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Company has the power to help in crisis

Equipment backs up hospital incubators during outages

By **Lois M. Collins**

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If the electricity goes out at Robert L. Mount's house, nobody gets upset. Mount has a backup plan — and the technology to make it work. They don't live through blackouts.

And he figures newborn infants, especially those in incubators and isolettes, deserve no less.

Mount is the president and chief executive officer of Lindon-based Power Innovations International Inc., a privately held company founded in 1997. The focus of his company is not only providing backup power, but improving the often-erratic quality of basic local electricity that's available.

"Power is a major concern," Mount said. "I've been told power is the No. 2 necessity of life, behind air."

The company's not in the consumer market, "not because it doesn't need it," but because there's so much work to do elsewhere.

Power Innovations is an original equipment manufacturer for the Hill-Rom/Air Shields neonatal incubators and monitors that are used to support premature babies. The equipment controls the living conditions surrounding the tiny person, including temperature and oxygen level. And Power Innovations provides the get-up-and-go.

Fragile babies have, in the past, often had to be "unplugged" from the power supply while they were being transported, or transferred to a "transport" incubator, then transferred again when they arrive at the destination. Even without pulling that plug, though, the quality of the preemie's environment could be compromised, Mount said. Local utility power can have spikes and dips, brownouts, "noise" and frequency variations.



Robert Mount shows an infant warmer and the battery his company, Power Innovations, created to make the unit portable and provide backup emergency power.

Jeremy Harmon, Deseret Morning News

And while hospitals all have backup generator power in case the lights (and everything else) goes out, it usually has the same quality problems.

"Hospitals can't afford to lose power," said Dave Eustice, Hill-Rom's marketing manager for new product development. "Also, the quality of power in hospitals is universally very poor. I have seen many inconsistencies in the quality of power that is supplied to our medical devices."

That's where Power Innovations has made its mark, providing not only "perfect power" backup for up to a half hour, but when the plug is in the wall and the normal power supply is on, the Power Innovations Uninterruptible Power Quality system manages the quality of that power. It "isolates, filters, conditions and regulates incoming power," the company says.

Power Innovations got involved originally while trying to help medical staff solve a problem with equipment. Since then, it's grown and evolved.

The company's innovation has been built so it can be retrofitted into existing warmers and incubators, while meeting Food and Drug Administration rules on things like being tip-over proof.

That's not all the company makes, either. It does some homeland security work, as well, Mount said.

It takes the calibre of the power that's available very seriously. Demand for power is greater than the supply and that has led to degradation of quality. "It's going to get worse" in the future, Mount warned. That's why "uninterrupted power supplies" are so crucial.

Power Innovations focuses on critical areas in aviation and medical equipment. And it plans to be involved, in the near future, in "alternative power generation and storage," Mount said — "generating energy for homes and businesses. For now, we are supplying equipment that manages the energy resources that are out there, making sure equipment runs perfectly."

The company also managed the power for the 2002 Olympics.

"People never saw a hiccup," Mount said with satisfaction. "And the Olympics were a little bit of everything," from basic technology to broadcasting and recording events.

More information on Power Innovations and its products are available at www.power-innovations.com.

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