

Action 16:

Underground or Improve Power Lines When Feasible to Reduce Ignition Risk

Description:

Remove above ground power lines and replace with underground power lines where possible (undergrounding some types of lines, particularly high voltage lines, may not be economically feasible). Above ground power lines can present an ignition hazard by breaking and arcing due to wind, contact with trees, etc., and even by electrocuting wildlife which may then fall to the ground in flames and cause a fire. CDF estimates that approximately 5% of wildfires in the state are caused by power line ignition, though they emphasize that is only a rough estimate. Undergrounding is recommended where feasible along Fish Ranch Road, Grizzly Peak Blvd., Tunnel Road, Skyline Blvd., and in other locations where such improvements could reduce fire risks. As a second choice, above ground power lines could be improved to reduce ignition risk. Specific above ground improvements that could be considered include reinforcing poles, reconductering lines with so-called "tree wire" which resists arcing, and clearing trees from lines.

Implementation:

The City of Oakland has plans to underground power lines

along Grizzly Peak Blvd. and perhaps also on Tunnel Road. PG&E and other appropriate organizations will be contacted regarding Fish Ranch Road and other sites for potential improvements.

Fiscal Impacts:

Estimated costs to underground power lines are \$50,000 to \$1,000,000 per mile, depending on the type of excavation, the number of connections, and the amount of infrastructure relocation which is necessary. Maintenance and liability costs may be reduced significantly. Improvements to power lines are estimated to cost \$5,000 to \$100,000 per mile.

Anticipated results:



Department of Forestry plane spraying flame retardant during one of a rash of arson fires near the Corridor in the summer of 1998 (Patricia Matthews)

Reduce fire ignition potential and reduce the threat of fire to people and property.

Cautions:

High initial cost; possible vegetation disruptions in some places; possible traffic disruptions.



(Patricia Matthews)