



## ***SCE Fire Mitigation Options Study***



**Roper Consulting**

**May 15, 2019**

# Executive Summary

Wildfires are part of our natural ecosystem and everyone must learn how to live with fire (National Wildland Fire Cohesive Strategy, 2009). To that end, Southern California Edison (SCE) has a vested interest safely supplying electrical power to its customers, even in fire-prone areas. SCE is exploring options to effectively mitigate wildfire ignitions associated with its operations at the earliest moment possible to help prevent large-scale disasters.

This report studied the five options supplied to the consultant. The consultant created an adaptation to Option 5 in light of the community feedback, which has been received since the 2018 Woolsey fire.

Each of the options has many pro and con statements to consider, coupled with cost and time to implement. SCE has a large service area with an array of fire service providers (15 counties). The consultant talked to several fire agencies that will be key implementers and they provided honest feedback. One core question developed during the discussions: Is SCE willing to implement a different option per fire agency, or will it need to be a one-size-fit-all approach?

The real questions for SCE Executive Management are:

- What are you trying to resolve?
- What are your expectations for the Return On Investment?

Because wildfire starts and damages are difficult to quantify for decision-making, a true ROI may never be achieved. Instead, a Return On Objective might be a more reasonable outcome to pursue. It then becomes a corporate decision for other factors not contained within this report.

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# Introduction

California and the Southern California Edison's (SCE) service area has been experiencing longer and more destructive fire seasons over the past 30 years to the point that typical fire seasons are now considered year-long. It is an academic discussion whether climate change is real or not, but the facts are present in that we are consistently experiencing more extreme fire behavior today and population growth into Wildland Urban Interface (WUI) areas result in more destructive, costly damages and life loss.

SCE is one of the key stakeholders in the wildland fire topic, serving as utility responder and also as a business/property owner with transmission lines, fixed facilities, employees, customers and shareholders. With this vested interest and community concern, SCE seeks to enhance protection of the communities it serves and its assets by:

- Providing effective suppression of *incipient* stage fires caused by utility crews performing work in high fire risk areas during elevated fire conditions;
- Providing effective suppression of possible powerline caused ignition in high fire risk areas (HFRA) during elevated fire conditions.

## High Fire Risk Areas in SCE's Service Territory

	<b>Area (Sq. Miles)</b>	<b>Percent of Service Area</b>
<b>CPUC Tier 3 – Extreme Risk</b>	4,708	9%
<b>CPUC Tier 2 – Elevated Risk</b>	9,573	18%
<b>SCE HFRA NOT in CPUC Tiers</b>	4,212	8%
<b>Total</b>	<b>18,493</b>	<b>35 percent</b>

The scope of work and a list of options were given to Roper Consulting by SCE staff to analyze, cost out and provide feedback. Data analysis is referenced to national and/or industry standards. It should be noted that the analysis crosses private industry and the public sector's rules of engagement.

Bob Roper, owner of Roper Consulting, is submitting this report. I specialize in fire service management and administrative functions focusing on the wildland fire problem. I've been in the fire service since 1977, serving 34 years in the Ventura County Fire Protection District (last 15 years as Fire Chief) and then as the State Forester of Nevada. I've been on Incident Management Teams (IMT) for Cal Fire and have addressed wildland fire issues at the local, state and federal levels. My years of experience and networks within the wildland fire community provide me the background to make sound insights, opinions and recommendations.

In addition to my qualifications, I have contacted three peer chief officers of large fire agencies (Ventura County, Orange County and Cal Fire) to gauge their reaction to the proposed options and gain their valuable feedback. All specific information relating to this report has remained confidential. The intent of this report is to provide valuable feedback to SCE Executive Management as future steps are being considered.

