

# FREE RADICALS

The world is white and starkly beautiful. The trees are thickly rimed in ice, bending awkwardly under its weight to the snapping point. The lawns, bushes, rooftops — everything is covered as far as we can see. The roads are empty. No lights shine in the windows up and down the street. Last night, I awoke again and again to the bangs of electrical transformers going out all over the area. We are trapped in a massive ice storm that has paralyzed Montgomery County, Maryland and left nearly half a million people without power.

The fire and emergency crew at the laboratory calls me at 6 am to tell me that all power is down, but there are no safety problems. Our house is already cold, so I build a fire in the fireplace and shove two comfortable chairs up close. This little enclave will be our world for the next day. Inside the sheltering wall of the chair-backs, the temperature is in the low 60s. It's cozy enough. Behind us, the rest of the house is spiraling down into the high 40s. As the day goes on, we add more layers of long underwear and pullovers.

We read and stare into the fire. It feels good to be free of distractions and chores, but, as the hours tick away, I become restless thinking about the things that I could be doing now if I had heat, light, mobility. I realize with some dismay that forced relaxation isn't relaxing for very long.

Our neighbor calls. She has an electric range. We congratulate ourselves on our foresight to go with gas. We invite her over for some hot soup, and, as she sets out, she locks herself out of the house, forgetting that the keypad on

her garage door is useless today. I take a thermos of boiling water to another neighbor and invite them over if they need food or a place to cook. We eat some ice cream bars that have started to melt in the freezer. The freezer and the house are heading for the same temper-

from a portable CD player. I'm reading, with the aid of a small flashlight strapped to the side of my head with a nylon strap. I use it in the woods when I'm backpacking; somehow, I never expected to use it at home. Wherever I look, it points, and my hands are both free. Simple, but ingenious. I turn my newly penetrating gaze on Nancy. She shields her eyes from the beam and says, "You look like a Borg." "Resistance is futile," I reply.

We read until it's time for bed.

Sometimes, technology is just a thick wool blanket, loomed at lightning speed so it can be sold at a price most people can afford. We have such a blanket on our bed, and tonight we add a sleeping bag (more technology — high-loft synthetic insulation), another blanket, and a quilt (made by my grandmother the old way — decidedly low tech). I crawl into bed and pull the covers up, leaving only my nose exposed so I can breathe. I think, as I lie there, that we probably don't have enough dry firewood to get through another full day. In the middle of the night, the

alarm clock begins to flash, the fire alarm peeps; we're connected. I smile and go back to sleep.

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Our relationship with the world we live on is very complex and delicate. We wring a living from the resources that Nature provides, as other species do. But what we can do with those resources sets us apart. We turn the materials of nature into other materials and implements with extraordinary properties, and in the process move beyond mere survival. Our success in doing that is one reason that we're

*(continued on page 53)*

## REFLECTIONS FROM THE



by Dale Hall

ature from opposite directions, and both are the worse for it.

Shattered trees are down everywhere, hampering the utility crews. On a battery-powered radio, we hear that some people may not get power for four or five days. A state of emergency is declared. Senior citizens without heat are being bussed to holding centers where little more than warmth awaits them. My wife, Nancy, a public health nurse, is called for emergency duty. Then uncalled. Then called again. And uncalled again. The support network is scrambling to cope.

It's evening now. Electrochemistry is providing what few creature comforts we have: light, radio news, and music

## Free Radicals

*(continued from page 11)*

indoors thinking about such things, and deer are outside poking under the ice for food.

In one sense, we're like ultra-intelligent spiders, scuttling around the world supported by a vast web of technology. The electric power grid; communications and distribution systems; massive, technology-based agriculture; hospitals and emergency medical teams — they're all strands in the web that we've spun to make modern life possible. If a cosmic broom came along to sweep the web away, many of us would be swept away with it. A few of us, luckier or harder than the rest, might cling to dangling strands in the corners, take stock, and slowly begin constructing another web. It's what nature intended us to do.

Our technology web is strong, like the spider's, but the occasional ice storm reminds us how much we've come to depend on that web and how important its maintenance is. I've watched spiders in the slanting shafts of the morning sun, repairing webs damaged by the wind, a passing person, or a waving branch. The utility crew down the road is doing the same. The spider knows that its survival depends on the web, and it has to be ever vigilant. And, like the spider, so must we. ■