

## Governing Energy

### Quantum Indeterminacy

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In 1935 Erwin Schrodinger posited that a cat in a closed box with vial of poison that may open at an unspecified time it is not known whether the cat is dead or alive to observers—the so called Observers Paradox.<sup>i</sup> Moreover, the act of observing itself can affect the outcome— Heisenberg's Uncertainty Principle.<sup>ii</sup>

Similar to Schrodinger's cat, this year has been one where the oil industry cat in a box has exhibited the same indeterminacy. Some cats (companies) are now dead (bankruptcy) and others still alive. Yet it industry itself seems to be beginning to exhibit a level of certainty.

Conventional wisdom seems to suggest that low commodity price points will remain for the foreseeable future. 2016 planning and budgets announced reflect this belief.<sup>iii</sup> So we end this tumultuous tours year with a level of certainty that many (not all) of the cats still alive will largely remain among the living.

No doubt 2016 will be one of continuing *Structural Dynamics* in the sector and those that support it, i.e., heavy equipment manufacturing.<sup>iv</sup> And observers and pundits focused on the sector will continue to get it both right and wrong.

Analyst comments have and will effect stock market movements and we will continue to see this this effect. However, when assessing the condition of a cat one should recognize the lessons of Schrodinger and Heisenberg from quantum physics. Things may not be as they appear!

**How certain are you about the health of your cat?**

## About the Author

Dr. [Scott M. Shemwell](#) has over 30 years technical and executive management experience primarily in the energy sector. He is the author of five books and has written extensively about the field of operations management. Shemwell is the Managing Director of The Rapid Response Institute, a firm that focuses on providing its customers with solutions enabling operations excellence and regulatory compliance management. He has studied cultural interactions for more than 30 years--his dissertation; *Cross Cultural Negotiations Between Japanese and American Businessmen: A Systems Analysis (Exploratory Study)* is an early peer reviewed manuscript addressing the systemic structure of social relationships.

## End Notes

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<sup>i</sup> [https://en.wikipedia.org/wiki/Schr%C3%B6dinger%27s\\_cat](https://en.wikipedia.org/wiki/Schr%C3%B6dinger%27s_cat)

<sup>ii</sup> <https://www.aip.org/history/heisenberg/p08.htm>

<sup>iii</sup> <http://www.ogj.com/articles/2015/12/murphy-oil-slashes-2016-budget-to-less-than-1-billion.html>

<sup>iv</sup> [http://www.amazon.com/s?ie=UTF8&page=1&rh=n%3A283155%2Cp\\_27%3AScott%20Shemwell](http://www.amazon.com/s?ie=UTF8&page=1&rh=n%3A283155%2Cp_27%3AScott%20Shemwell)