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Los Angeles Nuclear Meltdown Anniversary

At approximately 6:30 PM on the night of July 13, 1959, engineers working at an experimental reactor in the Santa Susana hills confronted their worst nightmare: an out of control reactor. It's called "an excursion," in Orwellian nukespeak but in fact it was the start of a partial meltdown that would take over a month to control and has taken over 50 years to clean up at a cost of over \$250-million and will take another 50,000 years to clear the released contamination from the groundwater.

It was fifty years ago today, that the city of Los Angeles experienced the meltdown at the Sodium Reactor Experiment (SRE) that, except for blind luck, didn't become LA's Chernobyl. Unlike Chernobyl or Three Mile Island this research reactor didn't have a protective containment structure and a breach could have, "released more radiation than was released at Three Mile Island," said Dan Hirsch, president of the Committee to Bridge the Gap.

Still, according to Hirsch, the meltdown released enough radioactive isotopes to cause over a thousand cancers. While the SRE melting may have fallen short of other large scale catastrophes the nuclear industry didn't want the public to know about what happened in LA's backyard.

Hirsch has led the charge to bring this reactor accident to light and force a succession of corporate owners of the site, and the government, to clean up the contaminated mountaintop facility. Nothing happened until he and a group of UCLA students (of which I was a part) uncovered government and corporate documents and films that revealed what had happened. The incident had been covered up for over twenty years, hidden from, the general public, local emergency responders, residents whose homes backed up to the site, children who played in the creek that transported radioactive isotopes down the hill and even the workers charged with cleaning up the highly radioactive mess who were never told about the dangers of their jobs.

"They took our (radiation) badges and locked them in the safe," said John Pace who as a twenty-something new hire at the Atomics International site was pressed into service to help clean up the radiation contaminated reactor building starting the day after the meltdown began. Pace explained that when the badges showed the "radiation went off the scales," the managers took

away their badges because they'd have to send the workers home if they were exposed to that much radiation. "We wouldn't have enough workers," he said.

Pace and his fellow cleanup crew members weren't issued any protective clothing or gear. "We wore regular cotton coveralls, nothing special," said Pace. Their first job was to seal the control room's windows and doorjambes with tape so the engineers would be safe. The workers were sent into the room with the reactor and started to scrub the floor and walls. They soon found this approach was too expensive because "the brooms, sponges and mops got contaminated quickly and had to be thrown away." Their solution, "we decided to use Kotex, sanitary napkins to scrub the floors and the walls," which were disposable.

While the crew scrubbed, the engineers and executives huddled -- trying to figure out what to do now that the unthinkable had happened. Pace knew it was serious because "we never saw those guys -- wearing suits and ties," in the reactor building.

The suits' bright idea was to start up the reactor again and then see what happened when they tried to shut it down. Pace said they did this repeatedly for about a month during which time more radiation was released, especially when one of the workers operating a small crane "panicked, hit the wrong button and dropped" one of the highly contaminated control rods. This work also contaminated many of the records of the accident which had to be destroyed.

Over a month after the accident, the company finally issued a cryptic press release embargoed until Saturday morning, August 29. Issuing a release for the weekend is considered a good way to bury any item you don't want anyone to write about because most newspapers are thinly staffed on the weekends. Something that stated "a parted fuel element was observed," and claimed this was not "an indication of unsafe reactor conditions," was destined to be buried in a pile of other more pressing news such as the lightning storms that killed nine people on the East coast that day.

Their strategy worked and few people outside of the nuclear brotherhood knew about the accident until I stumbled on some literature that mentioned the accident, while visiting the Bridge the Gap offices, twenty years later in 1979. A brief mention from a nuclear engineer, who was horrified by the hazard-strewn, secret past of the nuclear industry, had been printed in a newsletter from an anti-nuclear group. I was searching for topics for the first film I had to make while studying at the UCLA Film School. I'd decided, in the aftermath of Three Mile Island that looking at nuclear facilities in Los Angeles was, no pun intended, a hot topic.

I made a copy of the newsletter and contacted the engineer who confirmed that there had been a meltdown. Repeated attempts to pry documents or information out of Atomic International proved fruitless but I discovered that official reports had to be sent to regional Atomic Energy Commission (AEC) Depository libraries and the UCLA Engineering library was a depository.

After convincing the librarian to find someone to fix the aging microcard reader (a precursor to microfiche) I was able to surf a seemingly unlimited number of documents and reports about "operational accidents and radiation exposure experience" in the nuclear industry. Armed with a bag of nickels to feed the copying machine I slogged through what I thought were the most promising.

It became clear that benign sounding words like "excursion" or "incident" were code for troubling, dangerous and sometimes deadly accidents. The SRE's was not the only "excursion" in fact there had been 26 in the years between 1946 and 1970 "when the power level of fissile systems became uncontrollable because of unplanned or unexpected changes in the system reactivity," according to one AEC report I found. I was dumbstruck. Before the SRE, I'd thought

Three Mile Island was the only nuclear accident.

We'd also been told by the nuclear industry and the government that, "radiation from nuclear plants has not caused any known deaths among the public." Which most assumed meant no one had died due to a nuclear power accident. In fact, during this time six deaths of nuclear workers (not the general public) were, "attributable to nuclear causes." Three of those deaths occurred when the SL-1 reactor at the Idaho Falls research facility had an "excursion" that killed two members of the crew "instantly" and a third man died hours later due to head injuries. One of the workers was speared by a exploding fuel rod and sent flying to the ceiling where he remained impaled until the rescue crew figured out how to get him down without killing anyone else from radiation exposure. All three were buried in lead-lined coffins.

I also found that the SRE was one of three similar reactors that were being tested around the country. The other two, one in Piqua, Ohio and one in Hallam, Nebraska were also shut down after experiencing fuel melting. Both of these reactor complexes were entombed in giant concrete structures where they will have to be guarded for years.

I shared my findings with Hirsch who began to plan for their release, which led to a nuclear power educational effort that continues today.

Speaking at a press conference this morning commemorating the anniversary of the SRE meltdown, Hirsch shared his concern about whether we've learned anything from the past before we rush into a nuclear revival. "It's a powerful lesson of how things can go wrong with technology," said Hirsch.

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