## Options

To accomplish its overall goal to mitigate associated wildfires, SCE is exploring the following five options:

### Option 1

Provide additional equipment and training to enhance the capabilities of existing SCE's electrical field crews (assumes no new vehicles):

- What equipment should SCE provide to electrical field crews to best equip them to safely extinguish incipient stage wildfires?
  - Field crews on service trucks should be outfitted with Personnel Protective Equipment (PPE):
    - Nomex fabric pants and jacket or jumpsuit. This PPE is designed to be worn over existing clothing to provide double layering for thermal protection, \$360 per unit
    - Leather high-top work boots, \$125 per unit
    - Eye goggles, \$24 per unit
    - Leather gloves, \$60 unit
    - Helmet, \$80 per unit
    - Fire Tent, \$300 per unit
    - Hand radio, \$2,150 per unit
      - Note: Some existing work attire maybe suitable, i.e. boots
- What enhanced training should SCE provide to electrical field crews to provide them with the appropriate knowledge to effectively perform incipient wildfire suppression?
  - All crews will be required to complete the wildland firefighter medical exam, courses and training academy (subject to labor agreement):
    - NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 1582 Medical Examination \$350
    - National Wildfire Coordinating Group (NWCG) Pack Test \$150
    - ICS I-100 – ICS Orientation (web – 4 hours)
    - ICS L-180 – Leadership (web – 8 hours)
    - ICS S-130 – Wildland Fire (web – 8 hours)
    - ICS S-190 – Fire Behavior (web – 8 hours)
    - SCE Wildland Firefighter academy (40 hours)

- What specialized vendors provide this type of training?
  - Firestorm <https://firestormfire.com/training/certified-instructors/>
  - NWSA <http://www.nwsa.us/training-program>
  - NFTCA <http://www.nftca.com>
  - Red Helmet [http://www.redhelmettraining.com/Fire\\_Instructor\\_Courses.html](http://www.redhelmettraining.com/Fire_Instructor_Courses.html)
  - Attack One <http://attackonefiremanagement.com/wildland-fire-training.html>
    - There are numerous vendors that hire retired fire firefighters to provide workplace training. The average cost per student for an ICS class is \$100-150 depending upon the number of students, which influences teacher/student ratio.
- How frequent should we provide the training?
  - The initial training cost per student is \$6,695 plus vendor training cost of \$4,000-6,000 = **\$10,695-12,695 per student.**
  - Annual refresher training depends upon the annual activity experience per employee. If the employee did not have real live-fire experience during the course of the year, the **annual training will consist of 8 hours and is estimated at \$800-1,200 per student** for instructor/s plus employee hourly rate.
- Cost/time to operationalize:

	<b>Equipment /per</b>	<b>Vendor Training /per</b>	<b>Employee Training /per</b>	<b>Medical &amp; Pack Test</b>
<b>Cost</b>	\$2,739	\$4,000 – 6,000	\$3,264	\$500 + 192
<b>Time</b>		40 hours	68 hours @ \$48/hr.	4 hours @ \$48/hr.
<b>Total</b>	<b>\$2,739</b>	<b>\$4,000-6,000</b>	<b>\$3,264</b>	<b>\$692</b>

Note:

- The \$48/hr. hourly employee cost was provided by SCE staff
- There is no SCE program manager cost included
- There is no labor contract stipend/benefit for additional duties
- Vendor training costs may vary depending upon student class size
- In the best case scenario, once administrative business is fully developed, it will take **3-6 months to fully implement**

- Pros/Cons to increasing SCE's electrical field crew role in taking an active role to suppress incipient stage wildfires?
  - Pro
    - Increases SCE crew capability mitigating small incipient wildfires
    - Increases SCE crew safety
    - Increases coordination with local fire agencies
  - Con
    - Creates enhanced expectations over what SCE crews perform today, may be unrealistic
    - Cost-effectiveness versus Return on Investment (ROI)?
    - Dilutes overall knowledge base of technical SCE staff by adding non-related duties
    - May encounter SCE labor push back
- In your judgment and opinion, is this an effective approach to addressing the risk of SCE crew caused ignitions?
  - No – If SCE crews perform highly technical functions, which require them to be on top of their game everyday, adding another complex duty compromises one function or another. It is one thing to expect employees to call 911 and perform basic first aid firefighting as done today, and another thing to expect employees to be fully functional wildland firefighters. Wildland firefighting is a low-frequency/high-risk model.
  - Currently, SCE crews carry water pressure fire extinguishers and shovels to extinguish small incipient wildfires at their work site. They are not responding to a separate location.
- What is your professional judgment and opinion on safety considerations for this option?
  - SCE currently provides basic training on how crews can safely and effectively extinguish small wildfires. It is unknown within the fire service how many times SCE crews have mitigated small wildfires, nor does the fire service know of any safety incidents associated with SCE crews and wildland fires.
  - My professional opinion is that going beyond just notifying 911 and doing basic fire extinguishment, you are creating unrealistic expectations of employee performance and these unrealistic expectations may expose employees to safety issues as they try to accomplish the goal in a low-frequency/high-risk environment.

