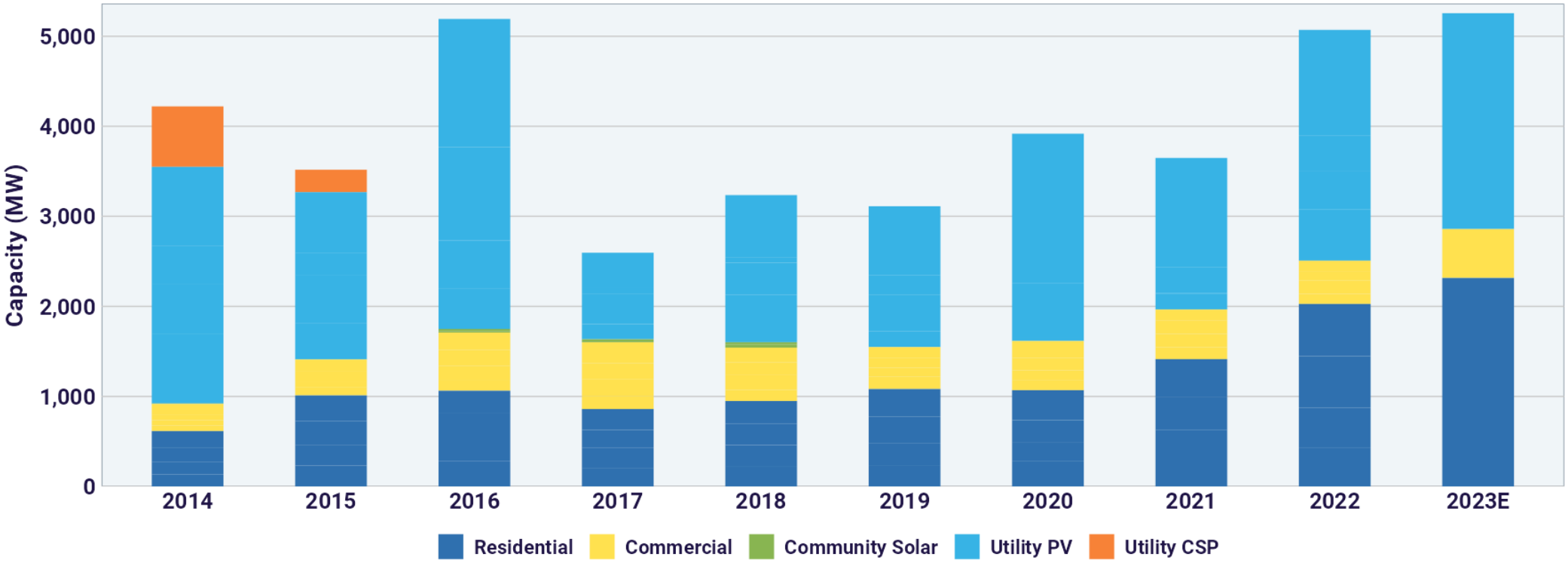
Annual California Solar Installations



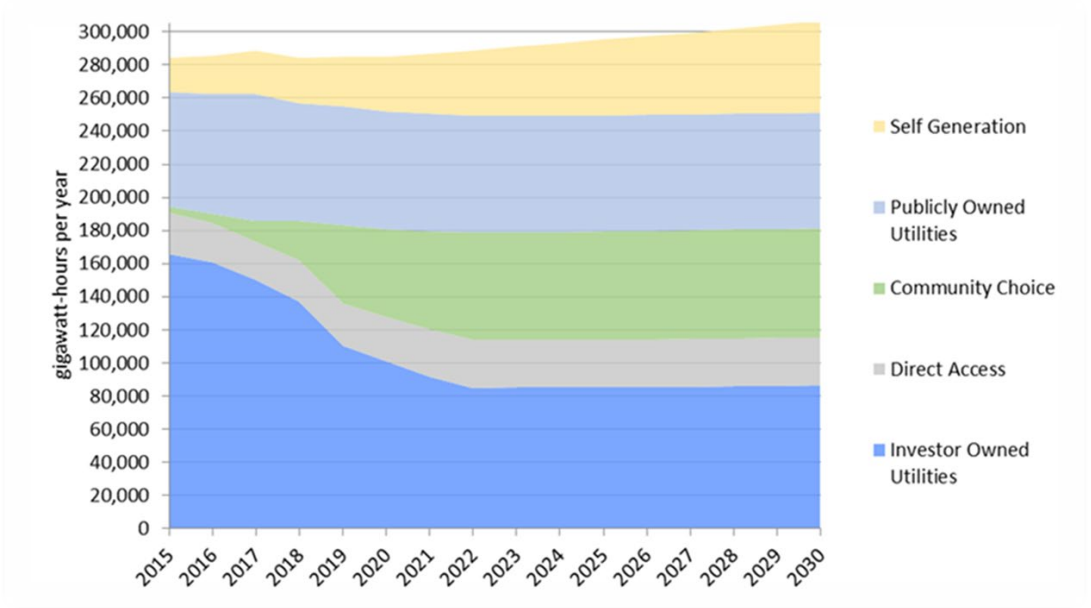
Ref: https://www.seia.org/state-solar-policy/california-solar

