

## **READY**

### **Vigilance is a 24/7 job for Diablo Canyon firefighters**

For Local 1245 firefighters at PG&E's Diablo Canyon nuclear plant, vigilance isn't just the name of the game—it's the whole game.

The plants are a witch's brew of deadly radioactive substances that could irradiate a large swath of California if "containment" failed. Fire is a significant threat because it has the potential to deactivate critical systems that are needed to maintain and shutdown the reactor.

Be glad that PG&E has a full-time fire department stationed at the plant around the clock, with a minimum of five firefighters on duty at any time.

"Our duties are to respond to safety problems and mitigate the situation," says Eric Carter, a shift captain and member of Local 1245. "We're defense in depth."

Don't think that defense means waiting around for the worst to happen. If containment is breached, it's pretty much too late for defense. For Diablo Canyon firefighters, defense is upfront and takes the form of vigilance and training.



**Local 1245 Firefighters at Diablo Canyon**

Firefighters are trained to standards established by the National Fire Protection Association. They also meet state standards for Emergency Medical Technicians. Then there's the training for hazardous materials and confined spaces to maintain the necessary certifications.

When they're not training, Diablo Canyon firefighters can be found servicing extinguishers, hydrostatically testing fire hoses, and performing "fire penetration seal and barrier inspections", among other duties.

Diablo firefighters also attend trainings hosted by the California Department of Forestry. It's training that can have real world applications at any time, like January of this year when a 300 acre wild fire swept across PG&E property. While it never got close to the plant, it engaged

the attention of 200 firefighters and 40-50 engines in what Carter called “three heavy days of fire fighting.”

(Fire departments in surrounding communities, which helped fight that fire, come to the plant periodically for training and drills. But it’s a one-way relationship—Diablo Canyon firefighters cannot leave their posts to help fight fires in neighboring communities.)

With wildfires, the main concern is the possibility of fire getting under the 500 kv lines coming out of plant, or the 230 kv line coming into the plant that provide power when the plant isn’t generating any.

In-plant protection systems include 18 hose-reel stations fed by a 7.5 ton CO<sup>2</sup> extinguisher, as well as hose-reel stations for delivering water.

While the possibility of a catastrophic nuclear release is the underlying reason for all the vigilance and training, Fire Captain and Local 1245 member Dan Beile is more concerned about something else.

“The biggest problem isn’t radiation, it’s hazardous materials. We have tanks with thousands of gallons of caustics.”

Huge transformers, for example, contain thousands of gallons of oil. The transformers have a “one in four chance of catastrophically failing” during their 25-year lifespans.

“We’ve already had one that blew up,” Beile says.

In this case the explosion ruptured the casing of the transformer. Firefighters quickly put their training to good use. They contained the fire to the transformer, extinguishing it with foam. A hazardous material team cleaned up the spilled oil.

Another small fire was extinguished last December when a three-phase capacitor failed in a circulator water pump.

This spring, Diablo Canyon firefighters are looking forward to the arrival of a new engine, the “Dash 2000”—a 2007 model with 455 horsepower and 1550 foot-pounds of torque.