## Option 2

Contract with a private fire suppression vendor to provide 15 fire suppression crews and supporting equipment. Fire suppression contractor will accompany SCE crews performing work in high fire-risk areas during heightened fire season to provide fire suppression services. During Public Safety Power Shutoff (PSPS) events, contractor shall strategically deploy its SCE assigned resources in high fire-risk areas to take immediate fire suppression actions for nearby ignitions prior to jurisdictional fire agency arrival. Contract term should include 12-hour shifts for six months per year.

- What is the right crew composition and equipment requirement?
  - The most productive staffing composition is a 2- or 3-person Type 6 engine (**Appendix B**) crew. If you cite a Type 6 engine to follow National Wildfire Coordinating Group (NWCG) standards, the appropriate equipment will be fulfilled. There is some leeway in the 2- or 3person staffing numbers below. While two people are the minimum staffing, their production rate in extending hose lines is greatly enhanced by the third person.
- How much would it cost?
  - An Request For Proposal (RFP) will be required to fully answer this question, but the following estimate is based upon the 2017 FEMA Reimbursement rates:
    - Vehicle \$68/hr.
    - Person \$72/hr. (includes salary & benefits)
    - \$212 – 284/hr. for a 2-3 person unit
    - **\$6,945,120 - \$9,303,840 for 2-3 person unit/12-hr. shifts for six months X 15**
- What would be the lead-time to implement?
  - **6-9 months implementation**, possibly longer if SCE desires only one vendor
- What vendor(s) do you recommend?
  - I do not recommend any specific vendor due to lack of first-hand experience. A comprehensive RFP process should ensure a qualified candidate.
    - Grayback <https://www.graybackforestry.com>
    - Capstone <https://capstonefire.com>
    - Rural Metro <https://www.ruralmetrofire.com>
    - FIRESTORM <https://firestormfire.com>
    - Oregon Woods <http://www.oregonwoods.com>
    - Arden Solutions <http://www.asifightsfires.com>
  - Contact the National Wildfire Suppression Association (NWSA) <http://www.nwsa.us> for industry references.



- Also recommend considering using a different type of vendor. The California Professional Firefighters (CPF) administers the Sub-JAC program in California. Under this program, CPF has an apprentice program that could possibly partner with SCE to provide staffing. The exact costs of this concept will depend upon an agreement and associated equipment costs. The time to implement this concept is probably 1-2 years. The real benefit will be the fire labor group's (CPF) buy-in.
- Provide at least three opinions/responses from larger counties in SCE service territory on viability of this option
  - Welcome SCE into this arena, especially bringing resources with them
  - Concerned about how these resources will be integrated into the command structure
  - Concerned about how fire labor will react
- In your judgment and opinion, is this an effective approach to addressing the risk of powerline and SCE crew caused ignitions?
  - Yes, this is a viable option to consider, but it needs to be fully vetted and explained and presented to partner entities. The fire service had a similar circumstances transpire around 2008 when the insurance companies began using their own resources. The insurance industry did not talk to the fire service first; their resources just started appearing on-scene at incidents without coordination and had some questionable responders. The fire service tried to rectify the situation by creating the FIRESCOPE Private Resource Guidelines (**Appendix A**) ([http://firescope.caloes.ca.gov/meetings/bod/2018/bod\\_meeting2/documents/AB%202380/7-908%20FIRESCOPE%20Private%20Resource%20Utilization%20Guidelines.pdf](http://firescope.caloes.ca.gov/meetings/bod/2018/bod_meeting2/documents/AB%202380/7-908%20FIRESCOPE%20Private%20Resource%20Utilization%20Guidelines.pdf)) that also applies to utility company resources. If SCE decides to move forward with this option, they need to first meet with service area fire agencies to fully explain the why and how this option needs to move forward. Without taking this proactive step, fire chiefs and labor groups may take opposition.
  - Success will happen if these resources are only tied to SCE crews and not the incidents, but these resources must agree to abide by the FIRESCOPE Guidelines.
  - Having these resources patrol potential trouble areas will be met with fire labor issues.
- What is your professional judgment and opinion on safety considerations for this option?
  - Safety should not be a problem if the RFP is properly written and the whole program is well-coordinated with internal SCE practices and the fire service for shadowing SCE crews.