Municipal Utilities

…provide services by and/or for a municipality, e.g.:

- Electric and/or gas energy supply and transport
- Water supply, transport and distribution
- Solid waste and wastewater collection and transport
- Phone and data communications

…in California account for a 20 percent of delivered electricity



Source: Robert Freehling

Electricity Service Municipalization Pathways

Existing distribution infrastructure ownership change

- Initiated by local government, or
- Ballot initiative

Roadblocks include:

- Ballot initiative failure
- Utility refusal to sell assets
- Litigation
- Political fatigue

San Diego Ballot Initiative - Purpose

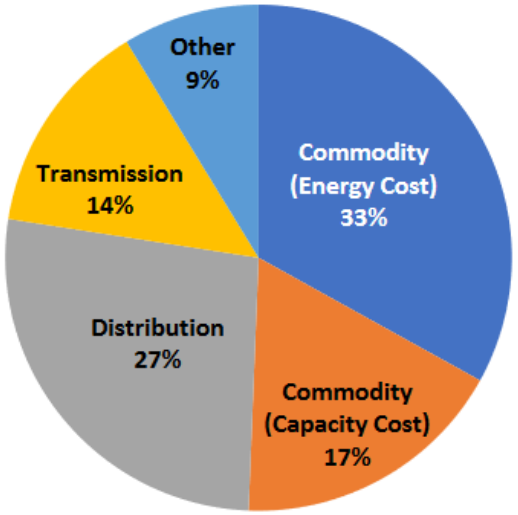
"The people of San Diego intend to use every approach, power, and authority available to the City under the California Constitution and the City Charter to address the impact of electric usage on our community and on the climate, and to do so in the most transparent, effective, and affordable manner possible. **This includes maximizing the use of local energy resources, especially solar energy paired with battery storage.** The people of San Diego are acting with great urgency to address the crises of our times – unaffordable rates, declining reliability of service, and the rapid increase in extreme weather fueled by the climate crisis. Ownership and control by the people of San Diego of the electric distribution grid is needed to **provide rate relief to residents and to best address local impact on climate change**."

Current SDG&E Electricity Cost Buildup and Rates

SDG&E's energy and capacity costs are 50% of total costs. Distribution, transmission and state mandated public purpose programs account for the other 50%.

The average rate of increase in electricity prices in the United States over the past 25 years has been around 2% per year. However, most California residents have experienced much faster growth in the prices they pay for power. **In just the past ten years, the average growth rate across all California utilities was more than 7.7% per year.**

Utility	2014 avg. rate/kWh	2024 avg. rate/kWh	Annual % increase
LADWP	$0.150	$0.230	4.37%
PG&E	$0.207	$0.462	9.33%
SCE	$0.195	$0.367	7.28%
SDG&E	$0.206	$0.424	8.35%
SMUD	$0.131	$0.146	1.21%



Sources:
https://www.solarreviews.com/blog/average-electricity-cost-increase-per-year

https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/electric-costs/sb-695-reports/electric-and-gas-cost-utility-reports-from-ious/sdge--2023-recommendations.pdf

