Twenty years ago, Bridge the Gap’s work led to the shutdown of the UCLA reactor, in part because of extraordinarily lax security. We discovered that five nuclear bombs’ worth of highly enriched, weapons grade uranium were stored in a filing cabinet. The overall security for the reactor — to prevent against either theft of that nuclear material or sabotage of the reactor — was little better than that for the campus bowling alley or bookstore.

A successful terrorist attack could have released a plume of radiation extending over much of West Los Angeles, exposing tens of thousands of people, yet the NRC staff claimed no security was even required by its regulations. The UCLA reactor case exposed the poor protections against theft of weapons-grade uranium at the nation’s research reactors and their vulnerability to sabotage, which could cause large radiation releases. We forced the closure of that reactor because of its safety and security problems and got the NRC to require removal of bomb-grade uranium from the nation’s research reactors, major victories.

Yet two decades later, similar security problems exist at the remaining two dozen university reactors, many of which still store highly enriched uranium fuel. CBG worked closely with the Brian Ross Investigative Unit at ABC National News on a four-month investigation in which journalism students were sent to all campus reactors in the country. They were able to talk their way into most of the reactors, without backpacks being checked or going through metal detectors. Doors were left open night and day. There were no guards or watchmen, nor barriers to prevent truck bombs from parking near the reactors. In one case, ABC was able to drive a Ryder truck of the sort used to blow up the Oklahoma Federal Building and park it just outside the MIT reactor for an extended period without being noticed or challenged. At most sites there was essentially no effective security to prevent someone either from blowing up a reactor, releasing radioactivity, or stealing bomb-grade uranium.

This fall, ABC ran a hour-long investigative news piece on its national Prime Time show, and a shorter piece on the evening news; both featured CBG extensively. We will continue our efforts to eliminate the use of weapons-grade uranium and to require real protection of research reactors from terrorist attack.

For years, we were deeply involved in fighting a proposal to dump large amounts of nuclear power plant wastes in unlined trenches near the Colorado River, the main water source for much of the Southwest. The project was defeated, a big environmental victory.

However, this year Governor Schwarzenegger tried to revive the project by quietly naming to the Southwestern Low-Level Radioactive Waste Commission two Board members of the radioactive waste lobbying organization that had been the main advocate of the Ward Valley dump. In their first acts, these appointees took steps to overturn state law we had helped get adopted that barred Ward Valley as a dump — and, incredibly, directed the Commission’s legal counsel to commence steps to sue California for hundreds of millions of dollars and to try to force Ward Valley to go forward.

Working with the Sierra Club, we took the story to the press and brought the situation to the attention of the Senate Rules Committee, whose vote to confirm the nominees is necessary, and testified before the Committee in a dramatic hearing. The result: one of the nominees was denied confirmation, and the second approved only after sending a followup letter promising not to try to revive Ward Valley or sue the state. The Governor’s efforts to revive Ward Valley have been blocked.
**BRIDGE THE GAP CELEBRATES 35 YEARS OF WORK IN THE PUBLIC INTEREST**

Thirty-five years! It is hard to believe that Bridge the Gap has been at this work for three and a half decades. An observer of these matters has noted that CBG was instrumental in shutting down or stopping more unsafe nuclear projects than perhaps any other public group in the Western Hemisphere. It is a remarkable thought; and it might be true. A brief summary:

**UCLA Reactor Shut Down**

CBG discovered that a little-known reactor on the UCLA campus was emitting radioactive Argon-41 gas from its exhaust stack at 250 times the legal limit, because of a calibration error, and that the emissions were going directly into main air inlet for the neighboring classroom building. The reactor had also been souped up above its original design specifications, making it possible to have a nuclear runaway accident, in which it could blow up and spread radioactivity over a highly populated area. Lastly, it used bomb-grade uranium and had virtually no security to protect the fuel from theft or the reactor from sabotage.

It took five years of intervention in the NRC licensing proceedings, but we finally got the reactor shutdown, just before the 1984 Olympics which were to be held a few hundred yards away. It was the first successful challenge to a reactor relicensing in the country, and led to a number of other unsafe reactors closing rather than face similar scrutiny.