- The problem arises as these private resources are monitoring high fire-hazard service areas and how they are coordinating with local fire agencies. Safety becomes compromised in communications, command and interaction unless these issues are resolved before putting these resources in the field.
- Pros/Cons to hiring private contractors to shadow SCE field crews and monitor high fire hazard service areas:
  - Pro
    - Increases SCE capability mitigating small incipient wildfires
    - Increases SCE crew safety
    - May increase coordination with local fire agencies
    - Adds to local fire agency resource depth if working relationship can be achieved
    - Type 6 engines should be able to access most SCE assets and locations
    - Much cheaper than fire agency personnel rates
  - Con
    - Cost effectiveness versus Return on Investment (ROI)?
    - May encounter SCE and fire labor push back

## Option 3

Contract with local fire agencies to provide fire suppression support to SCE districts that are in high fire-risk areas (15 districts). Fire agency personnel will accompany SCE crews performing work in high fire risk areas during heightened fire season to provide fire suppression services. During Public Safety Power Shutoff (PSPS) events, fire agency shall strategically deploy its SCE assigned resources in high fire risk areas to take immediate fire suppression actions for nearby ignitions. SCE would require this service on a 12-hour shift rotation six months out of the year.

- Is this operationally feasible?
  - Yes
- What would they provide to each district?
  - SCE would create a local agreement with each respective fire agency for “standby” services. This service is similar to services rendered to the movie industry and oil production operations. The contract would cite the hours of service, performance standards and duration. If a fire agency does not have Type 6 engines or equal vehicle, then a purchase order agreement can also be part of the agreement.
- How much would it cost?
  - Assuming that fire agencies have suitable and available vehicles for this

mission, we could project using the FEMA equipment rate of \$68/hr. Personnel rates are based upon 1.5 overtime (OT) rate because this service is not part of the agencies' regular staffing plan.

- Employee costs with salary and benefits X 1.5 OT rate:
  - Minimum staffing of three people of these ranks:
    - Firefighter  $\$70 \times 1.5 = \$105$
    - Engineer  $\$100 \times 1.5 = \$150$
    - Captain  $\$130 \times 1.5 = \$195$
  - Average rate =  $\$518 (\$450/\text{hr.} + \$68) \times 12 \text{ hrs.} \times 182 \text{ days} \times 15 \text{ units} =$   
**\$16,969,680**
- What would be the lead-time to implement?
  - If fire agencies have the respective vehicles and labor/operating agreements can be achieved, this option can be **implemented within 2-3 months.**
- Provide at least three opinions/responses from larger counties in SCE service territory on viability of this option
  - Larger fire agencies, while having more staffing, may find this option too hard to administer and therefore decline.
  - Smaller fire agencies (i.e. volunteers) may be excited about this option as a way to help generate needed revenue.
  - Sounds like a great idea and would be willing to partner with SCE.
- How would fire agencies react to SCE doing this?
  - Most fire agencies, respective governing bodies and labor groups will be open to this option. The final answer really will not be known until the topic is presented. The main concern will be the longevity of this option. If this is a one-season plan, fire agencies may be reluctant because of initial start-up operating costs and administrative issues. If this is a long-term plan, then fire agencies can build up staffing and resources internally for reserve capacity, which will ultimately help the state. A big question is if the host fire agency has the appropriate/available vehicles and a reserve/interested labor force.
  - It should be noted that the OT rate is very close to a new employee rate with salary and benefits.
- In your judgment and opinion, is this an effective approach to addressing the risk of powerline and SCE crew caused ignitions?
  - Yes, this is the easiest option to implement (operationally and labor issues) but at a huge cost for the ROI. A key component to reduce costs would be to not staff this option every day for the six months, but tie it to a "burn index" and coordinated via a "fusion" center. This would help lower costs, but reduces firefighter labor interest because it is not a regular program.

