

Pocketbooks and Power Systems: Managing Future Rate Impacts

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Why are we focusing on rates?

- California has amongst the highest energy rates in the country
 - ...but our bills are average (or even slightly below)
- State strategy is that we will electrify large portions of the economy
 - So our energy usage will go up – but we can leverage a lot of existing infrastructure
- Focusing just on electric rates is not the best metric to determine affordability

Energy Burden



- Energy burden is the percentage of gross household income spent on energy costs
 - According to U.S. Department of Energy, the energy burden facing low-income customers is 3x higher than the rest of the population
- Energy burden is for *energy services* i.e. both gas + electric

What if we used energy burden as a metric?

How would the energy transition be different if we used energy burden to measure the equitable access to affordable, clean and safe energy services?

We can calibrate programs to increase electricity usage but yield better outcomes on energy burden, if given that direction.

Electricity Sector Decarbonization

Grid decarbonization study (2021)

California can affordably and reliably fully decarbonize its electricity sector by 2045

We need to make different investment choices than the pathway we are on today

It is not just about per project cost, but total system cost

Available at: <https://issues.org/california-decarbonizing-power-wind-solar-nuclear-gas/>

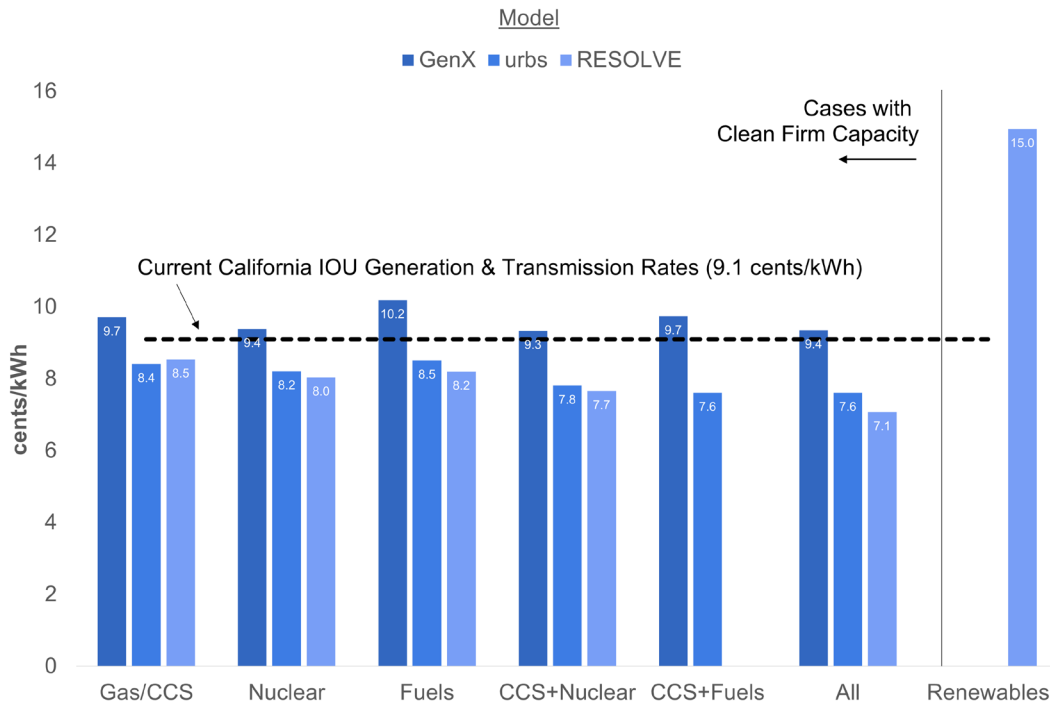


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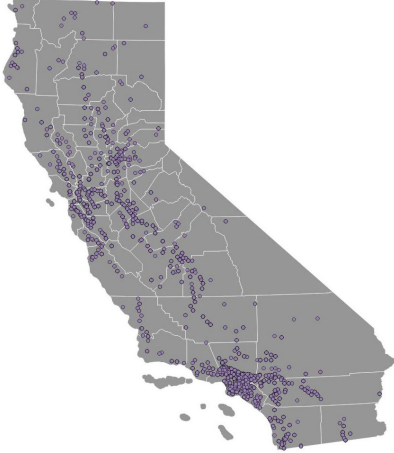


Electricity Sector Decarbonization

- What procurement choices are reasonable to make?
- Diverse portfolios contain overall system costs
- The largest driver of electric rate increase will not be generation and transmission – so let's not delay those efforts to keep the system affordable.



Importance of social and non-monetary benefits



Statewide medium and heavy-duty location study

- Truck registration by address (left)
- Truck registration w/in 50 miles of port (right)



- The past is not a predictor of future needs when electrifying major new portions of the economy.
- Efforts to focus funding to prioritize deployments in DACs delivers social and non-monetary benefits where they are needed most

Port of Hueneme	909
Port of LA	16885
Port of Long Beach	20185
Port of Oakland	5690
Port of San Diego	3688
Grand Total	47357

Who is paying? Who should be paying?

Customer investments captured on bill

Customer private investments not captured on bill

Taxpayer investments to offset customer bill

Shareholder investments

Thank you!

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