**Weapons-Grade Uranium Eliminated & Truck Bomb Protection Required at Reactors**

One outcome of the UCLA case was our successful effort, in coordination with the Nuclear Control Institute (NCI), to get NRC to adopt new regulations requiring research reactors here and abroad to stop using bomb-grade uranium.

The new policy has resulted in enough highly enriched uranium to make scores of nuclear weapons being removed from places where it could have been readily stolen or diverted.

Alas, the rules that we got adopted two decades ago, which were to eliminate weapons-grade uranium from reactors with all deliberate speed, have been poorly enforced, and a dozen research reactors in this country and many more abroad have yet to convert to the less dangerous fuels.

Additionally, also with NCI, we succeeded, after a decade of trying, in getting NRC to require protection against truck bombs at nuclear power plants.

**Ocean Dumping of Radioactive Waste Banned**

Michael Rose, an extraordinary researcher for CBG, discovered 50 sites off the U.S. coasts at which radioactive wastes had been dumped in 55-gallon drums into the sea. The U.S. government had lost track of most of them, yet the few sites that had been studied showed that the barrels were leaking radioactivity.

Working with Professor Jackson Davis and the governments of two small Pacific Island nations, we worked over a period of years to outlaw the practice by the United States and ban it internationally. This led to actions by Congress and the London Dumping Convention prohibiting dumping radioactive waste in the oceans of the world.

**Star Wars Nukes Blocked**

The Star Wars program was supposed to be non-nuclear, but CBG disclosed that large amount of money were spent to design and build space-based reactors and nuclear bomb-pulsed systems to power the proposed space-based battlestations. CBG’s revelations contributed to the ending of those dangerous and poorly considered Star Wars nuclear programs.

**Hanford N-Reactor and U.S. Plutonium Production Stopped**

At the time of the Chernobyl accident, we were asked by the House Interior Committee to essay the first independent team of experts to review the similar N-reactor at DOE’s Hanford reservation in Washington. The problems we identified, later confirmed by the National Academy of Sciences, contributed to the shutdown of that reactor and the end of plutonium production in the U.S.

**DOE’s Santa Susana Nuclear Facility Closed Down**

CBG had publicly disclosed details—through the research of Michael Rose and the earlier work of Dorothy Bobek—of a partial meltdown of a reactor at Santa Susana that had been kept secret for 20 years. A decade later, widespread contamination was found at the site. The local community asked our help in shutting the nuclear facility down, and with much work, that was achieved—perhaps the first time a community had forced the closure of an unsafe DOE nuclear site.

**Proposed Ward Valley Nuclear Waste Dump Defeated**

The nuclear industry proposed to dump radioactive wastes from nuclear reactors in unlined trenches less than 20 miles from the Colorado River, at Ward Valley. It took over a decade, and the work of a large coalition, to defeat that dangerous project. The victory is one of the great environmental sagas in California history.
NRC RADIOACTIVE WASTE DEREGULATION BLOCKED

This year Bridge the Gap built on significant environmental justice victories from previous years. We had helped a low-income, Hispanic farmworker community fight a hazardous waste disposal facility at Buttonwillow. By disclosing that radioactive waste had been dumped there, and CBG’s Dan Hirsch testifying as an expert witness in extended Tanner Act environmental justice proceedings, a settlement was won whereby radioactive waste would never be dumped there again. Similarly, by exposing radioactive waste dumping at the Bradley landfill in the northeast San Fernando Valley, another disproportionately impacted community, we won a lawsuit brought by CBG attorney Larry Silver and a statewide radwaste dumping moratorium.

However, the Bush Administration has been pushing to deregulate a significant fraction of the “low-level” radioactive waste stream nationally, which would permit the free release of such wastes and disposal in unlicensed landfills and recycling of contaminated metals into consumer products.

Building on those successes, this year we were instrumental in getting an astonishing 5-0 vote by the Nuclear Regulatory Commission (NRC) turning down a staff proposal that the Commissioners themselves had only the previous year requested that would have massively deregulated radioactive waste nationwide. Had it passed, it would have opened the floodgates of radioactive waste dumping in unlicensed landfills like Bradley and Buttonwillow.

CBG RULEMAKING PETITION TO UPGRADE REACTOR SECURITY ADVANCES

More than 800 comments were submitted to the NRC by members of the public in support of CBG’s Petition for Rulemaking to upgrade reactor security, reportedly the largest number the NRC has received for all rulemaking petitions combined.

