The Public ADVOCATES OFFICE

Fast Trip and Public Safety Power Shutoffs

Customer Impacts and Implications

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Customer Impacts:
Fast Trip vs Public Safety Power Shutoffs (PSPS)

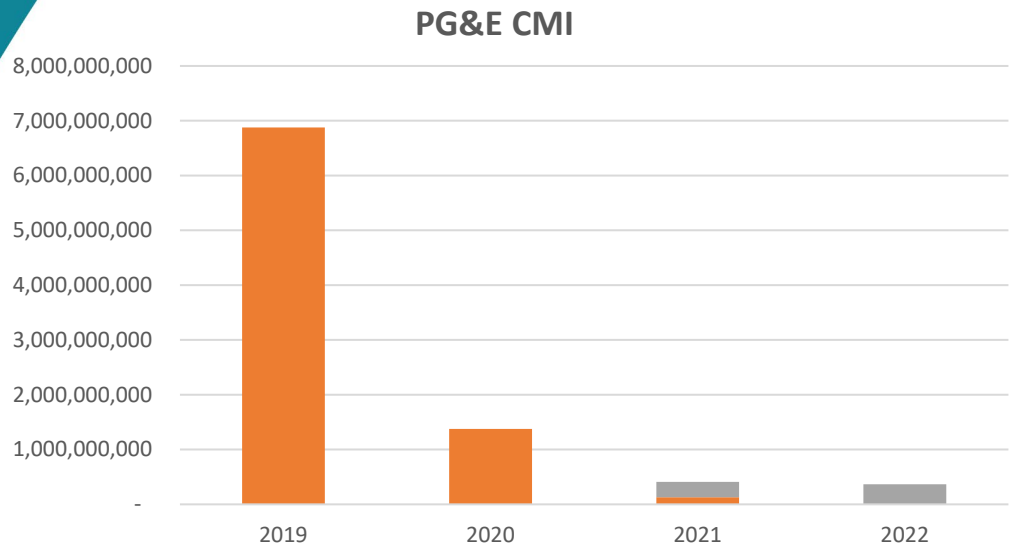
Pros

- Fast Trip outages are generally shorter than PSPS outages
- Fast Trip outages only occur when a fault is detected, leaving customers' power on until a problem occurs

Cons

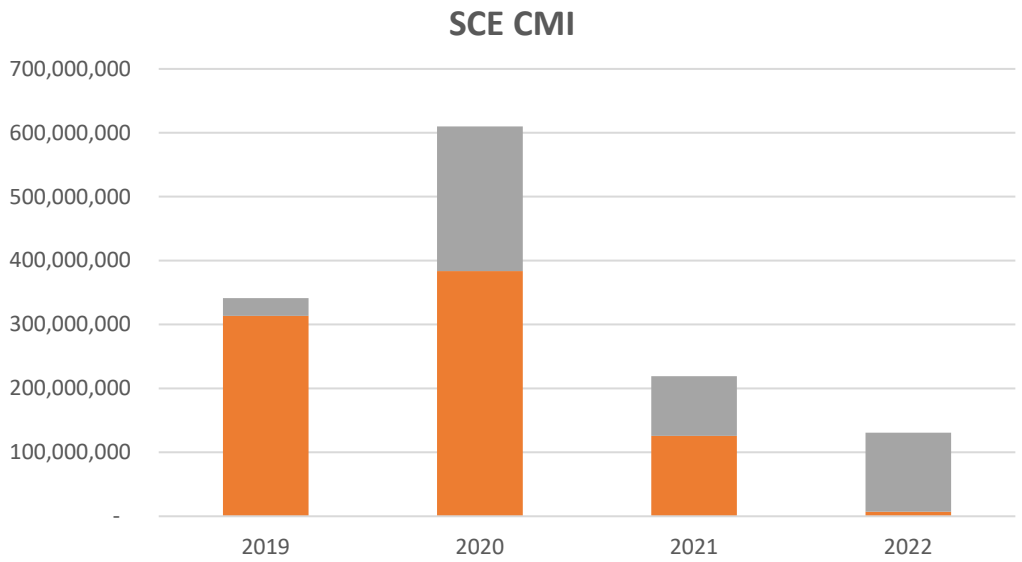
- Some Fast Trip outages can still be very long, causing food loss and other hardship to customers
- Lack of notification of Fast Trip causes significant disruption
- Inability to prepare for a forecast outage as in a properly executed PSPS event