- This option would also have the greatest public appeal because of the public's trust in firefighters.
- Pros/Cons to hiring fire agencies to shadow SCE field crews and monitor high fire hazard service areas:
  - Pro
    - Increases SCE capability mitigating small incipient wildfires
    - Increases SCE crew safety
    - Easy to implement
    - Increases coordination with local fire agencies
    - Adds to local fire agency resource depth if working relationship can be achieved
    - Type 6 engines should be able to access most SCE assets and locations
  - Con
    - Cost effectiveness versus Return on Investment (ROI)?
    - Very expensive
    - May encounter SCE labor push back
    - May incur additional vehicle purchase costs
    - Fire labor groups will not tolerate another fire agency performing this option within their service area
    - Duration?

## Option 4

Establish a proprietary fire group within SCE that consists of 15 two-person crews equipped with Type 6 engines. Crews would support SCE personnel during field operations during high-risk fire conditions, provide vegetation management services, support SCE crews in fire restoration efforts during and after wildfires, support PSPS events, etc. During Public Safety Power Shutoff (PSPS) events, SCE shall assign resources in high fire-risk areas to take immediate fire suppression actions for nearby ignitions.

- What is the right crew composition and equipment requirement?
  - The most productive staffing composition is a 2- or 3-person Type 6 engine crew. There is some leeway in the 2-3 person staffing numbers. While two people are the minimum staffing, their production rate in extending hose lines is greatly enhanced by the third person. SCE would need to purchase 15 - Type 6 vehicles with NWCG recognized inventory.
- How much would it cost?
  - A Type 6 engine cost between \$150,000-200,000 depending on features (i.e. foam system) plus its inventory \$30,000 = \$180,000-\$230,000/per X 15 = \$2,700,000-\$3,450,000

- Initial training costs range from \$10,695-12,695 (2-3) X 15 = \$160,425-\$190,425
- This will be a new SCE program so it will require new employees \$143,520 (salary and benefits at \$48/hr.)/per X 2-3 X 15 = \$4,305,600 - \$6,458,400
- Total costs **\$7,166,025-\$10,098,825 plus administrative costs**
- What would be the lead-time to implement?
  - Being this is a new program, it will need a program administrator and support staff plus a program design. Hiring new employees, training and purchasing vehicles are estimated to take **12-16 months for implementation.**
- Provide at least three opinions/responses from larger counties in SCE service territory on viability of this option
  - Okay with SCE shadowing field units, just do not like their units patrolling and responding to fires.
  - Welcome SCE actions so long as SCE fully supports the needed training and cooperative agreements with fire agencies
  - Predict a fire labor fight if SCE units monitor and patrol
- In your judgment and opinion, is this an effective approach to addressing the risk of powerline and SCE crew caused ignitions?
  - Yes, this can be an effective approach, but again faces fire labor issues in the “monitoring” action, not the shadowing action.
- Pros/Cons to hiring new employees as a proprietary program to shadow SCE field crews and monitor high fire hazard service areas:
  - Pro
    - Increases SCE capability mitigating small incipient wildfires
    - Increases SCE crew safety
    - Increases coordination with local fire agencies
    - Adds to local fire agency resource depth if working relationship can be achieved
    - Type 6 engines should be able to access most SCE assets and locations
  - Con
    - Cost effectiveness versus Return on Investment (ROI)?
    - Very expensive
    - May encounter SCE and fire labor push back

## Option 5

Contract with a fire suppression vendor/fire agency to establish fixed regional fire suppression capabilities in extreme risk fire areas during heightened fire season to take immediate fire suppression actions for nearby ignitions. SCE would require this service on a 24-hour shift rotation six months out of the year.

- Is this operationally feasible for a vendor to do? What about a local fire agency?
  - It is operationally feasible to do for both a vendor or fire agency. The problem is the ROI. Why spend millions of dollars for contract services that may never be used based on historical data when you could build a community infrastructure, i.e. community fire response, community arson watches. Today we put cameras in remote locations to monitor incipient wildfires, but response teams are miles away. Could we pass through funding to local fire agencies so they can build “reserve” forces in remote community locations?

The answer is **YES**. Reserve forces were the mainstay of the nation’s fire service and still are in most parts of the nation, minus Southern California. This community effort created community buy-in, but was phased out over time due to increased mandated training hours, loss of community members working inside of their community, lack of administrative support by host fire agency and labor issues. After the 2007 Malibu fires, Los Angeles County Fire Department created a new program for residents at the far end of Corral Canyon where they voluntarily staffed a fire engine. This single engine is still in place today, but with mixed results.

