

**STRINGENT COST MANAGEMENT AND PRESERVATION
OF SAFETY CULTURE, A CONTRADICTION?**

Dr. Klaus Petersen, RWE Power

Dr. Hartmut Pamme, RWE Power

Competition in the deregulated electricity market does not leave nuclear power plants unaffected. Hence the question is to answer, whether the safety is going to suffer under the cost pressure on the market.

Therefore the target of NPP operator's cost management is to run plants at maximum availability and with optimized cost structures that lead to minimized specific generating costs. The "costs of safety", with their fixed-cost character, are elements of this cost structure. The process of economic optimization of the cost structure does not permit cost minimization on its own sake in the area of operation cost and fuel cost (front and back end). The basis of economical assessment rather must be the minimization of potential risks which could entail losses of availability. However, many investments like plant modifications or preventive maintenance efforts made in order to avoid losses of availability to a large extent also imply at least a preservation or even higher levels of safety. Thus, economic efficiency and safety are closely correlated.

Public opinion is very sensible as soon as the high level of plant safety seems to be touched by economic pressure. But realizing that German NPP are endowed with mature design and safety features, improvements of safety standards can only marginally be increased by further technical optimizations. Therefore plant management, man-machine-interface and the individual behaviour of the employees are targets for improvement of nuclear safety and economic efficiency by increasing the efficiency of processes.

An even more efficient use of scarce funds and a tolerable political environment should allow the safety level of NPP to be upheld, and safety culture could be maintained and even be improved.