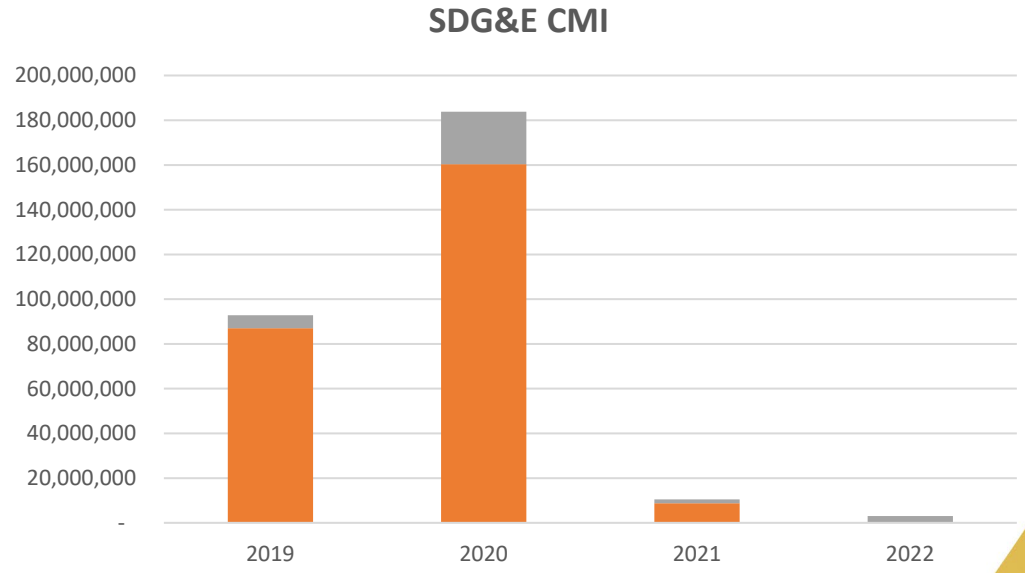
Customer Minutes Interrupted are Decreasing but…



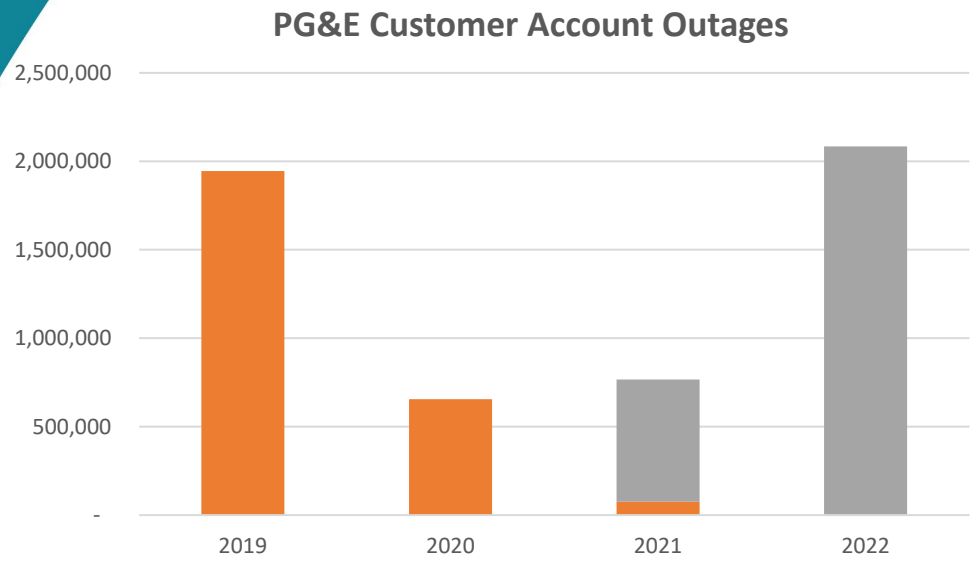
Customer Minutes Interrupted by PSPS Outages

