Reforms to Contain Utility Costs and Rate Growth

February 28, 2022

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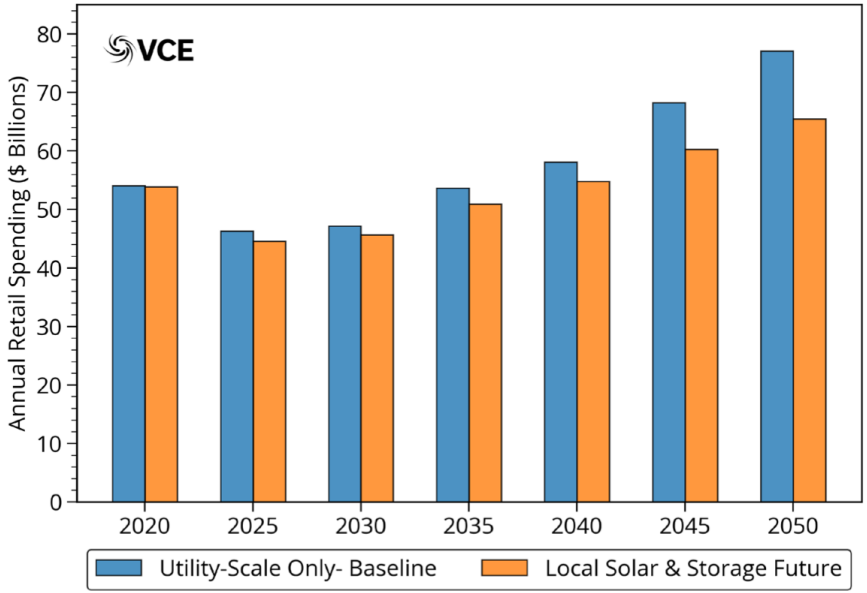
Retail Electricity Spending in High Electrification Future



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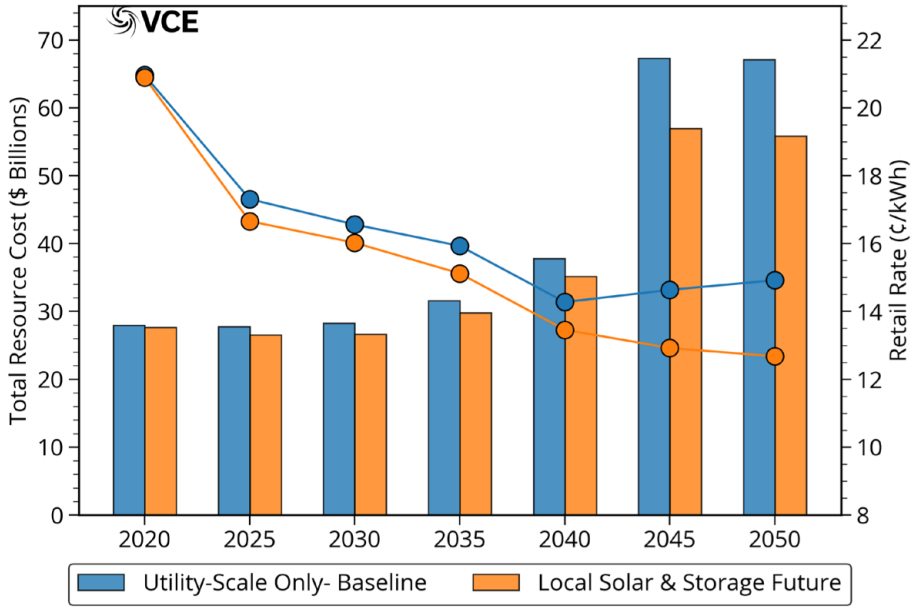
Rate Reduction from Electrification and DER Optimization



