

The Myth of Technological Infallibility

Posted: 20 Jun 2010 10:04 PM PDT

By Roger Witherspoon

The unfolding events in the Gulf of Mexico underscore the importance of journalists not falling for the industrial mantra that catastrophic events can't happen today because of "robust" safety systems and "built in redundancy" that ensure environmentally safe operations.

Oil companies have been drilling in the Gulf for decades and their work has come a long way since the 1979 blowout of the Ixtoc 1 oil well in the Bay of Campeche. That disaster gushed for months and dumped at least 140 million gallons of crude into the waters on the Mexican side of the Gulf.

The technology has improved markedly since then, however, and the revenues flowing in to the coffers of Gulf state governments and political campaigns have grown even further. Yet the script is an old one. The BP well which exploded, burned and sank with the bodies of 11 oil workers incorporated the latest safety technology, including a 450-ton, four-part, "fail safe" clamp on the ocean floor which was intended to shut down the well at the interface between the water and the sea floor.

Each of its four clamps should have been able to do the job — a redundancy which the industry claimed guaranteed that blowouts could not happen again. And they haven't had one for 20 years, though there are some 4,000 rigs out there.

It was this notion of technological infallibility which led President Obama to declare April 2 that: "It turns out, by the way, that oil rigs today generally don't cause spills. They are technologically very advanced. Even during Katrina, the spills didn't come from the oil rigs; they came from the refineries onshore."

But the notion that it was impossible to have a catastrophe was always arrogant and never defensible. To hold the belief in technological infallibility so strongly that disaster preparations are neither contemplated nor enacted is logically unjustifiable and reckless in the extreme. For journalists to parrot that line like paid stenographers rather than examining it thoroughly and questioning its premise is professionally indefensible.

Only weeks after the spill did federal officials or the mainstream media bother reading BP's emergency environmental plan and find it was fiction, replete with statements from dead scientists and plans to save the habitats of walrus and other creatures never found in the Gulf. Even worse was the discovery that the other major oil drilling companies had each submitted the identical creative writing for federal approval — and got it since no one in authority or in the newsrooms bothered to read the documents.

It was pathetic to hear Environmental Protection Agency Administrator Dr. Lisa Jackson state in a May 24 press conference that there were no emergency plans and no adequate systems for coping with the spreading oil spill because "we were told over and over by the industry that it could not happen. So we have few tools out there."

The same mantra is incorporated in President Obama's energy legislation, which would allow the nuclear industry to tap the taxpayers for some \$1.2 trillion to build "safe" nuclear power plants. In discussions of the next generation of nuclear power, all too often uncritical reporters have generated stories stating as fact that the new breed of reactors — which exist only on paper and, where they have progressed from the drawing boards, have failed all tests — are so safe that they can be placed in residential neighborhoods with no problems.

Such willful dispensation of critical thinking is understandable with politicians, who are paid by energy companies to win elections. But reporters are paid to represent the public interest.

There is no technology — from roller skates and clothes irons, to oil platforms to nuclear reactors — which can't be screwed up by the humans that make it, operate it or, in the tragic case of the Deepwater Horizon, factor finances into decisions about how thin their critical safety margins need to be. And human decision makers playing the odds with public safety are not helped by the unforgiving real world — in BP's case, the intense, ton-per-square-inch pressures generated by the weight of four miles of seawater and rock.

In writing about any technological development coming through a region of this ecologically diverse country — gas lines, high tension lines, reactors, airports, chemical plants, etc — journalists do readers a disservice if they quote officials touting how safe their operations are without giving equal emphasis to the possibility of calamity. The potential damage is always just as important as the potential boon to the local economy. The documents which are now being reported about were available long before the Deepwater Horizon blew up and sank.

That mindset on the part of regulators is not limited to the discredited Minerals Management Service.

Twenty years before 9/11/2001, the U.S. Nuclear Regulatory Commission had the foresight to order a study of the potential impact of commercial jets on nuclear reactor sites. The U.S. Army Corps of Engineers' analysis found that the damage from such a crash directly into a containment building or spent fuel pool, at speeds above 466 miles per hour, would be catastrophic. But the risk assessment prepared in the 1980s by Consolidated Edison of New York, which owned the Indian Point nuclear power plant found that the odds of a crash were so slight that it did not warrant much consideration. That conclusion came despite the presence of five major airports in the region and the fact that the Hudson River landing corridor was just 250 feet directly above the plants.

Con Edison did raise the issue of a hijacked aircraft ramming the reactors, but concluded "a commercial jet could cause extensive damage but the notion of a deliberate crash into the containment building is so out of the range of probability that we have not calculated odds for it in this risk analysis."

It would be 20 years before a hijacked United Airlines jet flew directly over the twin containment buildings jutting into the midst of the Hudson River from the promontory at

Indian Point en route to their destination at the World Trade Center. The federal 9/11 Commission would later conclude that Indian Point was the terrorists' backup target.

In this case, the Nuclear Regulatory Commission belatedly recognized that terrorism cannot be dismissed. Unfortunately, there is no experience to factor such an event into the long-established formulas used for risk assessment. As a result, the NRC has decreed that preventing terrorism is a federal responsibility and the commercial nuclear operators do not have to plan for such an event.

Recognizing the possibility of a nuclear disaster represents progress, of sorts, from the discredited view of oil industry regulators that a disaster is impossible. But the outcome would be more disastrous for those living in the wide ranging path of meandering radioactive clouds than it is for the millions of citizens and businesses affected by the lakes of crude oil meandering a various depths throughout the Gulf of Mexico.

It would be unfortunate if the spreading calamity in the Gulf did not awaken the mainstream media to the potential for catastrophes all around.