Customer Minutes Interrupted by Fast Trip Outages





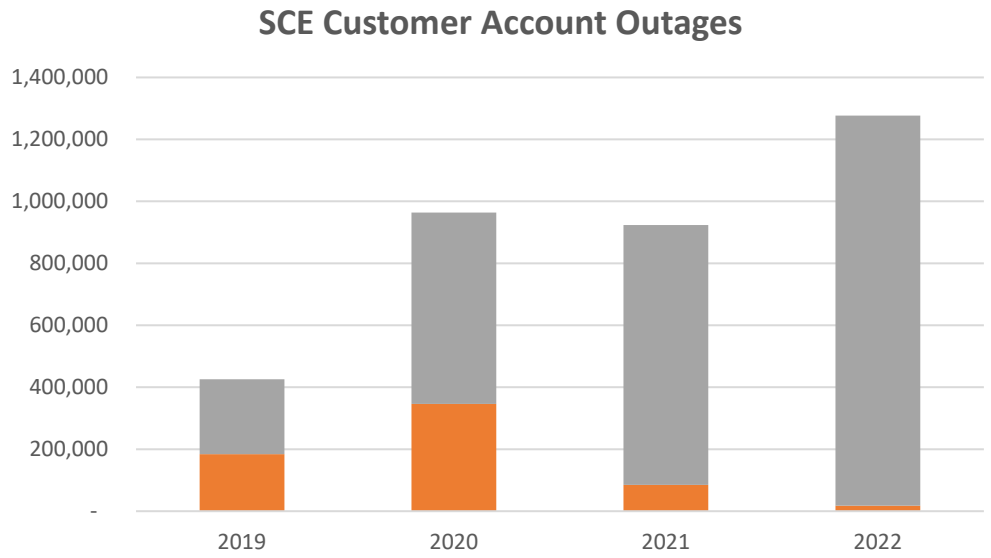
PG&E and SCE Customers are Experiencing More Outages…

