IN A STUNNING TURN OF events, Pacific Gas & Electric, the operator of the Diablo Canyon Nuclear Plant on the Central California coast, announced earlier this year that it was abandoning its much-contested efforts to extend the reactors’ licenses. The last remaining atomic power facility in California would be phased out and replaced with 100% renewable energy. This is a result for which Bridge the Gap and many others have worked for decades. By 2025 California will be fully free of nuclear power and quite far along on the path away from carbon-based fuels as well. We are showing the world how to move from dirty and dangerous power—fissile and fossil—to safe, clean, renewable energy, with ramifications nationally and worldwide.

There are aspects of the deal that, to be candid, are less than ideal. Chief among them is that we still have to get lucky for the next nine years that there won’t be a major earthquake, accident, or terrorist attack, any one of which could produce a massive release of radioactivity.

The good news is that about a decade from now, risks to California will be much reduced.

Diablo Canyon has had a troubled history. As I detailed in U.S. Senate testimony two years ago, PG&E claimed at the time the plant was being built that there were no active earthquake faults within 30 kilometers. After the facility was largely constructed, however, the Hosgri Fault was discovered, capable of an earthquake far larger than Diablo had originally been designed to withstand. Rather than undertake a very expensive seismic upgrade, PG&E, with Nuclear Regulatory Commission acquiescence, simply downgraded its estimates of how much shaking the new fault could produce.
DIABLO CANYON - CONTINUED

PG&E sharpened its pencils rather than significantly strengthening the plant. PG&E and the NRC asserted there couldn’t be any more undiscovered active faults nearby. Then the San Luis Bay Fault was found to be active close to the plant, and the Los Osos Fault as well. Not to worry, they said again, there can’t be any more seismic risks they didn’t know about. But then, a few years ago, the Shoreline Fault was discovered, coming within a few hundred meters of the plant.

Don’t worry, we were again told, the reactors could withstand the ground motion from the new faults. But then the NRC’s own Senior Resident inspector at Diablo actually reviewed PG&E’s own records and found that its own estimates of the shaking the new faults could produce exceeded the levels on which the design was based in the license. He said the plant should be shut down until then design was upgraded to meet the license requirements or the license altered. His concerns were ignored by his superiors. PG&E and the NRC also had long claimed that the faults couldn’t be interconnected. But then new studies forced PG&E to admit that the Shoreline Fault was connected to the San Simeon Fault, and the San Simeon to the San Gregorio Fault, creating one long fault zone extending from south of Diablo Canyon to north of San Francisco, hundreds of miles in length. The longer the fault, the greater the size of the potential quake.

Diablo was a terrible mistake. The struggle to prevent and then reverse the mistake has taken the commitment of many, many people, over many, many years. But soon, California will be nuclear free, and the world will be better off.

When Diablo Canyon was built, it was assumed there were no active earthquake faults within 30 km.

Now we know there are 4 active faults nearby.

Slides courtesy by Evan Morgan

IT’S FAR WORSE THAN YOU THINK

By CBG President, Dan Hirsch

The events of early November have brought me back to it, of all things, the famous “Drake Equation” for estimating the probability of intelligent life in our galaxy. Most parts of the equation are pretty standard — the number of solar systems in the galaxy, the fraction that might have earth-like planets, and the likelihood that life would develop on them and become technologically advanced. But the most intriguing factor in the equation is “L” — the estimated longevity of a civilization before it blows itself up or destroys itself by polluting its planet.

The recent election may be our “L” moment, the extinction point.

Presidents come and go. They can do a lot of damage for a few years, but the country and world generally move through and recover. This time may be different, because of a fundamental fact of physics: carbon dioxide, a greenhouse gas, resides in the atmosphere for centuries. As and as the global temperatures rise, the climate gets caught up in feedback loops — e.g., release of methane from warming tundra, reduced solar reflection from ice mass — accelerating and further lengthening the catastrophic impacts. Thus, the actions taken now can be catastrophic for hundreds of generations to come, for our and many other species.