Attorneys General from nine states, including California, wrote in support of our proposals, which generated a number of news articles. There were only six comments in opposition, all from nuclear industry representatives.

The Petition urges the prompt construction of “Beamhenge” shields around the nation’s reactors, an idea put forward by CBG’s Joel Hirsch to protect them from air attack. They would be constructed of steel I-beams and cabling so an incoming plane would hit the shield, not the reactor, thus preventing potentially massive radiation release. The Petition also requests requiring reactors be capable of repelling an attack by at least the number of attackers involved with the 9/11 events – 19. Currently, nuclear plants are required to be protected against only a small fraction of that number of attackers.

In late October, the NRC notified CBG it was granting part and deferring part of our recommended upgrades. Reactors would now be required to protect against multiple coordinated teams of attackers, attacking from several directions; adversaries would be assumed to be willing to kill and be killed; and waterborne attacks would have to be protected against. Our proposals to require protection against attacks by the numbers of attackers seen on 9/11 and to protect against air attacks will be considered at a later stage of the NRC’s own rulemaking.

Congress, in the Energy Policy Act, directed NRC to upgrade its security regulations to take into account the events of 9/11, attacks by large numbers of attackers, and attacks by the air. The NRC seems to be resisting that direction, leaving the nation’s nuclear plants insufficiently protected against terrorist attack. We have worked on this issue for a quarter of a century, and it appears our work is not yet over. Let’s hope that the vulnerabilities of the nation’s nuclear sites are addressed before it is too late.
In 1995, the U.S. Department of Energy and the Environmental Protection Agency signed a joint policy committing to clean up all DOE nuclear sites such as SSFL to EPA’s Superfund standards. When the current Administration came to power, however, it reneged on that commitment and announced that it intended to leave 99% of the radioactively contaminated soil in place and then release the site for unrestricted residential use. Homes could be built, and children could end up living, on contaminated soil from a nuclear meltdown because the government broke its promises to clean up the mess it made.

Joined by the City Attorney of Los Angeles and the Natural Resources Defense Council, we have sued DOE to get it to clean up the contamination. And earlier this year, CBG issued a major report on the nuclear cleanup standards controversy, prepared by Emily Churg, Tony Zepeda, and Dan Hirsch, showing that for some radionuclides, DOE proposes to leave contamination up to 100,000 higher than EPA says is normally appropriate. Our quarter-century work regarding this site is not yet over.

Working with the Nuclear Information and Resource Service, we generated a letter co-signed by scores of groups complaining about these conflicts. The result was virtually unprecedented: NAS had to remove several of the most conflicted of the nominees.

Earlier this year, the reconstituted BEIR Committee issued its findings: (1) there is no safe dose of radiation; (2) all radiation exposure increases the chance of cancer; (3) the cancer risk is about 33% higher than previous official estimates.

We helped get the story to the press such as AP, and now no one can legitimately claim that radiation is either harmless or good for you. Intriguingly, however, federal agencies are nonetheless working to relax radiation protection standards, even after the NAS concluded radiation was more dangerous than previously thought.

The nuclear industry for decades has tried to claim that “low” doses of radiation weren’t harmful and may even be good for you (a nutty theory called hormesis.) Now those canards have been put to rest by the National Academy of Sciences (NAS), in a development in which Bridge the Gap played an interesting role.

Every decade or so, the NAS convenes a Committee on the Biological Effects of Ionizing Radiation (BEIR) to evaluate the new evidence about the effects of radiation on human health. Federal radiation agencies then base their regulatory assumptions on the result of the BEIR studies. Because of their importance, the nuclear industry and their friends in various agencies work hard to pack the BEIR Committee with people amenable to their position.

In part in response to CBG disclosures regarding the packing of the NAS committee on Ward Valley, Congress revised the Federal Advisory Committee Act (FACA) to require NAS to take steps to prevent conflicts of interest on the part of NAS committee members, and an opportunity for the public to review prospective nominees and comment on potential conflicts.

When the NAS published the proposed BEIR Committee membership, we conducted an extraordinarily detailed review of their publications, public statements, and associations. We found virtually all of those proposed to be deeply connected with the side of the scientific debate that tended to minimize radiation risks. Frequently, there were direct conflicts, e.g., employment by nuclear organizations.