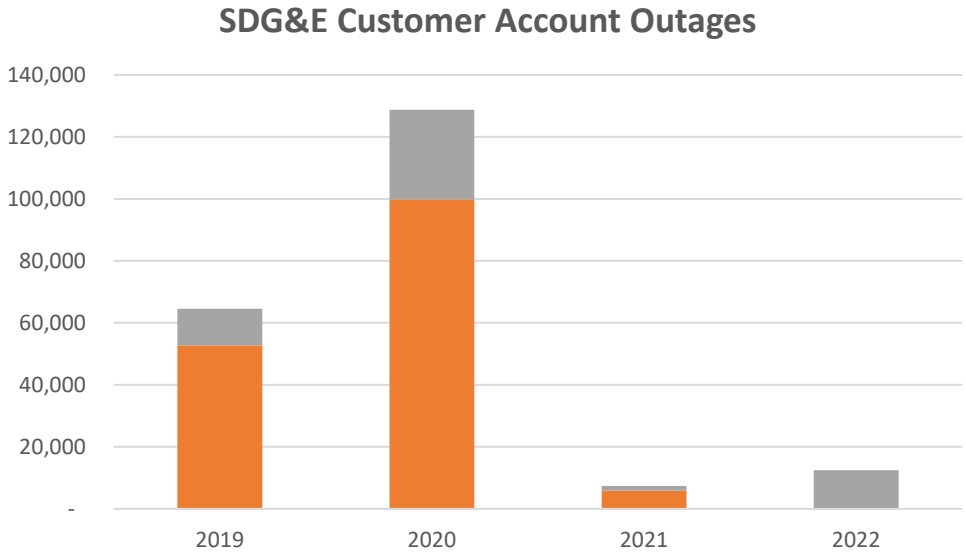


Customer Accounts affected by PSPS outages*

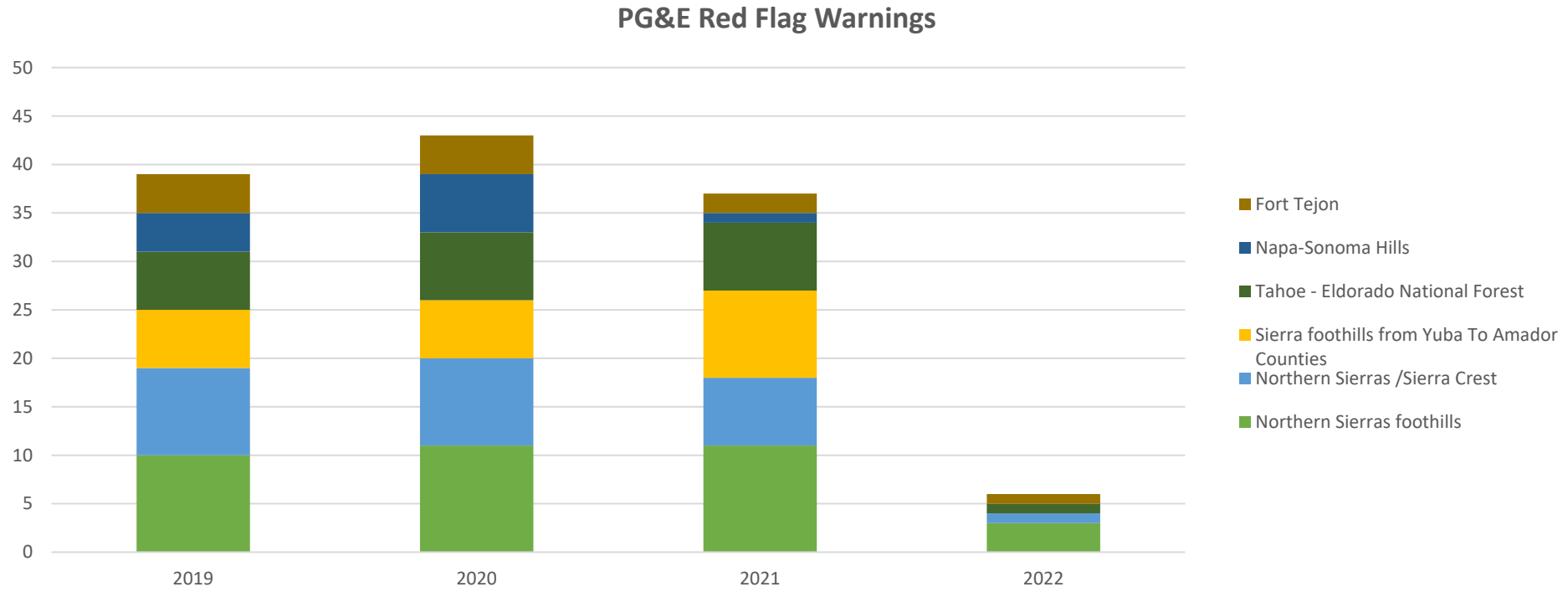
Customer Accounts affected by Fast Trip outages*

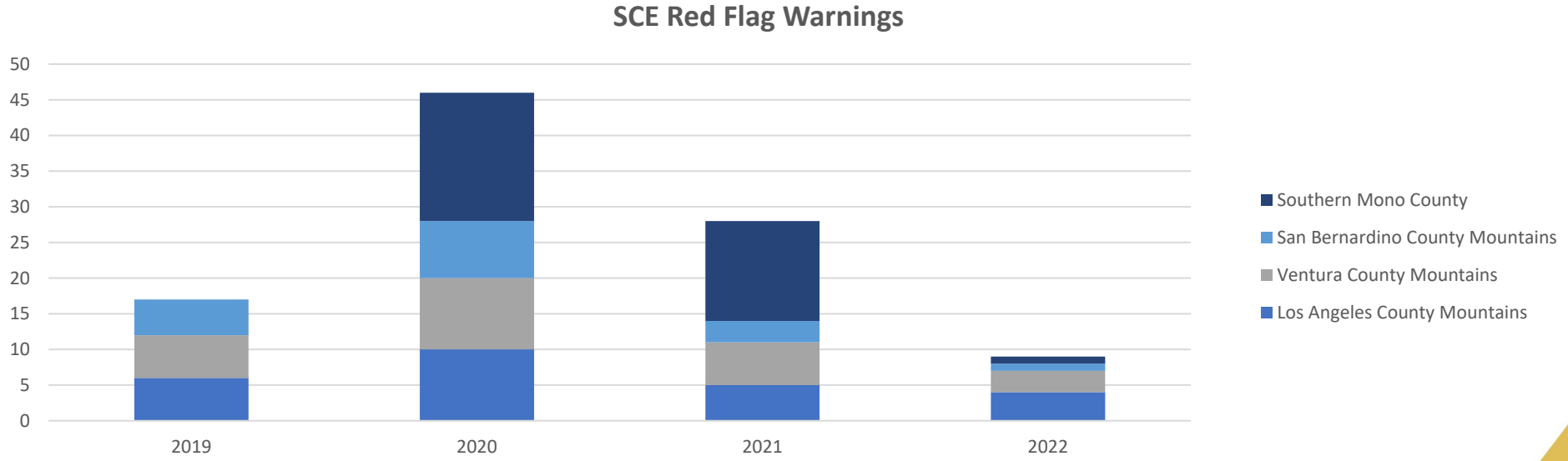
*Tallied by all instances of loss of power due to PSPS and Fast Trip. For example, if one customer account experienced two PSPS events, this would count as two outages in the below graphs.





