I’d like to open with a quote from our report Licensed to Kill. It is a line from James Russell Lowell’s aptly titled The Present Crisis:

"Once to every man and nation comes the moment to decide,  
In the strife of Truth with Falsehood, for the good or evil side."

The present crisis we face is the effort to roll back environmental laws to accommodate an unfettered power industry. The same industry that is manipulating the energy market and lobbing to lift these laws, has already brought us the nuclear myths: "the peaceful atom," and "electricity too cheap to meter." This report debunks the nuclear power industry’s wildlife myths:

"Sea creatures and nuclear plants get along well."  
"Nuclear energy peacefully coexists with the environment."

We found that the industry significantly misrepresents the fate of sea creatures around reactors using the once-through cooling system, the technology that is the focus of this report.

The once-through cooling system, through its intake and discharge of tremendous volumes of water, as much as a million gallons a minute, has four major impacts on the marine environment:

• When drawing in water, the reactor also sucks in billions of fish, larvae, spawn and other essential marine organisms, destroying these creatures, a process called entrainment.

• Larger animals such as endangered sea turtles, American crocodiles and manatees as well as seals and diving ducks, may become lodged or impinged on intake structures and drown.

• As marine creatures pass through the reactor they are scalded and pulverized. When discharged, they create debris that can cloud the surrounding water and block light from reaching important undersea plants.

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• The force of the discharge water scours the surrounding environment to bare rock. The elevated temperature of the discharge water destroys or drives away indigenous marine populations, upsetting the balance of nature.

Furthermore, the Nuclear Regulatory Commission (NRC) and the National Marine Fisheries Service (NMFS), two of the federal agencies that monitor and regulate the nuclear industry, routinely succumb to the industry's financial and economic needs over those of marine wildlife and especially of endangered species. This laxity has resulted in the industry's ability to bend or break the law. For example:

• The California utility, Pacific Gas and Electric, currently much in the news, suppressed data for ten years that showed the true extent of thermal marine damage by its Diablo Canyon reactors, breaking the Clean Water Act. PG&E also presented data it knew was incomplete to the state Water Board but remained silent during this cover-up.

• The Seabrook Nuclear Station in New Hampshire drowned young seals in its intake pipe without a lethal take permit, a violation of the Marine Mammal Protection Act for which NMFS declined to penalize the utility.

• The Millstone reactors in Connecticut massacre vast quantities of fish and lobsters with impunity, including the depletion of 50% of the winter flounder population in Niantic Bay, while fishermen are fined for illegal catches.

• Southern California Edison has collected an estimated $100 million from ratepayers for mitigation of the marine damage at its San Onofre reactors identified by the 1989 Marine Review Committee study, whose recommendations Edison agreed to abide by. To date, the utility has spent just $2.7 million on a tiny experimental reef.

• San Onofre is already allowed to discharge water at 25 degrees hotter than ambient, even though Diablo Canyon's discharge at 22 degrees hotter has resulted in the near complete destruction of marine habitat in the vicinity of the plant. Lack of enforcement and the further weakening of such discharge standards could sound the death knell for the Southern California marine ecosystem, the richest and most diverse in the country.
Although NRC is liable for enforcement of these laws, in every case where endangered sea turtles were present around the reactors studied, NRC supported utility efforts to raise or even eliminate the take limits for these animals -- take limits being the annual amount of sea turtles that can be legally killed or captured during reactor operation.

Contrary to the industry's wildlife-friendly advertising campaign, nuclear utilities prefer to kill more animals rather than spend the money to protect them. For example:

• A 1990 National Academy of Sciences study -- "Decline of the Sea Turtles, Causes and Prevention" -- and Florida Power and Light's own 1985 report, showed that sea turtles are injured during transit through the St. Lucie intake pipe, an experience verified by scuba diver Bill Lamm, whose steel tanks were slashed when he was sucked through that pipe in 1989. However, FPL has refused to acknowledge responsibility for injuring sea turtles during entrainment through the pipe since that 1985 study and has rejected all potential deterrent structures, largely on the basis of cost.

• Thermal scalding at the Diablo Canyon reactors has destroyed 90 percent of the resident threatened black abalone population. Yet it is illegal for any of us to take a single black abalone along the California coast.

• When a flock of 103 scaup, a species of diving duck whose numbers are dropping at an alarming rate, were drowned in a single incident at the Nine Mile Point atomic reactor near Syracuse, New York, there was scant reporting and no suggestion of mitigation.

• Salem's offer to repair damage under a so-called estuary enhancement program has resulted in unacceptable environmental alterations with the deaths of countless numbers of horseshoe crab and herbicide spraying over thousands of acres around the New Jersey site.

This report serves notice to NRC and NMFS that:

• NMFS must make public the science by which it arrives at kill quotas for endangered species.

• The public will no longer accept arbitrary and capricious decision-making about kill and capture limits.

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• We expect NRC to enforce the law rather than operate as an advocate on behalf of the industry pocketbook.

• Harm done to endangered species at coastal reactors must be measured as a cumulative effect, not assessed individually.

• Because the industry made an economic decision not to install cooling towers, the "best technology available" under the standards of the Clean Water Act, it, not the marine environment, should pay the price.

In conclusion, we urge that existing environmental protection laws be enforced, not worked around, ignored or rolled back. Trading off environmental quality while allowing the energy industry to arbitrarily operate outside the Clean Water Act, Endangered Species Act and other essential standards is robbing present and future generations of a safe, clean, healthy environment and balanced marine biodiversity. Negotiations behind closed doors that pander to expanding industry profit-motives over the survival of endangered species and the health of the oceans, the crucible of life, can no longer be tolerated.

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Founded in 1980, the Safe Energy Communication Council (SECC) is an energy policy watchdog coalition of 10 national energy, environmental and public interest media organizations working together to increase public awareness of the ability of energy efficiency and renewable energy sources to meet an increasing share of our nation's energy needs and the serious economic and environmental liabilities of nuclear power. Contact SECC at: 1717 Massachusetts Avenue, NW, Washington, DC 20036, Tel: (202) 483-8491, Fax (202) 234-9194, or visit our web site at www.safeenergy.org.