



integrity issues. And all the necessary tooling was not yet available. For example, the guide frame to safely install another BOP on top of the *Deepwater Horizon* BOP was not available in early May.<sup>41</sup> Additionally, efforts to understand and mitigate potential hydrate formation during installation was underway.<sup>42</sup> Some work that had been undertaken for the BOP-on-BOP option with the *Discoverer Enterprise* had to be revised for the *DDI*, but that progressed in parallel with the ongoing engineering efforts.<sup>43</sup>

Mr. Perkin asserts that pressure could be vented via the BOP choke and kill lines, and presumably, that the choke assembly was not needed.<sup>44</sup> Without substantial modifications, neither the *Deepwater Horizon* BOP's choke and kill lines nor the *Enterprise* BOP's choke and kill lines would have been usable for such a purpose. Upon removal of the *Deepwater Horizon* LMRP, the choke and kill lines on the *Deepwater Horizon* BOP would have failed closed.<sup>45</sup> The standard configuration for the *Enterprise* choke and kill lines would be for them to be connected to the rig for well intervention. It is possible that the lines could have been severed, but there was no plan to do so and no modifications were undertaken. Severing the choke and kill lines would remove the ability to circulate through the *Enterprise* BOP. Furthermore, the planned procedure necessarily called for pumping glycol through the choke and

been removal of the LMRP. The procedure for LMRP removal was not finalized and approved by the Unified Command until May 25th.<sup>48</sup> In addition, Mr. Perkin's claim

level of oil discharge from the Well. A procedure for riser removal was not approved until May 17.<sup>47</sup> Another necessary step for the BOP-on-BOP procedure would have been removal of the LMRP. The procedure for LMRP removal was not finalized and approved by the Unified Command until May 25th.<sup>48</sup> In addition, Mr. Perkin's claim that the *Enterprise* BOP was ready for use overlooks the fact that as of "early May," there was no approved procedure for use of the *Enterprise* BOP-on-BOP. The

<sup>41</sup> WW-MDL-00004752.

<sup>42</sup> Deposition Exhibit 5370.

<sup>43</sup> J. Wellings Tr. at 446-447 (explaining that the majority of the work to be redone "would not have affected the critical path of actually installing the BOP").

<sup>44</sup> Perkin Report at 17.

<sup>45</sup> The valve systems on the *Deepwater Horizon* BOP stack were not able to be controlled until its control pod had been repaired and reinstalled on the *Deepwater Horizon* LMRP.

<sup>46</sup> BP-HZN-2179MDL02405680.

<sup>47</sup> HCG274-021966.

<sup>48</sup> BP-HZN-2179MDL06497081. The contingency procedure for cutting drill pipe sticking out of the *Deepwater Horizon* BOP after the removal was approved May 27. BP-HZN-2179MDL06482998.