… Despite Fewer Red Flag Warnings in 2022





Fewer ignitions come with greater reliability risks

Lower Ignitions Trend…

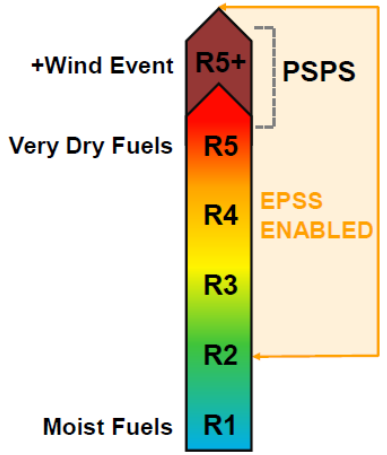
WILDFIRE RISK

31% more days with elevated wildfire risk in 2022
relative to 2018-2020[3]

WILDFIRE RISK REDUCTION

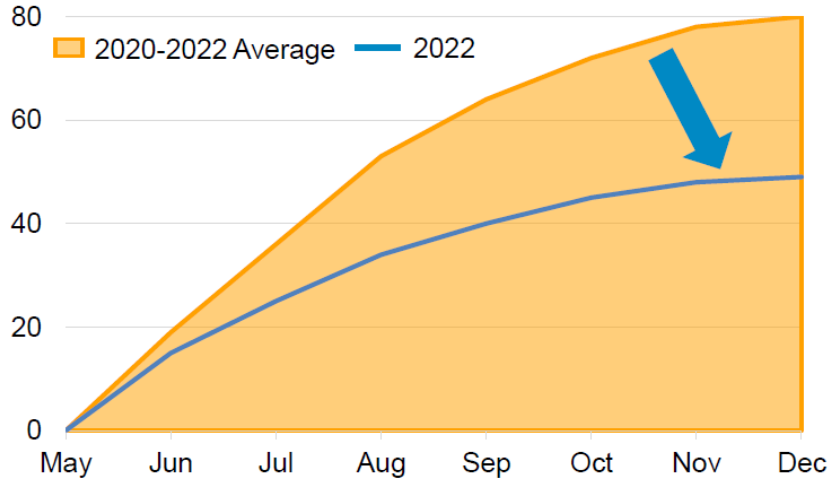
99% reduction in acres impacted in 2022
relative to 2018-2020[3]

Fire Potential Index[1]



In 2012-2020, 95% of acres burned and 100% of structures burned occurred under R3 or greater conditions