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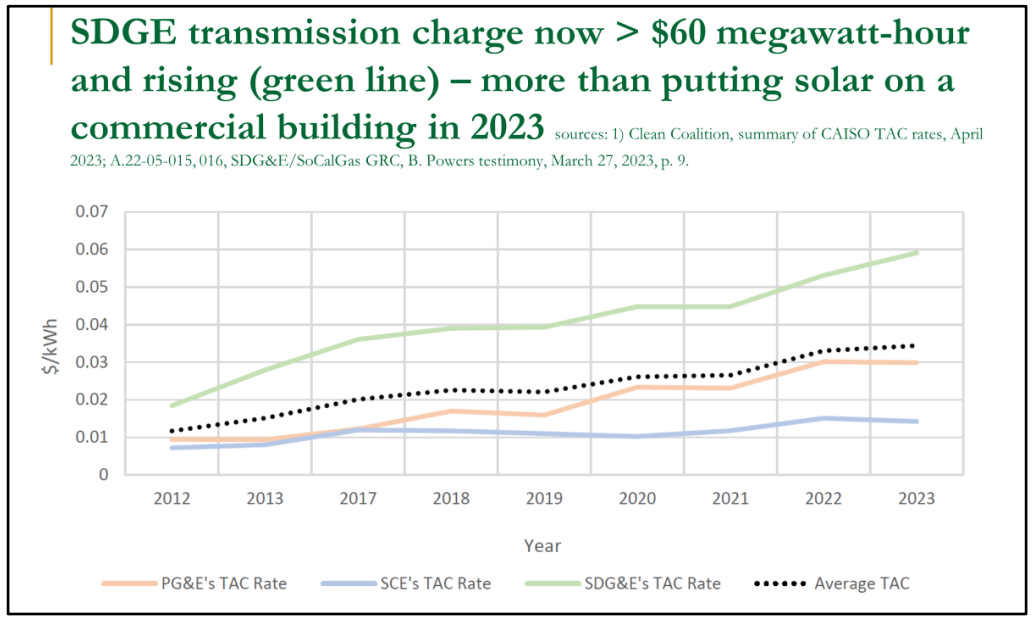
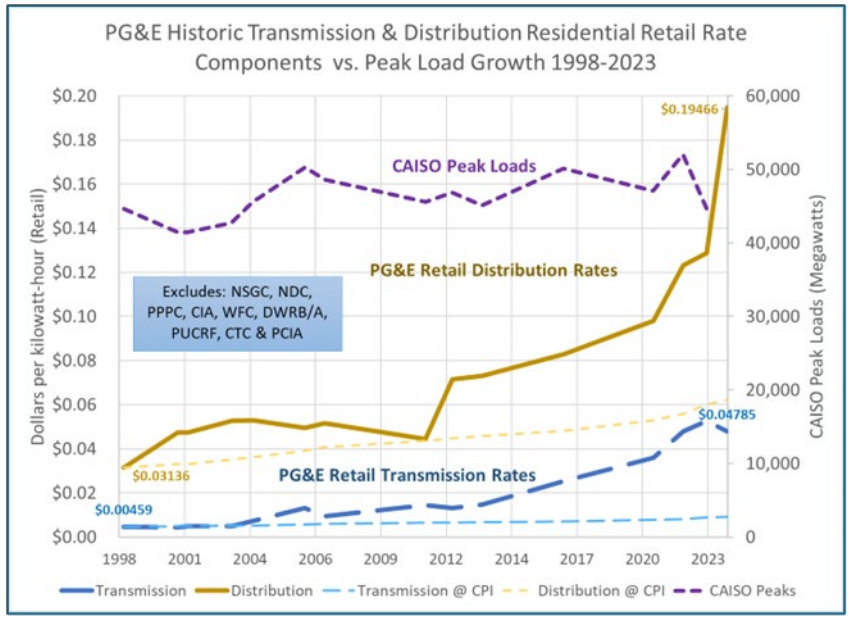
California IOU Cost Trends

SDG&E transmission charges are escalating rapidly, making community solar unaffordable.

Distribution rates exceed transmission rates. CPUC approved **$18B in 3 years for PG&E distribution undergrounding** and other wildfire risk mitigation.



Source: Bill Powers



Source: Richard McCann

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Power San Diego Ballot Initiative – Business Case

California municipal electric utility rates are comparatively low, while San Diegans pay among the highest electric rates in the country, and these high rates are projected to continue to rise as much as 10 percent per year through 2030.

Power San Diego can drive electricity rates down, advance local climate action, and spur local economic development and employment by offering rate options that maximize local deployment of solar and battery storage.

Resulting increased use of locally produced solar power will lower electricity costs by avoiding SDG&E transmission charges on solar power regardless of where in the city it is generated.

Power San Diego will be a self-financed department of the City funded by customer revenue, offering discounts to lower-income customers, retaining current union labor, and offering compensation and benefits equal to or better than provided by SDG&E.

