

Operators are faced constantly with difficult economic decisions, and they often involve other participants that have an interest in a particular play. So when operators seek a neutral party for answers to those decisions, or when companies just don't know what to do and will not move forward, they'll seek help.

Enter the consultant. This entity will immerse him/herself in the data, comb through the key points, just as if he or she was one of those with an economic incentive to engage the right data. The consultant then presents his/her findings.

A second or third opinion is often sought by top-level oil and gas company executives, seeking an unbiased look before making a major project investment decision.

"They don't come to us for inflated results; we are brutally honest to the data provided. We give them realistic predictions," says Dr. S. M. (Sam) Avasthi, a pioneer in the oil and gas industry's thirdparty consultancy sector.

At the Avasthi & Associates, Inc., office in Kingwood, Texas, you'll find dozens of binders with landmark oil field work, full of projects on which he has consulted on. Dr. Avasthi's firm is a recognized leader in providing consultancy services for designing, evaluating and optimizing CO₂ EOR, and other EOR/IOR projects.

Despite a lifetime of consultation, starting in 1970, it was by mere suggestion that he entered into advising. In the late 1960s, while at Rice University in Houston, Dr. Avasthi was contemplating a career as a research engineer and manager at one of the major R&D centers, or as an engineering professor at one of the leading universities. However, he was offered the opportunity to consult on a project for maximizing liquid hydrocarbon recovery from a major gas-condensate discovery in the North Sea.

After successfully completing that assignment, another in the North Sea soon followed. After working on those two consulting jobs, he was "hooked on consulting," as it provided opportunities to solve real-world problems, and he decided to make his career in the energy consulting business.

Through the 1970s, Dr. Avasthi consulted worldwide, in fields in the Middle East, North Africa, Southeast Asia, and more in the North Sea. During the 1980s, he consulted exclusively in the U.S., in the Permian basin, Midcontinent, Rocky Mountains, Gulf Coast and California.

While working on CO₂ EOR projects in the Permian basin, when those types of enhanced recovery projects were in their infancy, Dr. Avasthi was involved in designing, evaluating and optimizing some of the industry's first major projects of this kind. "That opportunity to work on early, major CO2 EOR projects in the Permian basin has had great impact on my consulting career, because, since then, I have been involved in CO₂ EOR projects in several other regions of the U.S., as well as in other countries.

In 1990, Dr. Avasthi started Avasthi & Associates, Inc., to provide energy consulting, and customized training, services to the worldwide oil and gas industry. He is an engineering alumnus of the Indian School of Mines, Imperial College London, and Texas A&M University (where he earned a Ph.D. degree in petroleum engineering). He was also a research fellow in chemical engineering at Rice University.

As the volatility in oil prices has dominated headlines over the past several months, Dr. Avasthi says financially fit companies will last through this latest crunch, and perhaps even come out ahead. "The key to [surviving and succeeding], always has been those with lean and mean operations, and watching the bottom line. I look at the down cycles as a great opportunity." WO

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