2020-2022 Cumulative CPUC-Reportable[2] Ignitions in HFTD + HFRA



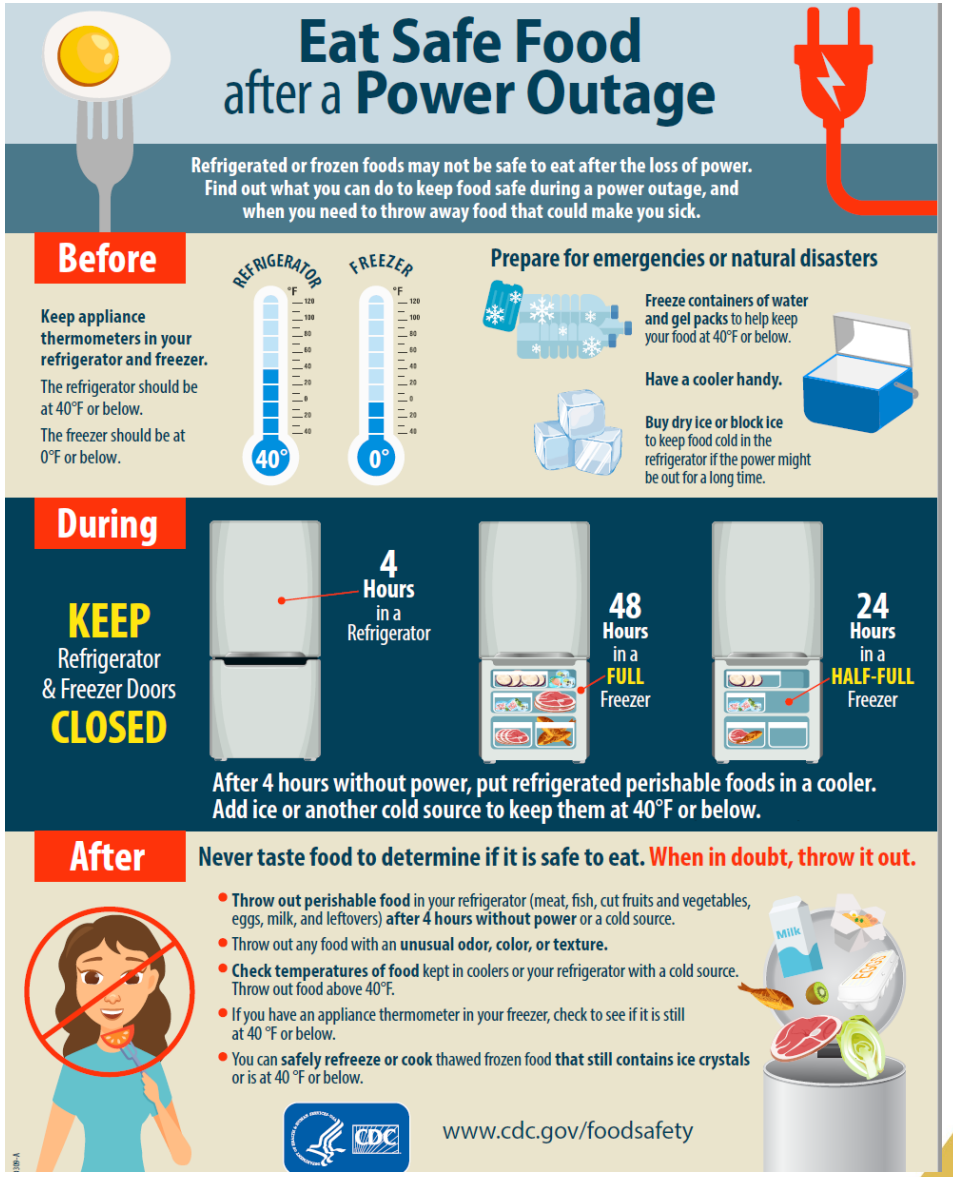
Presentation endnotes are included in Appendix 8.

…Shows EPSS Is Working

Restoration Time of Fast Trip Outages Remains an Issue for the Public

- A significant portion of customers experienced Fast Trip outages lasting over 4 hours, which causes food safety hazards according to the Center for Disease Control (CDC)

Utility	Total # of Fast Trip Outages	% of Fast Trip Outages Averaging >4 hours
PG&E	3,002 (2021-2022)	32%
SCE	2,072 (2018-2022)	18%
SDG&E	102 (2017-2022)	61%



Key Issue: Lack of Communication and Notification

- PSPS Events (when conducted in compliance with Commission regulation) include multiple notifications informing customers of when an outage is likely to occur, giving time to prepare

- Fast Trip outages, while still Wildfire Prevention related shutoffs, are sudden by nature and do not allow time for customers to prepare

- SCE Received 643 complaints about its PSPS program in 2022: Of these complaints, 93% were categorized as “general dissatisfaction…including hardships such as food loss”

- It is clear from post-season PSPS surveys that customers acknowledge that the utility may shut off power in the interest of public safety. However, the ability to prepare is critical to the wellbeing of the public during an outage, especially Medical Baseline Customers.

Initial Policy Recommendations

- Immediate short term: Improve information sharing with customers in real time: "You may be more likely to experience a wildfire safety outage during the incoming weather event"

- The Commission should open a rulemaking or track within R.18-12-005 to examine how Fast Trip settings are deployed and how customer communications and outreach should be managed

- Fast Trip is approaching PSPS levels of customer impacts and should be subject to common sense regulation such as standardized Fast Trip outage reporting to the Commission (PG&E already submits monthly reports)

- If the IOUs are unable to restore power from a Fast Trip outage in 4 hours or less, they should be required to explain why (e.g., damaged conductor)

Further Questions to Explore

- How can impacts of more frequent outages be mitigated for Medical Baseline and Critical Care customers? Further, how can existing PSPS programs be used to help customers during Fast Trip outages?

- Where is the balance point between reliability and safety? How does that translate into Fast Trip settings?

- What grid hardening or other distribution grid technologies are available to limit the reliability impacts of Fast Trip? When and where will they be deployed?

- How are modeling and forecasting tools used to determine when and where fast trip settings are deployed? How are those models validated?

- Fast Trip deployment thresholds can be much lower than PSPS, but still result in customers experiencing a sudden outage: Are current settings too sensitive for the significant reliability impacts on customers?

Thank You!