deploy in May 2010. The condition of the Macondo Well, and the Well’s ability to maintain integrity if the Well were shut in by means of a second BOP or a capping stack, were unknown in May 2010. If the Well lost integrity, a shallow subsurface breach would have presented significant risk to the environment and to the Response itself. To mitigate the risk presented by the capping options, the source control team at the Houston Incident Command Post (ICP) needed to develop and validate a method of regulating pressure for the capping options. The solutions to the risks presented by the capping options were not ready for deployment in May 2010. Having the identified risk of subsurface breaching, in my opinion the correct solution was to be able to regulate pressure in a capping option and without such an ability capping was not a viable option.

However, during testing in May 2010, several leaks and other maintenance issues were found that required Transocean personnel to undertake repairs to the Transocean-owned and maintained DDII BOP. This work took until May 29 to be completed. Not until Transocean had its BOP ready could it have been deployed as part of a BOP-on-BOP solution. The scope of this work could not reasonably have been anticipated by BP or the Unified Area Command.

1.2 BOP-ON-BOP VENTING AND PRESSURE MANAGEMENT WAS NECESSARY TO MANAGE RISK

As part of the necessary prudent work to identify and mitigate risks in developing capping solutions, the BOP-on-BOP solution called for the inclusion of a subsea choke connected to a vent manifold that would allow the venting of hydrocarbons. The design, sourcing, installation, and testing of such a system is not an insignificant undertaking, and a Transocean engineer estimated on May 18 that a solution would take ten to fourteen days. In my experience that is a reasonable if not extreme, estimate. However, each of such choke and vent manifold was ordered to be