High-Stakes Gambling and Lube Oil Flushing: A Legal Case Study

Would you bet $10 if given a chance to win $1,000? What about if given the option in reverse? Would you invest $10 to prevent a $1,000 loss if the odds were the same? What do you think most people would do?

Let's take that same scenario and apply it to the pragmatic business world where cost/benefit and risk/reward scenarios rule the day. Are businesses willing to makes such an investment to prevent such a loss? Those who don't make the investment often make the decision because they believe their $10 investment is preventing someone else's $1,000 loss. Their conclusion might change if they knew that isn't always the case. Consider the following scenario:

Assume MegaWhatt, a local power company, has chosen to invest $10 million into repairs on a 100-megawatt natural gas turbine generator. After putting out their request and receiving several bids, they select Acme, a reputable industrial construction company, to perform the work. Buried as an afterthought in the winning proposal, $10,000 is earmarked for flushing of the lube oil system. When Acme solicits proposals from different flushing companies, it is shocked when the price tag comes in at $100,000. Acme opts to perform the task itself with system pumps and 100 mesh screens. After all, that is the way the company has done it for the last 50 years, and they'll be happy to do it that way for the next 50.

Unfortunately, for future reliability managers, maintenance managers and shareholders of MegaWhatt, the damage done by the contaminants left in the system isn't seen for a few years. Just beyond the warranty period, a catastrophic failure occurs. The maintenance engineer is amazed at what the company is finding in the lube oil reservoir.

If the flush had been performed in a manner in keeping with best practices, it might have been another 10 or 20 years before such a failure occurred. The loss in downtime and cost of repairs quickly approaches the $10 million mark. MegaWhatt calls Acme and gets an enthusiastic response. They'll be happy to help with the maintenance and repairs – and will submit its bid for time and materials.

Plant manager Bob calls the company attorney. He thinks there must be something that can be done so MegaWhatt isn't stuck footing the bill.

General counsel Paul, who recently finished reading an article similar to this one, says, "Actually, there is."

What Paul learned is that from the common law there is a cause of action in many states, including Texas where MegaWhatt is located, for breach of an implied warranty of good and workmanlike performance of services. Acme sold services to MegaWhatt consisting of the repair or modification of MegaWhatt's existing property. MegaWhatt will argue that Acme did not perform those services in a good and workmanlike manner and that, as a result, MegaWhatt suffered damages. Those are all the elements necessary as the basis for liability.

Paul learned from one of the reliability managers that Acme had received several proposals for a high-velocity flush from reliability companies. The proposals had cited research dating back 50 years that illustrated how equipment cleanliness was critical for component life and that turbulent flow and sub-micron filtration were the best practices utilized across the industry for more than a decade. Despite this information, decision-makers had opted to save money and do it a manner long outdated, assuming it would be good enough.

Unfortunately, as everyone now knew, a clean screen doesn't always mean a clean system because system pumps can't generate enough flow to get the contaminant to the screens or filters. With time, those contaminants were left in the system and, as a result of the chain reaction of wear, lead to a critical failure.

Paul sends off a letter to David, general counsel for Acme, demanding payment of damages in the amount of $10 million. David calls Raymond, who had served as the project manager for Acme on the MegaWhatt job, and explains the gist of the demand letter. Raymond protests, saying he's done it that same way for the 30 years he's been in the business.

So, is Acme out $10 million? Possibly. MegaWhatt will have to prove that Acme failed to do the job in a good and workmanlike manner. This standard of performance requires Acme work to be performed in a manner generally considered proficient by those in the trade or occupation capable of judging such work. MegaWhatt will be allowed to call upon expert witnesses to prove that Acme' efforts in performing the flush failed to meet the standard. Paul is a certified Machine Lubrication Technician himself and he knows that it will be fairly easy to find such experts by going through the roster of members from his local chapter of the Society of Tribologists and Lubrication Engineers. Of course, Acme will not be without its experts and, ultimately, it would be up to a jury to decide whether Raymond provided his services in a good and workmanlike manner considering the standards of the trade.

Unfortunately for Acme, it could also be liable for attorneys' fees, court costs and any interest on the damages that would have accrued from the time of the failure. Acme could be on the hook for quite a bit more than $10 million.

Such liability scenarios are not limited to service providers but also extend to original equipment manufacturers. Customers rely upon the expertise of the OEM in designing and manufacturing a product. If best practices are not incorporated into the design or manufacturer's operating guidelines, and if a failure occurs as a result of failing to adopt such best practices, the OEM could be found liable under a common law theory of implied warranty of merchantability.

It is an unfortunate truth that when the economy starts to tighten up, litigation increases dramatically. There are fewer opportunities to be had, so the decision to fight over the fruits from opportunities of the past becomes an easier one to make. An "old school" approach to reliability might not only hurt the equipment reliability of the end-user, it might put the service provider or OEM out of business.

Wait, we just gave them what they asked for!

You could imagine that Raymond would be defensive if put on the stand. After all, he gave the customer what it asked for. If he had increased his bid by $100,000, he wouldn't have gotten the work. MegaWhatt never specified a high-velocity flush in its request for proposal, and if it had, he would have given it to them.

However, MegaWhatt is not in the business of repairing turbine generators. It is in the business of generating power to sell to its customers. It is reasonable for MegaWhatt to have relied upon the expertise of Acme to explain what is needed to perform the work completely.

Acme was in a Catch-22. If the company incorporated the best practices and costs associated therewith, then it might not have gotten the work. If it didn't, it could be held liable. The best option was for Acme to educate and recommend to MegaWhatt at the beginning of the process the justifications for and costs associated with incorporating best practices. Acme should have given MegaWhatt the choice in accepting or rejecting those practices in writing. If the information and long-term benefits were presented correctly, MegaWhatt would probably have had greater respect for Acme and appreciation for Acme's commitment to long-term equipment reliability.

About the author:

Adam Muery served as the vice president of operations for RSI Reliability Solutions. He holds a Bachelor of Science degree from Texas A&M University and a J.D. from the University of Texas. This article is not to be considered legal advice. Readers should always consult with their own attorney.

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