Response to WSD Plan for SCE:
Action Statement of the Wildfire Safety Division (WSD) and Draft Resolution WSD-004
6.15.2020

While WSD intentions have merit, given the history of SCE actions; their unscientific, yet aggressive push to remove all possible vegetation in the near vicinity to equipment; the continued defense of their plan, unsupported by data or risk effectiveness analysis, to add 4,000 miles of covered conductors – at 42% of their total mitigation budget of $4.5 billion over 3 years - vs a mere 17 miles of undergrounded wires; their pervasively poor data with assertive but unsupported conclusions drawn from this data; and their aggressive and dictatorial relationship with the community be changed by ministrations from the Wildlife Safety Board?

> "WSD is hopeful that providing clear review and evaluation of performance, including identifying such weaknesses, will help drive change in the utilities, allowing all regulated electric utilities in California to improve wildfire risk reduction performance."

Hope is <u>not</u> enough. Without an absolute requirement by the WSD to have solid data analysis with comparative risk effectiveness analysis ascertained by academic and community stakeholders, for covered conductors vs undergrounding wires, <u>prior to</u> continuing this program, SCE will not change its current plan. **SCE-19, Class B**

> "Southern California Edison Company (SCE) takes an "all in" approach to the deployment of covered conductor at significant cost with minimal analysis of alternatives or analysis of why this tool warrants extensive use."

> "On average, the large three electrical corporations plan to spend approximately $305,000 per HFTD circuit mile. SCE's planned spend of approximately $318,000 per HFTD circuit mile is the high end of the large three IOUs and is approximately 4% more than the average of the two other large IOUs."
> "SCE's total investment in covered conductor is 42% of the entire WMP budget, growing from $240 million actual spending in 2019 to $775 million projected spending in 2022, as shown in Appendix B, Figure 3.5a. SCE's spend on covered conductors is much greater than that of its peer electrical corporations. It is also noteworthy that while SCE projected spending $42 million on covered conductor installation in its 2019 WMP, its 2020 WMP reports SCE actually spent $240 million – nearly five times over its 2019 projections.18 SCE does not sufficiently justify the relative resource allocation of its WMP initiatives to its covered conductor program with any quantifiable risk reduction information."

Risk assessment and reduction: There is insufficient evidence that their significant investment in the covered conductor program will be effective in reducing catastrophic wildfire and no information on the criteria used for deploying this measure. There is little detail or substantiation of risk provided for different mitigating options.

This same scrutiny should be applied to their vegetation removal plan. (**SCE-13 Class A)** Tree removal has been effected in a blitzkrieg throughout their service area. Again, there is no science behind this, including for either the 18" or the 4 ft margin between trees and wires. What is clear is that many, many thousands of trees have been removed.

> "SCE spent 325% more than it planned on vegetation clearance in 2019 and only about 25% of what it planned on spending for hazard tree remediation."
>
> "SCE's discussion of its vegetation management programs contains a focus on numerical project targets but lacks detail on how achieving those targets correlates to reduction in vegetation caused outage or ignition risk or increase in thresholds for initiating PSPS events."
>
> "…meeting program targets (e.g., number of trees trimmed or miles of covered conductor installed) does not necessarily mean that the utility has reduced the risk of wildfire."

These statements indicate an unplanned and wholesale attack on vegetation. The problem is not the vegetation, it is SCE equipment.

Again, despite their assertions that they have effective and meaningful outreach to the community, they have abjectly failed. General community outreach and notification has been extremely adversarial without working discussions and outreach has been ineffective regarding WSD and meetings. See addendum: Summary 18.10.17.

> "WSD held two sets of all-day workshops over four days, on February 18, 19, 24 and 25. The February 18-19, 2020 informational workshops called for the electrical corporations to present to stakeholders and the public details on their WMPs, and for stakeholders to ask questions, raise concerns, and otherwise comment on the WMPs' contents."

Despite attending multiple presentations for the PSPS as noted in addendum, communication with the PUC regarding SCE practices, and with colleagues even more involved with SCE, we did not receive notification of these meetings. Previously, scant data was presented for their PSPS plan and conclusions were not based on data. See addendum. This is a severe and recurring problem and is reflective of their response to the entirety of the catastrophic wildfire problem.

