Utility Ignitions Emergency

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To: Energy Safety WSAB <wsab@EnergySafety.ca.gov>

Wildfire Safety Advisory Board,

PG$E has undertaken a monstrous tree cutting project called Enhanced Vegetation Management to placate the CPUC and Judge Alsup who supervises their felony probation for the San Bruno gas explosion. Ever increasing tree trimming and removal has been their go to scapegoat for as long as I've observed them, over 35 years now. Their severe tree trimming caused rapid regrowth that continually shortened the trim cycle causing more TLCs (Tree Line Conflicts) and requiring an ever growing work force. As utility caused wildfires have increased over the last decades PG$E has increased the aggressiveness of their Vegetation Management program, especially since the Camp Fire.

PG$E (and other electric utilities) have always blamed trees for power outages and fire ignitions.
Indeed, 25% of utility caused fires are TLCs, but the other causes are mostly the fault of their equipment, especially the bare uninsulated wire.
A vehicle striking a pole or just the wind can cause wires to slap together showering sparks on dry vegetation. An animal, Mylar balloon or a wind blown branch can cause arcing and showering sparks by conducting current from one wire to another. But these frequent occurances cause arcing only because there's no insulation on the wires. The constant here is bare wire.

Who would have bare wire in our homes, or in our drought parched forests? PG$E's distribution system lacks circuit protection like the GFI (ground fault interrupters) in our homes. Most of their circuits are "protected" with expulsive fuses that shower molten metal on the ground when overloaded. Who ever thought that was a good idea?! PG$E has only lately begun to replace these with exempt self contained fuses since they've been "embarrassed" by so many equipment caused fires. Even so these are being replaced at an unjustifiably slow pace. The other common PG$E "circuit protection" are reclosers that open the circuit (cut the power) when a fault is detected but then close automatically a moment later on the assumption that whatever caused the fault is no longer there, saving a call out to a lineman. But if the fault remains the recloser will close several times more, showering sparks each time, before remaining open. This is not a "fail safe" system, as it should be.

If it seems that PG$E's equipment is causing more fires lately that's probably because much of it is old equipment left in service from the time PG$E acquired the system in the 1940's. Wire and especially splice connectors have limited service life. That's because current cycling up and down with demand causes the wire to heat and cool causing embrittlement of the wire and loosening of the connectors. Loose connectors heat up under load causing resistance

which causes more heat then more resistance etc, etc. This is why PG$E flies helicopters with infrared sensors to inspect their lines. These “fly-by” inspections are assumed to be cheaper than replacing equipment at the end of its reasonable service life, part of PG$E’s “RUN TO FAILURE” operations. The “RUN TO FAILURE” operations and the antiquity of the equipment are thoroughly documented in the Butte County District Attorney’s Camp Fire Investigation. The CPUC is complicit here as it has not updated GO 95 Construction Standards and enforced them as is their mandate; to provide safe and economical power for the citizens of California.

The Legislature and the Governor have worsened the situation by accepting felonious PG$E’s false narrative that trees are the hazard. SB 901 and PRC 4295 require utilities to increase vegetation clearance and allow them to trespass and destroy private property, nullifiying citizens’ fundamental property rights.

The focus needs to be returned to infrastructure hardening, Covered Conductors, as the quickest, most feasible direct response to what is an emergency!

Please act urgently,

Robin McCollum
Chico, California