Mr. Trump campaigned on “cancelling” the recently signed Paris Climate Agreement, the last hope for keeping temperature rise to something on the order of 4 degrees Fahrenheit. If the U.S. drops out of the needed global reduction in greenhouse gases goes with it. But clearly, this can bring down the entire agreement, with many other nations then refusing to limit their emissions since we, a primary polluter, have broken our commitments.

Trump has also committed to undo the EPA’s Clean Power Plan, critical for limiting such emissions. He promised to eliminate or at minimum eviscerate EPA generally, and his transition team is filled with climate change deniers and fossil fuel industry figures. He said he wants to greatly expand drilling for oil and natural gas and the mining and burning of coal, the main contributors to global warming. At times it seems that he adopts positions by automatically doing the precise inverse of what scientists say we must do to survive. His policies are fuel for the flame that will destroy us.

Given his temperament and views about the proliferation and use of nuclear weapons, we may be entering a period of the greatest risk of a miscalculation or other event leading to nuclear war that we have seen in half a century. His aides coordinated his Twitter access during the last week of the election because of his out-of-control pushing of buttons on a smart phone. No one, under our Constitution, however, can confiscate the President’s access to the “nuclear button.” No one can countermand an order to launch, whether given in a moment of temper, miscalculation, or otherwise.

The situation is far worse and long-lived than most people realize. The fossil fuel industry types and other billionaire interests control not just the White House and the executive branch, they also control both houses of Congress. And they will shortly control the Supreme Court, with at least one and likely several new justices who will serve for thirty years or more. There is thus no balance of power, no checks and balances, and uncheked power is a recipe for despotism.

The reconstituted Supreme Court will further expand the power of the ultra rich to buy elections, authorize ever greater voter suppression measures, and cripple the rights of people to organize into unions, further reducing one of the only sources of funding in elections to counter that of billionaires and large corporations. Because of the deluge of money released by Citizen’s United and related actions, a large majority of state legislatures and governors are now controlled by the same forces, and have used that power to gerrymander Congressional

IN MEMORIAM: DR. STEVE WING

We recently lost a great friend and colleague, Dr. Steve Wing, professor of epidemiology at the University of North Carolina. Steve was a courageous expert on the health impacts of radiation, whose findings often brought him in conflict with government and industry. He did seminal research showing that workers at the Oak Ridge nuclear bomb factory were dying from radiation-induced cancer at rates far above those predicted by official estimates. He found evidence of increased cancers downwind of the Three Mile Island reactor that suffered a meltdown in 1979. And he served for years as co-chair, with Dan Hirsch, of the Santa Susana Field Laboratory Epidemiological Oversight Panel, assuring independent studies of the health effects from that contaminated site.

He fought, quietly, diligently, good-naturedly for what is right, despite difficult odds, in the face of a scientific establishment controlled to a significant degree by big institutions that have caused radiation harm and had a self-interest in suppressing findings that made clear the magnitudes of the harm. He advanced the science, but he also served communities in need. Despite the huge imbalance in forces, he helped level things out; he truly engaged in “science for the people.” And he paid a price for doing so. But he also earned the enduring gratitude and respect of people in communities that had been injured by an out-of-control nuclear enterprise.

DAN HIRSCH APPOINTMENT

Dan Hirsch has recently been appointed Director of the Program on Environmental and Nuclear Policy at the University of California, Santa Cruz. The Program aims to train a new generation of young people while making concrete contributions to addressing critical threats to the planet such as global warming and nuclear war and a range of other environmental and environmental justice policy issues. Dan continues his 46-year-long association with Bridge the Gap.

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**RADIOACTIVE DRINKING WATER**

**EIGHT YEARS AGO, IN THE WATING DAYS OF THE Bush Administration, the EPA tried to issue new standards for radioactivity in drinking water that would have increased permissible concentrations by factors of hundreds, thousands, or even more, above the longstanding Safe Drinking Water Act limits. Bridge the Gap was instrumental in getting those proposals blocked at the very last moment.**

Now, in the last days of the Obama Administration, the same people within EPA’s radiation office are trying to push the proposal through again, with even higher concentrations than the Bush EPA had proposed. Once again, Bridge the Gap is helping lead the fight against this extraordinary relaxation of public protections.