Grid design and hardening: As noted, cost effectiveness of covered conductors has not been provided nor comparison with other measures such as undergrounding. Nor have those costs been provided. A planned 6 miles of undergrounding in 2021 and 11 miles in 2022 is extremely limited especially compared with the 4,000 miles planned for covered conductors. Criteria for selection of undergrounding sites has not been made available.

Since undergrounding is a permanent solution, continued maintenance cost of covered conductors and other above ground infrastructure and risk of wildfire and attendant costs must be included in the cost analysis.

Many costs are associated with overhead lines: poles; line maintenance; removal and trimming of trees and shrubs with attendant costs assessment, including over time; land manager and homeowner disputes; the consequent increased cost to structures and landscape due to heat gain; PSPS costs and mitigation; data collection and analysis for overhead line risks and maintenance; increased costs of cooling structures; irrigation to compensate for increased heat gain and drying of remaining vegetation; erosion and flooding; aesthetics; loss

of habitat; decreased calming effect; and, of course, wildfire. Have all these costs been delineated? That is doubtful.

Undergrounding wires is the clear and permanent solution to SCE's wildfire liability. They are absolutely recalcitrant about refusing to do this. They quote a price of $75,000 to more than $85,000 to underground wires from 1 pole, with no underground utilities, to another. This is absurd and about 7 to 10 times more than it was a decade ago. It is a trench with gravel and conduit.

SCE, and local government, should not charge for planning undergrounding, should charge only for the actual physical cost of installation, as validated by an independent assessment, for undergrounding. They should absorb at least part of the physical cost in cost sharing arrangements with individuals and local government. This is the simple solution, except for SCE complete rejection of this proposal.

Neither individuals nor local governments have the power to force them to enact the simple solution to all of these various plans. You do. Please enact this.

ADDENDUM

10.17.2018
Georgia Goldfarb

Summary of Risks & Consequences of SCE Shut-off plan

I strongly oppose Edison's plan for outages. Their poorly devised plan presents a high level of risk for many in our community. As we know, high fire hazard conditions can last for several days and will only become longer and more frequent with climate change. It is irresponsible to shut off all ability to communicate at various times over some 400 square miles (the Santa Monicas) and possibly some 100,000 people without careful planning, coordination and testing for secure mechanisms for communication, electrical supply to water pumps and traffic lights and other needs.

SCEs plan was driven, not by careful planning with fire agencies and residents to minimize fire danger, but by concern about their liability. With their increased lobbying expenditures this year, they were able to pass SB 901 and were able to promote new PUC directives regarding these shutoffs, persuading the PUC to remove the word "mitigate" from the shut-off language. The solution to the wildfire crisis is not to desperately seek various ways of funding Edison's costs related to the disaster, but to ameliorate the causes of these fires. Edison does not discuss burying their wires, but that is the obvious answer to both their liability and actual hazard from arcing and downed powerlines and transformers.

The City of Malibu has rightfully opposed their plan. I agree.

Assessment of problems and risks:

1. Frequency and risk assessment for projected shut-offs by Edison is likely inaccurate.

    a. First, Edison stated that the expected frequency of blackouts is 2-10/year in their entire service area. However, much of the 50,000 sq mile SCE area has either limited risk of fire from sparking and downed wires or very low population. Clearly the highest risk will be

concentrated in wildland, mountainous areas adjacent to cities, like the SMM. The risk of blackout for the Santa Monica Mountains must be calculated, especially when this risk is used to develop a wildfire plan. More recently SCE has given an estimate of 4/yr for the SMM. This number may have been taken from SDG&E frequency of 19 from 2013 to ~2018, which equals 3.8/yr. But that is not a risk projection for our area.

b. The stated frequency of blackouts is based on historical data, while the need for the blackout intervention, as evidenced by the NEW frequency and spread of wildfires for the present and future, has NOT been incorporated into the projected frequency and duration of the blackouts. That is, they have no idea how often they will occur and how long they will last. Reportedly, Malibu had 32 red flag days over the previous year. What should we anticipate for this and future years?

c. Generalizability of shut-off experience. SCE has tested the blackout intervention twice: Once in Idyllwild in December 2017, population ~3800, in a very different terrain, and another that wasn't discussed. Generalizing the purported success of this one very limited experience is NOT applicable to the Santa Monica Mountains considering the area covered, total population, and population density.

