The Presidential BP Deepwater Horizon Oil Spill and Offshore Drilling Commission released two new reports yesterday, on the effort to stop the spill and anotheron whether response and clean up technology has kept pace with technology developments for exploration. The reports continue a really impressive pattern emerging from the Commission: taking on hard questions, devoting significant staff resources to addressing those questions and issuing readable, thoughtful and hard-hitting reports. The reports spare no one in their criticism, including the federal government, but also give credit where credit is due. Here are some highlights from three Commission reports released so far:

From "The Amount and Fate of the Oil":

> By initially underestimating the amount of oil flow and then, at the end of the summer, appearing to underestimate the amount of oil remaining in the Gulf, the federal government created the impression that it was either not fully competent to handle the spill or not fully candid with the American people about the scope of the problem.

and

> it is possible that inaccurate flow-rate figures may have hindered the subsea efforts to stop and to contain the flow of oil at the wellhead [though staff will issue a separate working paper addressing this possibility].

The release of yesterday's paper on Stopping the Spill provides evidence that improper flow estimates did, indeed, hamper efforts to stop and contain the flow of oil. BP's efforts to use a dome to cap the largest leak through the placement of something called a "cofferdam" failed when hydrates formed and clogged the dome during the installation process and made the dome buoyant. As the staff paper concludes:

> The lack of an accurate flow-rate estimate may have hindered BP's planning for the cofferdam, [though]… it is unclear whether a more accurate sense of the cofferdam's likelihood of success would have enabled BP to proceed differently.

Lack of a proper flow estimate may also have doomed BP's efforts to pump heavy drilling

mud into the top of the well (known as “top kill”) in an effort to contain it. As the report concludes:

> In retrospect, several members of the government science teams have told Commission staff that a more likley cause of the top kill’s failure was the flow rate, which was many times greater than …the government’s official estimate when the top kill commenced. Because BP did not pump mud into the well at high enough rates to counter the actual flow, the hydrocarbons flowing from the well ejected the mud back up the [blow out preventer] stack and out of the riser.

The Commission is not, however, only in the business to criticize, but also to analyze what went right. The Stopping the Spill paper gives significant praise to BP’s post-blowout efforts to contain the spill, documenting in great detail the enormous resources — financial and technological — brought to bear on containment. The result, according to staff:

> in a compressed time frame, BP was able to design, build, and use new containment technologies, while the federal government was able to develop effective oversight capacity.

But, of course, the fact that BP had to develop and build such technologies and that the government had to develop effective oversight capacity only *after* the catastrophic spill had occurred is astonishing. The staff report states it plainly:

> the oil and gas industry was unprepared to respond to a deepwater blowout, and the federal government was similarly unprepared to to provide meaningful supervision.

In perhaps my favorite passages from the report describing the pathetic lack of government capacity to oversee the disaster, the report makes clear that

> at most, MMS had four to five employees in Houston trying to oversee BP’s efforts. One employee described his experience as akin to standing in a hurricane.

And BP was similarly unprepared:

> Other than the lengthy process of drilling a relief well, BP had no available, tested technique to stop a deepwater blowout.

Moreover,

> Efforts to actuate the [Blowout Preventer] were plagued by engineering and organizational problems. For instance, it took nearly ten days for a Transocean representative to realize that the stack's plumbing was not as it seemed …. Without properly recording the change, Transocean had reconfigured the BOP stack. ….BP Vice-Preseident Harry Thierens [wrote at the time], "When I heard this news, I lost all faith in this BOP stack plumbing."

And yet, the Commission staff report is truly complimentary about the joint efforts of BP and the federal government in responding to the spill:

> BP's efforts to develop multiple source options simultaneously were herculean. And the speed with which government scientists, with little background in deep-sea petroleum engineering, established meaningful oversight was truly impressive.

So the bottom line of the Stopping the Spill report is that pre-blowout, the oil industry and the government were completely unprepared for a major catastrophe. Once the spill occurred, the response was truly impressive.

The second of the Commission reports issued yesterday focuses on one reason for the complete lack of preparedness: underinvestment in oil spill containment technology by either the oil industry or the government. The "Response/Clean-Up Technology Research & Development and the BP Deepwater Horizon Oil Spill" report concludes, after surveying the major oil companies about investments in clean up technology:

> it is difficult to pinpoint what resources, if any, these five major oil companies

> have allocated to in-house response R & D spending over the last two decades. [W]e believe it is fair to assume that industry spending on in-house response R & D has been, and is currently, minimal at best.

The federal government's efforts get no more praise:

> The Oil Pollution Act authorizes up to $22 million in annual funding for the Interagency Committee's "comprehensive program of oil pollution research" and an additional $6 million annually for a Regional Research Program. …[N]ot even half of the authorized $28 million has been appropriated in any single year since the passage of the Oil Pollution Act.

The Commission has just a few more months to complete its work, so expect to see more from both the staff and the Commission itself in the very near term. If the past is indeed prologue the final result of the Commission's work should provide a real blueprint of what went wrong, what went right and — most importantly — what we need to do going forward to minimize the risk of another catastrophic spill in the future.