Among the seminal environmental laws of the nation is the Safe Drinking Water Act. Adopted in the 1970s, it sets permissible concentrations by factors of hundreds, thousands, or millions, of iodine-131 by 3,450 times.

The new PAGs would increase the amount of strontium-90 allowed in the water you drink by a factor of 925 and the amount of iodine-131 by 3,450 times.

Bridge the Gap has led a coalition of dozens of environmental and public health groups in opposition. We twice briefed top EPA leadership in Washington, D.C., including Gina McCarthy, the then-Assistant Administrator for Air and Radiation and now the outgoing EPA Administrator. Working with Public Employees for Environmental Responsibility and using the Freedom of Information Act, we were able to pry embarrassing documents out of EPA showing that under EPA’s own internal analyses of the proposed PAGs, drinking even a single small glass of water with particular radionuclides could give you a lifetime’s permissible radiation exposure.

We briefed the White House Office of Management and Budget, which has to approve all such new rules. We put together joint opposition comments from more than 60 groups and helped stimulate more than 60,000 other written comments urging the rejection of the proposal. We also helped trigger coverage in the Wall Street Journal and television news, and tough questions for Administrator McCarthy at the National Press Club.

As we go to press, the outcome remains uncertain. On December 1, McCarthy gave final approval to the rest of the PAGs, all but the drinking water section, which she said is on a separate timetable. We don’t yet know if the public attention we helped generate has resulted in McCarthy kicking the drinking water controversy to the next Administration, or whether she will still sign off on her way out the door. It does appear, however, that our efforts contributed to some of the worst, anti-environmental parts of the remaining PAGs being withdrawn.

The fight over radioactivity in drinking water will persist. We will continue our work to prevent the public from having to drink water with radioactivity hundreds or thousands of times higher than has long been set as acceptable. Safe water is an undeniable right.

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**THE BATTLE TO ENSURE a full cleanup of the Santa Susana Field Lab increased in intensity in 2016. The state and federal agencies that had promised cleanup took ever more troubling steps to break their commitments. The cleanup agreements signed in 2000 promised buyout by 2017; the agencies have dragged their feet so much that cleanup, if it ever occurs, won’t even begin by then. We keep fighting; concerned elected officials keep pushing; and the media keeps probing.**

The NBC4 I-team aired the sixth and seventh segments in their Emmy-winning “L.A. Nuclear Secret” series on the SSFL radioactive and toxic chemical contamination. These episodes focused on whether SSFL pollution has migrated to the 450-home new housing development in Runkle Canyon and the children’s camp at Brandeis Bardin Institute, both of which are located adjacent to contaminated SSFL areas. At the March meeting of the SSFL Work Group, under leadership of SSFL Work Group Coordinator Denise Duffield, CBG intern Michael Chica and Jenna Mota Melville made a presentation based on their analysis of Boeing’s own estimates of cancer risk from SSFL contamination. Using Boeing’s own data, they showed exceedingly high cancer risks despite Boeing’s proposals that it be allowed to walk away from most of its cleanup obligations.

As a result of the presentations, a number of community members volunteered to create a SSFL action group which has been meeting throughout the year to keep the push for a proper cleanup alive. A major focus was keeping up the pressure on the Department of Toxic Substance Control (DTSC), which has seemed to be, at minimum, failing to enforce the Administrative Orders on Consent (AOCs) to clean up SSFL. Indeed, DTSC has seemed the classic “captured regulatory agency,” captured by the polluters it is supposed to regulate. We have been working closely with groups from dozens of other impacted communities around the state who are having the exact same problems with DTSC, which seems to view its clients as the polluters not the public. As long-time community activist Marie Mason put it, “DTSC should be looking to protect our communities, not allow Boeing to run the show.”

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**SANTA SUSANA: The Battle for Cleanup Continues**

Protesters of all ages gather at Santa Susana Field Lab.

