

BY JON VARA

## Legislation Is the Mother of Invention

**Larry Birnbaum did not set out** to become the rough-service-bulb king of North America. But the passage of the federal Energy Independence and Security Act of 2007—or EISA, as it's also known—left him little choice.

As you may recall, EISA aimed to reduce U.S. energy consumption by gradually eliminating conventional incandescent light bulbs, with production of 100-watt bulbs to end by January 2012, 75-watt bulbs by 2013, and 40- and 60-watt bulbs by 2014.

At first, that looked like bad news for Birnbaum—a third-generation bulb manufacturer from South Hackensack, N.J., whose grandfather was a personal friend of Thomas Edison's. But the public response to the newly-enacted law suggested that consumers weren't ready to give up on incandescents just yet.

"It was just crazy," he says. "Word got around that incandescent bulbs were going away, and we had people lining up outside in pickup trucks and vans to buy them by the case."

With five years to work with before EISA's restrictions began to bite, Birnbaum ventured into what he calls "the belly of the beast," sifting through the act's sprawling 310 pages for a legally acceptable way to keep the lights on. The answer, he found, was the rough-service incandescent—a bulb that is superficially similar to the familiar general-service type, but contains a vibration-resistant filament. Though foreign imports of rough-service incandescents would be prohibited under EISA, U.S. manufacturers would be allowed to continue making them even after general-service bulbs had been phased out.

Moving the rough-service bulb out of its original niche in the industrial sector—where it was commonly used to light vibrating machinery—and into the new one created by the general-service bulb's disappearance did involve some product redesign. Birnbaum notes that EISA also established an array of new requirements for rough-service incandescents, including additional filament holders, a gas-filled globe, thicker glass, and a brass (as opposed to aluminum) threaded base.

But the new EISA-compliant bulb—dubbed the Newcandescent—was ready to go before the phase-out deadline. It has been selling briskly for about \$3 a bulb, and while that's several times the price of its general-service predecessor, the new bulb is expected to last 10 times as long. Its 10,000-hour service life, in fact, rivals that of a compact fluorescent.

The compact fluorescent, admittedly, does use fewer watts for a given amount of light, making it a more cost-effective choice in the long run. But to Birnbaum and his customers, there's simply no substitute for the clear, familiar light of an incandescent bulb. It's an idea, you might say, whose time has come again.

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New Jersey manufacturer Larry Birnbaum switches on a treasured bulb presented to his grandfather, Samuel, by Thomas Edison in 1914.

Photo: Newcandescent.com