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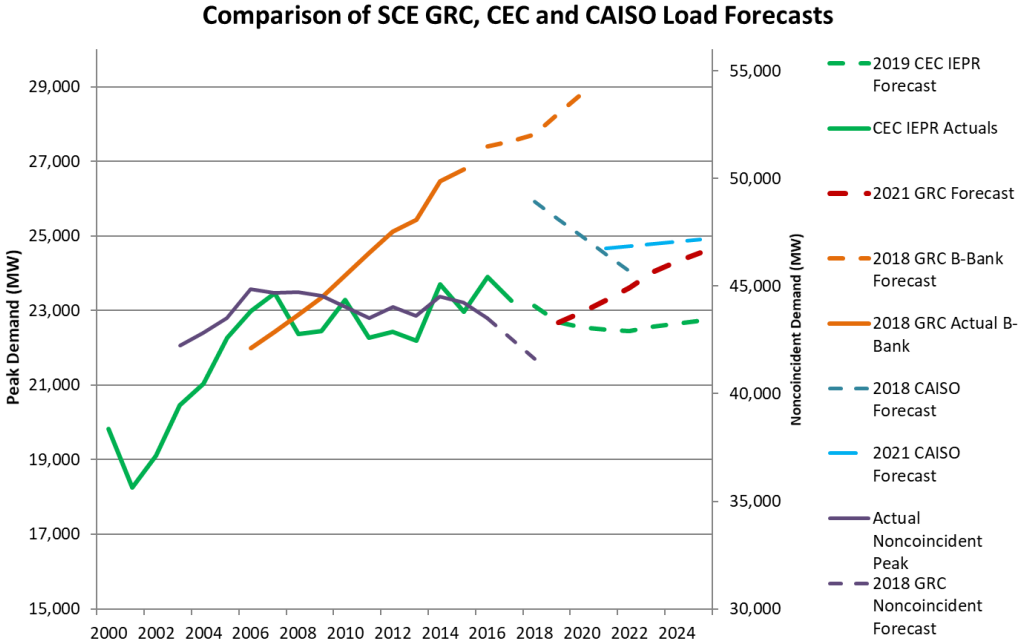
SCE 2019 Recorded Capital Expenditures ($,000)

Grand Total	**4,573,591**
Generation	90,865
System Augmentation - Grid Modernization, Grid Technology, and Energy Storage	131,078
System Augmentation - Load Growth, Transmission Projects, and Engineering	1,101,147
System Augmentation - New Service Connections and Cust. Requested System Mod	360,135
Total System Augmentation	**1,800,360**
Wildfire Management	649,079
Poles Replacement	389,827
Total Wildfire Management & Poles Replacement	**1,038,906**
Distribution Infrastructure Replacement & Maintenance	537,070
Substation Maintenance	65,438
Total Maintenance	**602,508**

Spending Based on Incorrect Load Forecasts

SCE's and PG&E's load forecasts are biased above recorded sales, leading to overinvestment in distribution systems.

SCE's forecasts are not consistent with CEC or CAISO, or even its own internal data.



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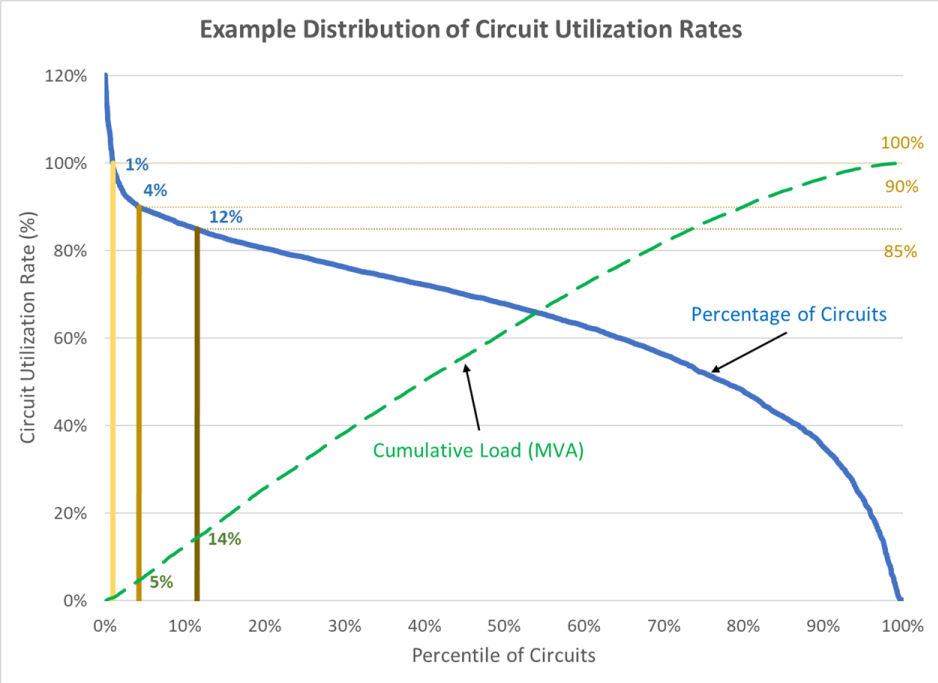
Targeting Overloaded Distribution Circuits