Following the 2018 Woolsey fire, there is now a public outcry that people will not evacuate next time due to congested roads and less than effective repopulation efforts. These residents now want to create “militia” type fire brigades to take care of their local community when no public fire resources are available. Their justification seems reasonable to them, but government leaders will still follow evacuation plans as the safest course for the larger general population.

Suggest that SCE meet with fire service leaders to discuss how SCE could foster a local response program that captures the energy and dedication of local residents. This type of program may not work everywhere and if created, needs to be supported for the long run.

- What will be required for each fixed fire suppression location?
  - Location components:
    - Used fire vehicle, \$50,000
    - Equipment, \$50,000

- Training, \$15,000
  - Shelter facility & land for the vehicle, \$300,000
  - Administrative oversight, \$50,000
- How much would it cost?
  - \$465,000 per location X 15 = **\$6,975,000**
- What would be the lead-time to implement?
  - **1-2 years**
- Provide at least three opinions/responses from larger counties in SCE service territory on viability of this option
  - The option has merit, especially in areas that express self-reliance
  - Labor will never agree and the community will not be there for the long run
  - Not a one-size fits all approach, but has merits and open to future dialogue
- In your judgment and opinion, is this an effective approach to addressing the risk of powerline and SCE crew caused ignitions?
  - This does not directly address powerline and crew caused ignitions. This model is most likely to be concerned with the protection of private residences. What this effort does do is to create community support for a SCE-initiated program. Wildfires will occur outside of the SCE work area and HRAs and the result is the same, damaging fires.
  - The only way to make an investment to better address powerline and crew caused ignitions is to use some type of SCE technical tools that show a higher level of resistance and/or areas where maintenance is a factor. If this type of data is available, then vendor or fire service crews can be a target option versus a very expensive standby model.
- Pros/Cons to creating a community-based reserve capacity program that can support SCE field units and monitor HFRA areas:
  - Pro
    - Increases SCE capability mitigating small incipient wildfires
    - Increases SCE crew safety
    - Increases coordination with local fire agencies
    - Adds to local fire agency resource depth if working relationship can be achieved
    - Type 6 engines should be able to access most SCE assets and locations
  - Con
    - Cost effectiveness versus Return on Investment (ROI)?
    - May encounter fire labor push back
    - Like many community volunteer programs, they are easy to start and hard to maintain

# Summary

SCE is to be commended for thinking outside of the box and inserting themselves into the resolution of wildfires associated with their work and assets. With that said, SCE has goals, but historical data is lacking to show that SCE crews caused fires while working on trouble spots or that SCE crews have ever extinguished an incipient fire. During the writing of this report, the consultant had a conversation with the retired Capstone Fire Chief who indicated that Capstone has some historical data from the term of their SCE contract, which needs to be documented. In addition, monitoring vast HFRAs during peak Red Flag days is like finding a needle in a haystack without better technical tools for intelligence/direction.

Fire chiefs are open to new ideas that are feasible and do not want to throw money at problems, even if it's SCE's money. There is also the very real issue of labor interests on both SCE's side and the fire side. Both groups want to work within their respective silos and are reluctant to cross paths due to professional courtesy. From the fire side, if SCE refers to this venture as part of their private fire brigade, there should be no problem shadowing SCE crews or monitoring fixed SCE facilities. The problem arises by monitoring potential trouble spots and then taking action.

There is no way to unilaterally implement most of these options. Any option will need the respective labor group's buy-in for success. On top of that, if SCE wants to be recognized as an innovator, SCE will need community support, first by starting with respective political support and then an endorsement by the fire service. The problem is that some communities may endorse one option while another community prefers a different option. Is SCE open to implementing options depending upon community preferences?

Most of the options come with considerable costs and with the lack of historical data; the question about the ROI is noteworthy. SCE can spend millions of dollars without making a tangible difference in their bottom line and fire-start outcomes.