d. CAL FIRE is pointedly <u>not</u> involved with any pre-emptory shutoffs, only as typically needed during a wildfire and specifically to protect fire fighters. CW letter 10.16.18

2. Veracity

a. Edison stated that a red flag day would be required. But on the first event, Oct 15, 2018, this was not present in my area in Big Rock, only a red flag warning. At the time of the shut-off the winds were quite limited in my area and in areas of Las Flores, and were not projected to increase for some time. This situation should not have triggered a RFD. Further, specific conditions which will trigger a shut-off are not delineated. Thus we do not know what will trigger a shut-off or how long it will last.

b. SCE stated that there would be 48 hr notification. On Oct 15, many received no notification at all or received it when the electricity was turned on again, in the afternoon of 15 October or ~ 2 a.m. October 16. (Sara Wan, Carbon Canyon). It is not known whether anyone received prior notification. The possibility of a shut-off was discussed with the city on 14 Oct, but there was no notification to the general public until the afternoon of 15 Oct.

c. SCE then denied that there was a shut-off. Email from Ryan, SCE to Sen Stern's office Oct 16. This is not true, the announced time of 12:13, was when the power was shut off in Big Rock and Las Flores. Also see Hans observations and discussion with linesmen. 10.18.16

d. Why was restoration of service delayed by supervisors inspecting lines instead of linesmen? Hans. 10.18.16

e. This was an extremely disorganized and haphazard event. SCE's statements were clearly duplicitous.

f. If we are to have any confidence in the accuracy of the data being produced, an independent observer is sorely needed. That observer should produce calculations for prediction of shut-off frequency and observe all aspects of a shut-off.

3. Communications.

   a. Without electricity, communications will not be available to either residents or first responders regarding fire hazard, wind, road conditions, and evacuation information in the most critical areas. How will we learn of the advice from Cal Fire, Fire Department, City, Sheriff, NOAA, and citizen information? How will they communicate and coordinate services? The situation can change frequently and will inform our decision to stay, go and where to go. As has been made abundantly clear in the fires in northern California, it is ridiculous to think, that in a firestorm the entire populace will somehow individually receive timely emergency information as Edison has suggested.

   b. Traffic lights will be out. How will gov't agencies and community members be able to drive safely.

4. Water supply would be limited.

   a. The electrical lines are not undergrounded and the pumps are neither undergrounded nor encased in concrete which will be required for the system to function in a wildfire. Water is pumped to tanks on a hill which feeds by gravity to our homes. Without electricity, the water supply would be whatever is left in the tank prior to the shut-off. The fire department's water supply would have to rely on air and truck support, limiting their effectiveness and safety.

   b. People who are unable to evacuate or who shelter in place would not have the water they need to protect themselves or safely defend their homes. In the 1993 Old Topanga fire, water ran out in Big Rock, which compromised the ability to fight the fire.

   c. Water is required for habitability. Even without fire, 1-3 gallons of water per person per day is required for basic needs. With a prolonged shut-off, especially under severe heat conditions it would be more. It is unlikely that most people have that stored, particularly the more vulnerable. These risks have not been addressed in their analysis.

5. Excessive heat and medical equipment and supplies.

   a. Without power, lack of air-conditioning and electricity will place people at risk for heat related illness, particularly vulnerable people, older people, young children, people dependent on medical equipment and supplies (any medication which requires refrigeration), and people with disabilities. Temperatures inside a house could increase to over 100^{o}. People may die from heat-related illness and lack of support for medical equipment.

6. Additional costs.

   a. Costs of alternative accommodations, loss of perishables

b. Loss of income from home and other businesses due to inability to communicate for many days throughout the year have not been addressed in this plan.

c. Risk of professional liability for medical providers who will have limited, if any, communication with patients

d. Loss of life due to inability of agencies to coordinate services and communicate conditions and evacuation orders with residents.

e. Whatever public agency participates in this will be held liable for the outcomes, ultimately the taxpayers.

What we need is not a reactive discussion based on business and shareholder needs, but a thoughtful discussion and plan on how collectively to best survive these challenging conditions. This should be the beginning of these discussions not the end. Burying the wires, however, could be both the beginning and the end.