Power San Diego Ballot Initiative – Goals/Strategies

Goal: Minimize fixed charges and cost burden on vulnerable customers.

Strategy: Rate design and programs, including tiered rates that provide all residential customers with a basic amount of lower cost electricity to address essential needs and additional defined amounts progressively higher rates.

Goal: Achieve Climate Action Plan targets.

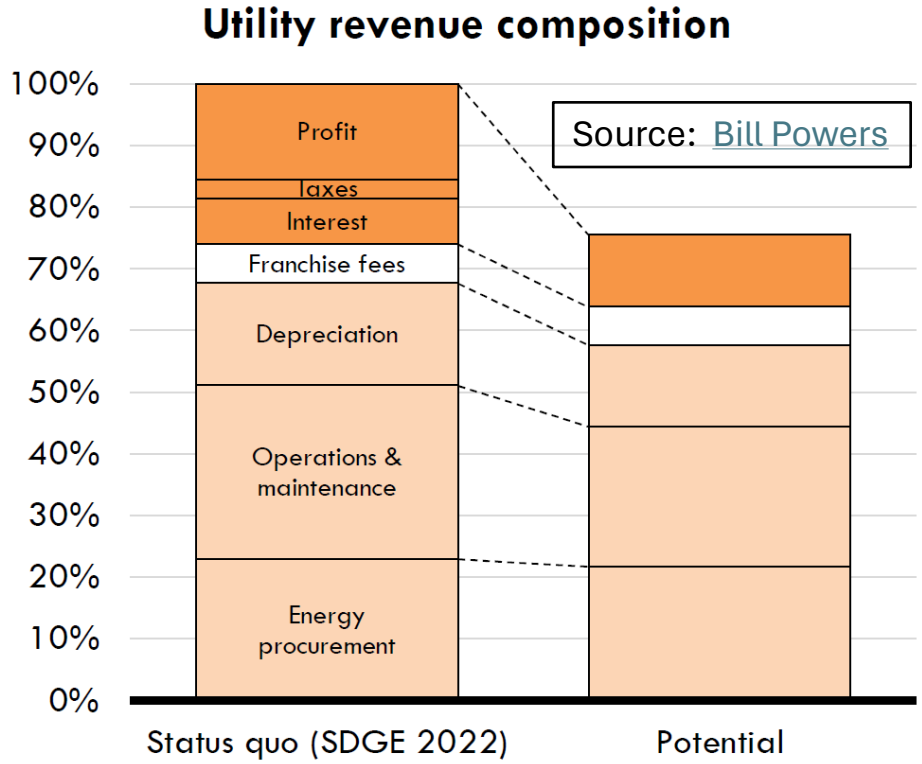
Strategy: Maximize rooftop and parking lot solar, associated battery storage, and energy conservation.

Goals: Upgrade reliability and enable interconnections of new local renewable generation and battery storage.

Strategies: Invest in the distribution network and establish a relationship with San Diego Community Power, a CCA serving San Diego County.

Why Are Muni Rates Lower than IOU Rates?

Munis don’t pay dividends or taxes.



Muni long term debt is independent of asset base.

IOUs are accountable to Wall Street and states; they borrow to keep annual debt service costs equal to shareholder dividend payments. (50/50 debt/equity)

States regulate rates and require IOUs to fund programs.

Munis are accountable to the communities they serve and think more like people, paying as they go and only borrowing when they must.

Munis can respond more flexibly and promptly to energy transition issues, but are existing Munis doing so?

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What are Comparable, Currently Operating California Munis Doing?

SMUD has a plan to offer provide net zero carbon electricity service by 2030. It calls for 300 to 1300MW of Virtual Power Plant capacity by 2030.