In summary:

	<b>Option 1</b> Enhanced SCE crew capability	<b>Option 2</b> Private vendor	<b>Option 3</b> Fire agency	<b>Option 4</b> SCE dedicated	<b>Option 5</b> Reserve capacity
<b>Implementation time?</b>	3-6 mos.	6-9 mos.	2-3 mos.	12-16 mos.	1-2 years
<b>Cost?</b>	\$10,695 to \$12,695 plus annual refresher	\$6,945,120 to \$9,303,840	\$16,969,680	\$7,166,025 to \$10,098,825 plus administrative costs	6,975,000
<b>Consultant's Recommendation</b>	<b>No</b> , stay with current model	<b>Yes</b> , if limited to private fire brigade actions	<b>Yes</b> , if SCE commits to long-term contract, poor ROI	<b>Yes</b> , if limited to private fire brigade actions, poor ROI	<b>Yes</b> , if you can get fire agency and community support

# Appendix A

**HENRY RENTERIA**  
Director, Governor's Office  
Of Emergency Services

**P. MICHAEL FREEMAN**  
Chief, Los Angeles  
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**DOUGLAS BARRY**  
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**DENNIS THOMPSON**  
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**KEN WAGNER**  
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**SHELDON GILBERT**  
Chief, Alameda County  
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**RICH WEBB**  
Linda Fire Protection District

**PAT DENNAN**  
Chief, San Bernardino County  
Fire Department

**JIM MARQUIS**  
Chief, Grass Valley  
Fire Department

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National Park Service

**CRAIG BARNES**  
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Bureau of Land Management

**CHARLES KNAPP**  
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**CHRISTY E. BOUMA**  
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California Professional Fire Fighters



## FIRESCOPE

FIRE AND RESCUE SERVICE ADVISORY  
COMMITTEE/  
FIRESCOPE BOARD OF DIRECTORS

3650 Schriever Avenue  
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To the California Fire Service:

The FIRESCOPE Board of Directors approved this document at its July 9, 2008 meeting. This document is intended to provide guidelines when encountering private fire resources, utility companies, etc. on incidents.

Recently, private fire resources have been on the Juliet and Sesnon fires. The caliber of these resources varies depending upon the insurance company that contracts with the private vendor. This ranges from a vendor that reports to the ICP, has fire qualified staff, attends briefings, has compatible radios and complies with all road closures and motor vehicle rules to the "wildcat" vendors that do the opposite.

*These guidelines are intended to provide general direction for command staff. FIRESCOPE supports the use of private vendors to perform pre-suppression fuels treatment and steps to protect structures prior to the fire's arrival, but they should not work within an area under evacuation orders.*

### Private Resource Utilization Guidelines

#### Issue

The issue before the fire service today is how to address the command, control, liability and safety issues associated with private resources.

#### Discussion

Private resources (contractors) may be allowed to operate on an emergency incident (within a restricted area) only if they are under contract to the AHJ or cooperating fire agency. Private fire brigades may also be integrated within the incident if they have legal authority and jurisdiction to operate, are fully qualified and have a working relationship with neighboring fire agencies. These private resources are held to the same operational and training standards as public fire agencies. Initial legal review indicates that the AHJ/IC has the authority to restrict resources that may enter a closed area. Private property owners have the legal right to protect their property if they are on-site during the emergency incident, but once evacuated are not allowed re-entry during said incident when a mandatory evacuation order is in place.

All other private resources utilized should be restricted to non-emergency activities outside of the evacuated or restricted area to ensure safety, command, control and minimize potential liability issues. Private resources may include utility companies, contractors or laborers providing defensible space/ fire protection, etc. These resources have a role before, during and after the emergency incident, but only within areas deemed safe and have the expressed authorization of the AHJ/IC. If they are given evacuation orders, they must comply.

The fire service needs to work with the insurance companies to safely utilize private fire protection resources. As the nation is witnessing, there are more fires and threatened structures today than public and private fire protection forces can respond to. Most of these services advertise that they will respond if a fire is within three miles of the insured property. With that said, it seems that the paramount marketing tool for the insurance companies should be that they endorse property owners adhering to FIREWISE or similar prevention/protection standards yearlong. A homeowner will be better off using private resources to create defensible space, retrofit structures to a modern wildland building code and installing fire suppression systems (internal & external) so the structure can survive a wildland fire even if a fire protection services cannot arrive prior to the fire. This is particularly important, as most structures are lost in the initial attack phase of wildland fires.

#### ***Command, Control, Liability, & Safety***

The emerging private fire protection industry is not regulated and does not have any local, State, Federal, National standards, or enabling legal authority to follow while employing staff or responding to incidents. Many follow NWCG guidelines, employ off-duty/retired or experienced firefighters, but the AHJ/IC may not know their true ability/capability. Some vendors have already appeared unannounced on fires, violating road closures while trying to sell their services to homeowners during a developing crisis.