"DTSC should be looking to protect our communities and not allow Boeing to run the show"
WORSE THAN YOU THINK - CONTINUED

SANTA SUSANA - CONTINUED

bus tours and “nature hikes” on the SSFL property. CBG and dozens of coalition members showed up on several weekend mornings to protest these greenwashing tours and to alert participants to the risk of taking a toxic tour on a contaminated site. This has been a long, long fight for us, since we helped bring to public attention in 1979 the meltdown that the government had kept secret for decades. We thought the battle was finally over in 2010, when agreements for a full cleanup were signed. But since then, Boeing, the Department of Energy, NASA, and DTSC have all taken steps to back the cleanup obligations. We’ll keep on keepin’ on, struggling to get this contaminated nuclear meltdown and missile engine testing site cleaned up.

YEARS AGO, LONG BEFORE I became board chairman here at Committee to Bridge the Gap, I was on the editorial board of the Los Angeles Times, writing on a variety of topics, one of which was the debate then in progress over a nuclear waste dump proposed for a site in Ward Valley, CA. In good journalistic fashion, I spoke to both sides in this debate. The state’s electrical utilities were major waste producers; hospitals and pharmaceutical labs produced only a comparative fraction, but were foregrounded by the industry group that represented both. When that group’s spokesman visited me, he was clearly aware that CBG was leading the opposition, and he confided to me his suspicion that Dan Hirsh was secretly in the employ of the coal industry. Surely some- body had to be funding him big time.

Public interest work is always like this. Private inter- ests, with big money to stake, can dig into deep pockets to buy all the legal and public relations talent they need. They deploy that talent in aggressive lobbying that targets regulatory laws that may be small and unimportant to the general public.

Think of traffic regulations. What would driving be like without them? But now think of drinking water. If it weren’t for regulatory law, you would have to boil every drop. If a meltdown at Point Diablo ever leads to disaster and mass evacuation, it will be because of failure at the Nuclear Regulatory Commission — perennially the target of heavy lobbying by private interests for whom public safety runs a distant second to profit. Against these lavishly funded lobbyists, public safety and the public interest must make do with idealistic and talented volunteers, funded by small contributions of the sort that astonished the country during the Bernie Sanders campaign. The work that these volunteers do is smart, hard work but behind-the-scenes work. Whether we know it or not, we rely on them to smoke out the devil hiding in the small print of regulatory laws that may be literally matters of life and death for us.

Among the public interest groups active in the cause of nuclear safety and environmental defense, CBG is one of the smallest but has always, as the saying goes, punched far above its weight. What has kept us on our feet and punch- ing for almost half a century are small, astonishing con- tributions from idealists like you who refuse to allow profit to trump safety.

For safety’s sake, then, send us a little astonishment in the mail. You’ll sleep better, we’ll hold the right feet to the fire, and we promise not to take a penny from the coal industry.

Message from Board Chair, Jack Miles

CBG WELCOMES NEW RESEARCH ASSOCIATES

DEVYN GORTNER  
first got involved with Committee to Bridge the Gap in 2009 when she discovered she was living not far from the contaminated Santa Susana Field Laboratory. In 2010 she founded an umbrella organization called Teens Against Toxins to help raise community awareness about SSFL and pressure the responsible parties into cleaning up the site according to the most protective standards.

She graduated from Duke University in May of 2016 with a double major in English Literature and Social and Cognitive Psychology, a latter according experience at Hunters Point Naval Shipyard in San Francisco, an environmental justice community. While challenging, working with the community has been one of the most enriching experiences of her life and she is excited to continue to help this, and many more commu- nities through her work with CBG.

MARIA CAINE was first introduced to the issue of Environmental Justice at UC Santa Cruz, where she studied Environmental Studies and Economics. In early January of 2016, she met Daniel Hirsh while interning for his pro- gram on Nuclear Policy through UCSC. The focus of the internship was to evaluate the cleanup standards and the pro- cess of cleanup at Hunters Point Naval Shipyard in San Francisco, an environmental justice community. While challenging, working with the community has been one of the most enriching experiences of her life and she is excited to continue to help this, and many more com- munities through her work with CBG.

CBG NEEDS YOUR SUPPORT

Your generous donations make this vital work possible. Please send a donation or give online at www.committeetobridgethegap.org

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