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Poor communication led to isotope crisis

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EDUCATION REPORTER

An Okanagan College communications instructor is not surprised a consultant's report cited a communications failure as the biggest factor in the shutdown late last year of a Chalk River, Ont., nuclear reactor which lead to an international medical crisis.

"If you look at large organizations, across the board, they tend to have gaps in their communication," communications instructor Marc Arellano said.

Last November, Canadian Nuclear Safety Commission managers refused to let the National Research Universal reactor, operated by Atomic Energy of Canada Ltd. in Chalk River, restart after they learned required safety upgrades had not been made.

The reactor supplies about 50 per cent of the world's medical isotopes which are used in nuclear medicine.

The isotopes are used to

diagnose and treat cancer, heart disease and other conditions.

A report by medical experts commissioned by the federal government said that hospitals across North America were running out of the material by late November.

Kelowna General Hospital's nuclear imaging department ran at about 30 to 40 per cent of normal capacity, so only the most urgent scans were done.

Other hospitals, especially in more rural areas, ran out completely, and doctors had to turn to other procedures, some of which carried more risk or were less reliable.

The crisis became major national news and on Dec. 12, an act of parliament ordered that the reactor be restarted. It took another two weeks for the reactor to power up and deliver the isotopes.

An independent report by energy consultant Talisman International says junior staff at the CNSC knew the up-



Marc Arellano

grades had not been completed but did not think the situation warranted raising it with superiors.

In December 2005, the commission had ordered seven upgrades and the operations license it issued was conditional on those upgrades being made.

But the licenses "were not clear and did not specify in any detail exactly which NRU safety upgrades were to be installed," said the report.

As a result, managers at AECL did not understand that the upgrades were required.

Asked how such communication breakdowns can happen within and between such critical organizations, Arellano said these kinds of failures are common in large organizations.

"Sometimes because of their size, but they also tend to have gaps in communication because of a siloing effect. Usually large organizations tend to be very hierarchical."

And because of this, people tend to protect their turf and information may not easily flow between levels of the hierarchy.

"Where the real power tends to lie in those organizations is usually at the top. That's why it's really important to have leadership that creates a tone or a culture that fosters open communication. Otherwise it doesn't percolate up."

He said the situation at CNSC seems to have been,

"one of those classic situations of everyone expecting someone else to take responsibility and this impression was created by improper language in the regulator's documentation."

He added that large bureaucratic organizations need to have processes or protocols to make sure information is passed up the hierarchy.

"If there's no process, then the information isn't shared. Organizations need to foster leadership skills among its employees.

"Leadership is not about position, it's about doing the right thing," Arellano said.

"Organizations that succeed have people who are ready to act and speak regardless of their position. It is extremely risky for an individual, or department, to deliver bad news in an environment that is not conducive to open communication."