In the News

Deadly Combination of Staging And Wires Claims Two Lives

Two fatal accidents during the past few months underscore the need for caution when working with pump-jack staging in the vicinity of overhead wires. On December 8, 2007, 22-year-old Marcos Landaverde was installing siding on a condominium in Lowell, Mass., when a staging pole apparently became detached from the building, causing the staging to pivot away from the structure and fall. Witnesses told the *Lowell Sun* that Landaverde had been working at a height of 15 to 20 feet, which means he may have survived the fall had not the falling aluminum staging pole struck a 7,600-volt power transmission line, electrocuting him. The accident is being investigated by the local OSHA office, which expects to issue a final report this summer.

Two months later, on February 11 in Forks Township, Pa., 43-year-old Gary Rinker was killed and co-worker Angel Luna seriously injured when an aluminum staging pole they were erecting at the site of a small siding-repair job struck a 19,000-volt overhead line. It's not clear whether Rinker and Luna misjudged the wire's position, failed to see it, or lost control of the pole while raising it.

An industry hazard. According to NIOSH electrical engineer and safety expert Gerald Homce, accidents like these occur all too frequently in the industry: Nearly half the 3,378 on-the-job electrical fatalities recorded between 1992 and 2002 involved construction workers, with the largest share by far resulting from accidental contact with overhead power lines. Homce notes that distribution lines, which typically carry 7,000 to 14,000 volts from a local substation to a pole-mounted transformer, are most often responsible; they're extremely common and need not meet the height and isolation standards required of higher-voltage lines.

Prevention. There are, of course, ways to minimize the chances of an accident. First, make sure your workers understand that adhering to OSHA's clearance requirements isn't enough to guarantee their safety. For example, the agency's regulations specify a minimum 10-foot clearance between staging and power lines — yet the barn wall on which Rinker and Luna were preparing to erect their staging was reportedly 20 feet from the overhead lines. Even though that distance easily meets OSHA's requirements, it apparently didn't exceed the fall radius of the staging pole.

Workers should also be aware that not all accidents involve aluminum staging: Wood staging poles can also transmit a fatal shock, especially when damp or wet. It's always better to avoid contact in the first place than to bet your life on the nonconductivity of the staging poles.

If ever you have the slightest doubt about your ability to work safely, call the local power company. Procedures and costs vary from one company

■ Last-minute renovations by owners preparing to sell their homes "may be propping up a sizeable chunk of the remodeling industry," reports *The Wall Street Journal.* Even though sellers typically recover only a portion of remodeling costs when a home is sold, many apparently believe that last-minute updating is necessary to compete with overstocked home builders offering free upgrades and other incentives. As an example, the paper cites one seller who spent $23,000 remodeling a house he'd paid $700,000 for five years earlier; he sold it without regret for $775,000.

■ Like carpenters, landscapers, and others in the construction industry, illegal-immigrant smugglers rely on tough, reliable trucks for their work. According to the *Houston Chronicle,* the vehicles of choice for a growing number of smugglers are Ford's Super Duty F-250 and F-350 pickups, which are typically stolen, used once, and abandoned. In 2007, 1,245 such trucks were stolen in Houston alone. Ford's popularity with smugglers appears to be due to the relative ease with which pre-2008 model-year trucks can be acquired. Said a Houston Police Department spokesman, "You can steal these trucks with a screwdriver."

■ A crafty British farmer who built a large Tudor-style home and lived there for more than four years, concealed from view by a huge stack of hay bales, has found himself in trouble with local officials, reports Reuters. Homeowner Robert Fidler, knowing he'd be denied permission to build in a restricted greenbelt, tried to exploit a planning loophole that allows unpermitted buildings to be made legal if no objections are raised for four years. Unfortunately for Fidler, the local council is not impressed, and has called for the home to be demolished.

to the next. Pacific Gas & Electric usually deals with a problematic distribution line in one of three ways, says work-procedures supervisor Chuck Stinnett: by interrupting power to the line in question; by temporarily shielding the line with insulating covers; or — for long projects — by rerouting the wire so downstream customers can continue to receive power while the work is being done.

All three options cost money, naturally, though Stinnett declined to discuss specific dollar amounts. In most cases, the contractor has to pick up the cost of keeping a three- or four-person utility crew on site for the duration of the power interruption or shielding operation. Power companies prefer to have several days' notice before making such a site visit, Stinnett notes, but contractors shouldn't hesitate to call for help if they've just become aware of an unsafe condition. "It's better to get the utility to come out than to try to come up with a solution you can't manage," he says. "That's our responsibility and we take it very seriously." *— Jon Vara*

GAF Rolls Out Green Roof

Until quite recently, green roofs were a novelty, confined mostly to demonstration eco-villages or to the home offices of big corporations looking to burnish their green credentials. But with GAF's introduction earlier this year of the GardenScape Roofing System, plant-covered roofs may be headed into the mainstream.

Technically, GAF follows the approach used by many existing green roofs: A low-slope roof deck is covered with rigid foam insulation, a roofing membrane, a proprietary multilayer drainage mat, and a 3- to 4-inch layer of lightweight growth medium. The vegetation layer itself consists of a hardy ground cover of shrubby plants of the genus Sedum, species of which flourish in most climates and require minimal irrigation.

What makes the GAF product unique, says company consultant John Busch, is that it's an integrated system designed to be sourced and installed by roofing contractors, with all the components — from the insulation to the plants — covered by a single warranty. "The goal is to avoid the situation where there's a leak in the membrane and the roofing contractor says he'll take care of it — but not until you get the landscaper to take up all the growth medium and plants," he says.

At an installed cost of $15 to $20 per square foot, GardenScape roofing isn't exactly cheap — and that price doesn't include an allowance for beefing up the roof structure to handle the typical 25 psf of dead load. On the other hand, green roofs have roughly twice the life expectancy of similar membrane roofs, Busch says, partly because the growth medium and plants provide weather protection.

Green roofs can also lower heating and cooling costs by 15 percent or more, which Busch attributes to the vegetation's heat-buffering effect. And in large commercial applications, a GardenScape roof's ability to absorb rainwater and discharge it gradually can reduce or even eliminate the need for the expensive storm-water ponds that are often required to manage runoff. *— J.V.*

Closing the Book on 2007

For home builders, the good news about 2007 boils down to one thing: It's finally over. December housing figures, released by the Commerce Department in January, paint a dismal picture of the end of a discouraging year:

- December new-home purchases were the lowest since February 1995. Overall, sales for the year were down 4.7 percent, making it the worst sales year since record-keeping began in 1963.
- In December, the median price of a new home fell to $219,200, compared with $244,700 for the previous December — the biggest such drop in 37 years.
- Figures released by the National Association of Realtors show that the median price of an existing single-family home declined by 1.8 percent in 2007. That's the first-ever decline during the four decades records have been kept, and probably the first since the Great Depression, according to the NAR. *— J.V.*