- As an example, SCE invested $1.1 billion in "growth" in 2019, but SCE load is not growing (nor are PG&E's or SDG&E's).
- Distribution deferral solicitations have not been successful because upgrades are already planned and the time window for solicitations is too narrow. A targeted dispatch framework could be prepared for circuit overload.



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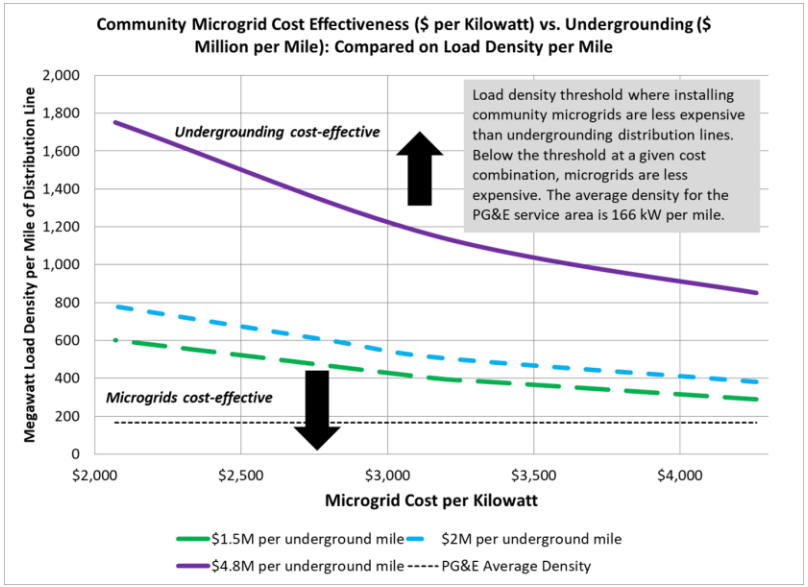
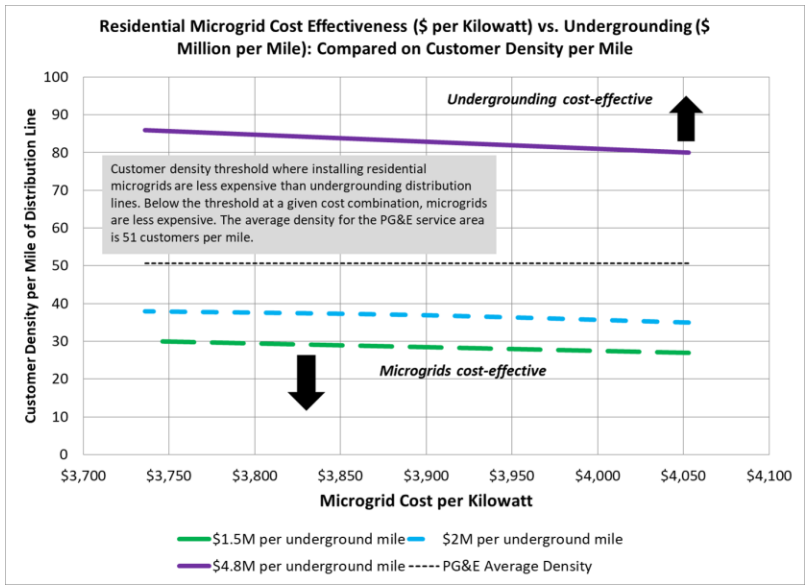
Microgrids Can Be Cheaper Than Undergrounding





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Recommendations

- Conduct a comprehensive independent audit of previous distribution system spending
- Implement real time pricing rates
  - Full rate development in current GRCs and SDG&E RDW
- Create targeted energy dispatch (TED) programs
  - Event based program targeting circuit peaks
  - Managed by IOUs; not integrated with CAISO
- Systematically review alternatives to undergrounding

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Thank You

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