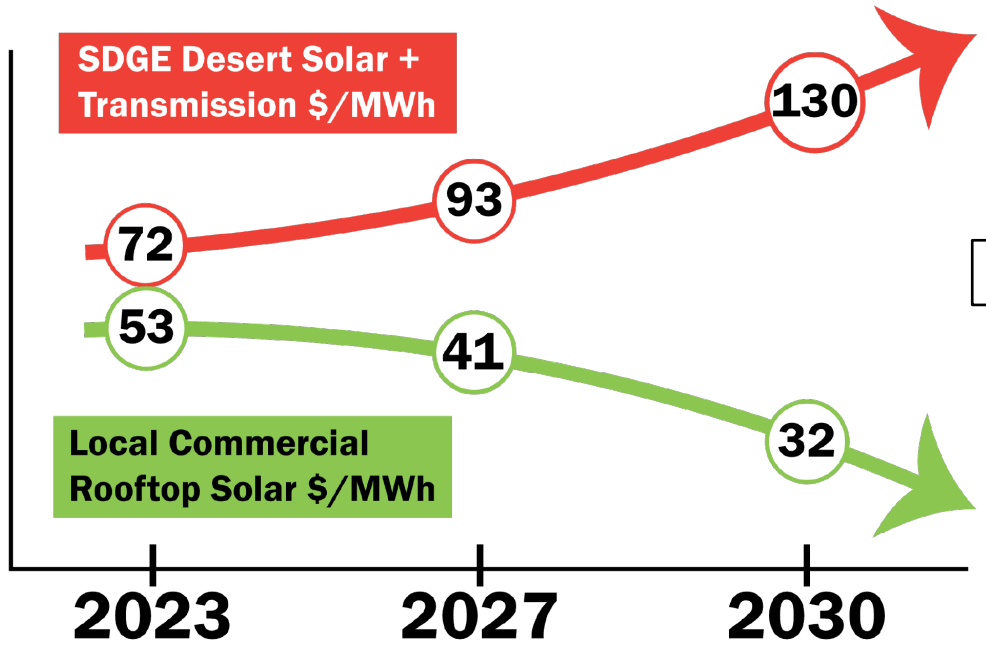
https://www.smud.org/-/media/Documents/Corporate/Environmental-Leadership/ZeroCarbon/2030-Zero-Carbon-Plan-Executive-Summary.ashx

LADWP's goal is 100 percent zero carbon electricity by 2035.

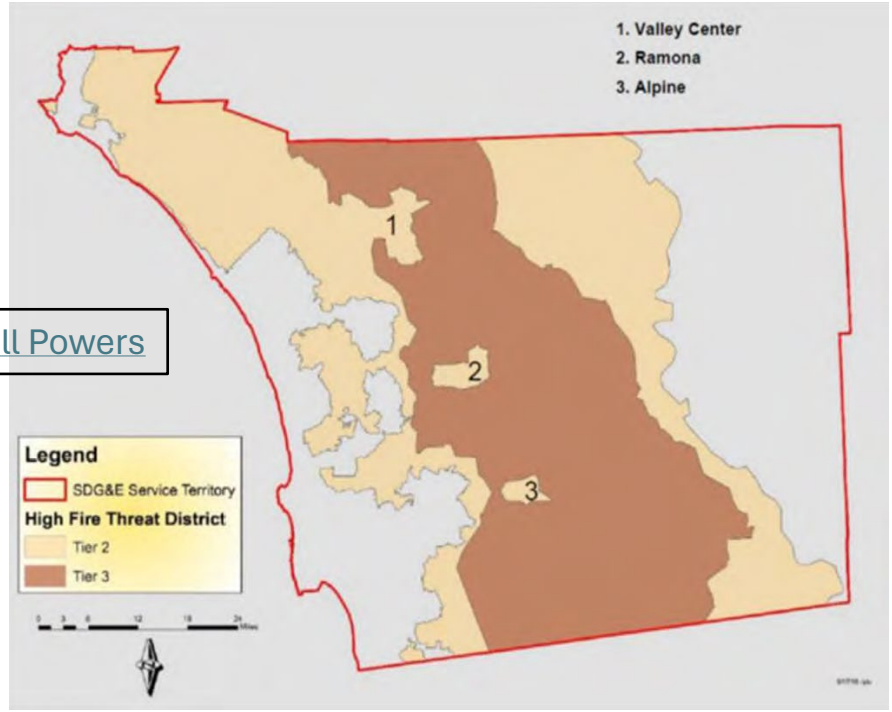
https://www.ladwp.com/sites/default/files/2023-08/2022%20LADWP%20Power%20Strategic%20Long-Term%20Resource%20Plan_0.pdf

Additional Rate Minimization Opportunities

Avoid Solar Import Costs



Avoid Wildfire Mitigation Costs



Source: Bill Powers

San Diego Ballot Initiative – Status

- Signatures are required from at least 10 percent of the city's population by May 14th to qualify the initiative to be on the November ballot.
- The signature gathering process is underway but costly – more than $4 per signature.
- Two former CPUC commissioners have signed on in support of the initiative.