The AHJ/IC must be able to account for all resources under his/her command, especially when evacuation orders are given. The AHJ/IC is responsible and now proven to be liable for unsafe acts. Therefore, allowing additional resources within a closed hazard area without compatible communications, standardized training, certifications and qualifications, and so forth can compromise safety as well as obstruct ingress/egress of firefighters and public.

#### **Background**

Over the past few years, insurance companies have seen an increase in their insured property losses due to wildfires. This development has spawned a resurgence of interests from private vendors and the insurance industry to offer what they claim to be an augmentation of traditional public fire protection services. Further evaluations also indicate that the coordination of utility company resources and other private vendors is not well addressed on emergency incidents.

In order to insure the protection of the public, first responders and the private resource operators themselves, it is incumbent on the fire service (local, state & federal) today to clarify the potential impact of these operations and clearly establish command, control, liability and safety parameters under which private resources can operate on incidents.

### **Appendix A Private Resource Guidelines**

The following guidelines serve as a tool for the AHJ/IC in managing private resources on incidents:

1. All private resources must respect the decision of the AHJ/IC as they're the final decision makers in the command, control, liability and safety of the incident.
2. The AHJ/IC and law enforcement has complete authority and legal right to control an emergency incident. Private resources are not first responders and are

completely subject to the directions and limits set forth by public safety agency personnel. The private resource has no claim or stake in unified command and will not have any role in incident command.

3. Private resource vendors shall provide a representative that reports to the Incident Commander or the Liaison Officer and can communicate with their resources.
  - a. This representative shall attend all planning and operational briefings and should be available to represent said entity in regards to qualifications and specific interests to be involved, etc.
  - b. Private resources are responsible to communicate their location and movements through the private resource representative to the Incident Commander/Liaison Officer.
  - c. Failure to notify the Incident Commander/Liaison Officer of the location or movement of private resources could subject them to removal from the incident.
4. Private resources shall check-in with the Incident Commander prior to deployment within an emergency area. ICs need to maintain situational awareness regarding private resources and their compliance with evacuation orders.
5. A message should be included in the incident action plan and briefed at operational briefings regarding known private resources activity on or near the incident.
6. Private resources must be able to monitor incident radio traffic so they maintain situational awareness and know when an area is being evacuated/ restricted. They shall refrain from using incident radio frequencies.
7. Private resources should focus their activities on pre-fire activities and pretreatment of values-at-risk prior to a road closure order.
  - a. Once a road closure is ordered, they must evacuate the area so safety is not compromised and cannot return until the area is reopened, or until they have received IC authorization to re-enter.
  - b. If the private resource does not evacuate the area, the private resource assumes full responsibility for the safety of the resource, personnel and equipment.
  - c. The AHJ/IC should not be held liable for any loss, injury or death.
8. The IC or local law enforcement officials having jurisdiction must authorize access to any community under evacuation/restriction.
9. Private fire protection resource contractors who are employed on an incident (as a local, State or Federal resource) are not allowed to sub contract with the insurance industry or freelance to local home owners while mobilized on the incident.
10. Private resources not under contract to a public fire agency shall adhere to all local business license provisions.
11. All private fire protection resources should be identified (non-emergency) on the outside of the vehicle, to ensure they do not appear to be a public fire resource. This includes no red lights, sirens or facsimile fire agency decal.
12. During fires where a community meeting is hosted by the AHJ/IC, a clear understanding must be created with the general public as to the role of government in incident command and private resources.

# Appendix B

## WILDLAND TYPE 6

SAC METRO FIRE





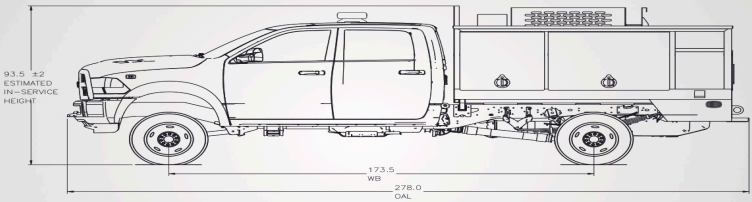
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