

INSTITUTE OF VALUE MANAGEMENT AUSTRALIA

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"VALUE MANAGEMENT - PARTICIPATION OVER MANY YEARS"

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I was delighted to be invited to give this opening address to your Conference because it allows me the opportunity to acknowledge the very significant role that value management played in improving the performance of the Electricity Supply Industry in Queensland and in fact assisting to take it to the top in performance within the Australian states.

"Participation over Many Years", the theme suggested by your Conference organisers, is most appropriate for this address as the story associated with improved performance within the electricity supply industry in Queensland had its beginning in the early 1980s. The industry in Queensland along with the other Australian States had planned for a resources boom with a very intensive power station construction program to meet the forecast increase in demand for electricity from large power intensive industries. The boom disappeared and left the industry with a massive capital works program, surplus capacity, a large and increasing level of debt and high interest rates. The resulting high capital charges applied over a level of electricity consumption much lower than anticipated and hence electricity prices went up well in excess of the inflation rate. Customers were unhappy, the Government was unhappy and the electricity industry, previously considered to have had a satisfactory performance, was suddenly in big trouble.

In 1985 the industry in Queensland developed a corporate strategy which aimed to address the major problems. The strategy, based on a 5 year time horizon, set out to contain electricity price increases, reduce the level of industry debt, reduce internal costs and had as a vision the achieving of the lowest electricity prices in mainland Australia by 1990.

Initially the process was top driven and targetted the big ticket items such as the closing of old low technology power stations, slowing the power station and major transmission line construction programs and addressing major cost items. A theme of "Doing things better" was developed within the Queensland Electricity Commission (QEC). This theme and the goals of the corporate plan were communicated to staff, providing an opportunity to identify with the new

direction of the organisation because it was a major change from the very heavy construction program of previous years.

It is interesting to observe that the "how to" part of the process was not initiated from the top. Apart from some major decisions of a strategic nature the process for achievement of the goals was not identified.

To the best of my knowledge, value management, or what was initially known as value engineering emerged somewhere in middle management. QEC was fortunate to have found a consultant to assist in the process who had recently retired from a value engineering role in Victoria.

The reduction in the growth rate for electricity and the consequent slow down in the power station construction program allowed an opportunity for a fundamental review of the design of Stanwell Power Station, a major 4 x 350MW unit station to be built west of Rockhampton. This station was a firm project in the power station construction program but was still on the drawing board. Its initial design had in many respects copied the features of the power stations built at Tarong and Callide, both of which were very successful stations. But here we were presented with an opportunity to review all aspects of the new station. At the corporate level the Commission was looking for a major reduction in capital expenditure. The generation design management took up this challenge, adopting the theme of Stanwell 200 with the objective of reducing the capital cost of this major power station, estimated to cost \$1600 million. The theme Stanwell 200 aimed at a cost reduction of \$200 million - a bold task indeed. Value engineering was chosen as the vehicle to address this very significant challenge.

The concept was embraced at corporate level and this in itself was an important element in the process. But more importantly as the value engineering teams were formed and worked together and achieved early success, a great deal of enthusiasm developed within the organisation, and this I believe was the most important element in what became an enormously successful venture.

As the project proceeded I was impressed by:

- the very significant cost savings that were being achieved
- the speed at which seemingly complex studies were completed
- the enthusiasm of all the participants
- the improved communication that developed within the organisation.

It soon became clear that the original tough objective of a cost reduction of \$200 million would not only be achieved but would be exceeded. Naturally, I carried the message of success far and wide.

At a corporate level it was a very significant result because with interest rates then at 15%, the reduction in the Commission's interest bill on the \$200 million capital savings amounted to \$30 million per annum as an on-going savings and this translated to 3% in the level of electricity tariffs.

And so value engineering was successfully launched within QEC and proceeded to go from strength to strength. The opportunity was taken to address other construction projects but the concept spread to the operations area of QEC and then to the administration area. The basic techniques were still being used but the studies became less engineering oriented and hence the title of Value Management was adopted.

And the enthusiasm continued and expanded - and the successes continued and broadened.

Having the lowest electricity prices in mainland Australia was no longer a vision but a reality.

Value Management was used internally on another very major project. A complete review of the existing Gladstone power station was undertaken to improve station performance and extend the station life. Once again it was an unqualified success, this view being supported by a review by an external engineering consulting organisation. In fact Gladstone power station improvements have been so good that the aluminium company, Comalco, is now negotiating to buy the station which in the normal course of events would be classed as a "middle-aged" power station.

Equally important to the value management studies on major projects - were the large number of smaller studies producing successful results and all contributing to the overall success of the QEC. The big ticket items stand out as successes but I can assure you that the large number of smaller and less publicised successes had a significant impact on improving QEC performance.

As experience and success developed within QEC with value management, a pool of facilitators and advisers was established and this enabled value management to spread. The electricity distribution boards in Queensland embarked on value management studies, some jointly with QEC and some on their own. Joint studies were initiated with the Commission's coal suppliers, the Queensland Railway and the Queensland Water Resources Commission with the outcomes usually producing wins for both parties. But here again the side benefits came in the way of improved communications between the parties.

Now I must tell you about a remarkable thing that happened in all this. The industry strategy developed in 1985 was clearly top driven with an optimistic vision 5 years out and some tough targets to be achieved along the way. While I was optimistic I saw the need to aim high, to drive the process hard and to continually communicate the strategy, sometimes to sceptical audiences.

We reviewed the process every six months gathering revised forecasts from the various sectors to build up the corporate picture.

Around the two year mark, the numbers came in better than previously forecast and from then on they kept improving. The process had changed to a bottom up approach. I then had the happy task of communicating the improved results at six monthly intervals with the industry going from strength to strength. As confidence in the creditability of the future forecasts developed the industry was able to guarantee that electricity tariff increases would be no more than half the annual increase in the consumer price index and at the same time the level of external debt was reducing. So the original plan was achieved and improvements are still ongoing.

This is the happy ending to the story - a story very much associated with value management. Not that I am saying that value management was the only driving force in achieving this result. One can never underestimate the power of well directed human endeavour. Ultimately it is the people in an organisation that produce the results and the people in QEC were responsible for "doing things better".

Many factors contributed to the successful outcome and these included assistance from the Government, a very committed executive team within QEC, a well motivated workforce with objectives which contributed to the corporate objectives and goals and some degree of good fortune.

But value management has to be recognised both as a catalyst and an essential tool in the process.

It appeared just when the organisation needed something new. It was easily understood - it had wide application - it lead to quick results - it produced some major benefits early in its use and this developed enthusiasm and acceptance throughout the organisation - it contributed to team building and improved communication not only within the organisation but at the interface between QEC and its suppliers, customers, and the distributors of electricity - and finally it proved to be a major contributor in achieving the goals set in the corporate strategy.

Its success was enhanced by the enthusiasm of the consultant who introduced it to the organisation, by the skills and enthusiasm of the in-house facilitators and by the abilities of the teams themselves.

Value management needs the support of executive management and it certainly received that support within QEC. The early successes made it easy for the executive to communicate the benefits being achieved through value management both internally and externally. I personally enjoyed listening to many of the presentations from value management teams reporting on the successful outcomes of their studies and then at other times and in other places being able to repeat these stories to other audiences with the same degree of enthusiasm that was evident at the original presentation.

My participation with value management has indeed been over many years. I have enjoyed that participation and the success it has brought to the electricity supply industry in Queensland.