Municipalization Experience - 1

A ballot initiative in 2006 to enable SMUD to annex Yolo County (including Davis) failed.

In 2013, the City Council of Davis, CA, voted to fund a study of electricity service options. The study authors asserted that that municipalization would significantly reduce electricity costs. The City Council voted not to initiate municipalization and later focused further investigation on the feasibility of Community Choice. **Valley Clean Energy contracted with SMUD for billing and power sourcing/scheduling services and began serving customers in Davis and Yolo County, CA in 2017.**

Municipalization Experience - 2

Between 2010 and 2020 Boulder, CO* residents voted four times to move public power forward and contest Excel Energy litigation. In 2021, Boulder's state representative authored legislation requiring a 2022 Public Service Commission report to the CO legislature regarding Community Choice Energy. **In 2020, Boulder approved a new 20-year franchise agreement with Excel Energy.**

*Boulder's climate action and renewable energy initiative began in 2002. Boulder and Davis are small cities that both host major universities.

The IOU “Playbook”

The for-profit electric utility industry has learned how to successfully oppose municipalization initiatives.* The IOU “playbook” relies on utility shareholders spending more than their electoral opponents and keeping their message simple, i.e., **“You won’t save any money and you shouldn’t entrust something so vital as grid operation to an inexperienced local government.”**

Maine voters recently voted 70/30 against consumer ownership of electricity infrastructure, after proponents were outspent 37 to 2 by the state’s two IOUs. Maine’s governor, a Democrat, opposed it. On the other hand, Kauai recently created an energy user cooperative to buy out **a willing incumbent IOU**.

If municipalization ballot measure succeeds, the IOU sends another simple message, i.e., **“Our assets are not for sale.”** Then it moves on to **litigation the IOU can easily afford but the municipality can’t.**

* Since 2000, by more than 6 to 1, more municipalization initiatives in the US have been defeated than have been approved.

Municipalization Process Options

Incremental – Municipal microgrid ownership and operation as an outcome of land development projects - consistent with California's energy policy focus on new vs. existing buildings.

Collaborative - Example: City of San Jose collaboration with PG&E and LP Energy (a non-utility transmission owner)

Negotiation – Example: The City of San Diego and SDG&E recently renegotiated a franchise agreement after the city put the franchise out for bid and got no responses.

Displacement – Local distribution grid ownership change as an election outcome.

It’s a New Ball Game

The Power San Diego **business case is valid** because it relies on demonstrably versatile and affordable elements of a low carbon energy transition. An underemphasized strength is **avoidance of undergrounding costs in areas of low electricity usage.**

By focusing on an urban/suburban distribution system, the City of San Diego can create a **new model that minimizes both reliance on transmission infrastructure and related charges** while maximizing reliance on energy customer assets – solar arrays and EVs.

Power San Diego’s potential for successful negotiations with SDG&E is enhanced by **major cost avoidance** potential. Power San Diego’s transformative model, **if it successfully integrates local supply, storage and transport,** may inform progress toward the US electricity industry’s future.

What if the Dog Catches the Bus?

- Change messaging which currently calls for voters to “Fire SDG&E”. This insults **SDG&E employees** who will staff the proposed municipal utility. They **are key to everything initiative sponsors hope to accomplish.**
- Prepare for both the election and the negotiation that follows. Address voter worries. **“Can my city make this work?”** Place former Muni GMs and CPUC commissioners on the board, and hire a CEO from the solar, EV or battery industries and a COO with CA Muni experience.
- **Short term benefits are real but not compelling. Long-term benefits are compelling and understated in campaign materials.** Emphasize both.
- Get Wall Street analysts on your side. **Municipalization can be structured to benefit both ratepayers and IOU shareholders.**
- Ten years from now the energy world will have radically changed. Whatever the voters say, **initiate a collaborative pilot step with SDG&E ASAP.**

Concluding Thoughts

The unidirectional energy transport business model can be integrated with newer, bidirectional models, just as bulk material transport by ship and rail were ultimately integrated with truck and air transport. Newly formed municipal electric utilities will have necessary flexibility to create a more robust, better integrated renewable electricity service business model.

But for the AT&T breakup, the cell phone revolution might have taken a slower path. There is compelling reason to choose a faster climate action path than the one we are currently on.

Link to Bill Powers' Presentation on Power San Diego

https://www.youtube.com/watch?v=Z3oY2QxRAB8