

## **Assessment of Leadership and Management for Safety – where do we start?**

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### **1. Introduction**

The importance of Leadership and the arrangements for Management for Safety (L&MfS) in ensuring safe operations within high-hazard organizations has been both well-recognised and widely discussed. Major accidents and incidents over the past 30 years have demonstrated that shortfalls and failures within L&MfS have the greatest impact on the likelihood and consequences of a serious incident – and that it is the shortfalls in these areas for which an organization tends to be rightly held to account. From Chernobyl, through Challenger, to Deepwater Horizon and Nimrod, it is the failings in the way that the organization managed safety and risk that make the headlines.

Whilst much has been written concerning the attributes of an effective organization, and the elements and characteristics of effective safety management systems, there is less guidance concerning effective ways of assessing prevailing arrangements. Furthermore, whilst it is recognized that the quality of leadership within the organization is critical, there is little information available as to how to review and assess it, other than such methods as drawing inferences from judgments concerning the prevailing safety culture.

The UK nuclear industry operates a Licensing regime that places the responsibility for safety on the duty holder – it is for the Licensee both to propose arrangements and to demonstrate that they are effective and appropriate. The regulator attaches various License Conditions, one of which is a requirement for Periodic Review, the purpose of which is to ensure that a critical review is undertaken at regular intervals to ensure that the Safety Case, and the arrangements that it describes, continue to meet modern standards, remain valid and appropriate, and continue to be implemented effectively.

Whilst a requirement to consider the management arrangements has always been a part of Periodic Review, more recently the UK Office for Nuclear Regulation (ONR) has made explicit its expectations concerning the review of L&MfS.

This paper describes ongoing work to support a review of L&MfS within a nuclear Licensee, and focuses on the challenges and risks associated with undertaking the review, and on the importance of ensuring that the Licensee gains value from the work beyond merely meeting a License Condition. Those challenges include the question of defining criteria, and the range of potential stakeholders with an interest in the conclusions.

### **2. Issues**

ONR sets out its expectations within a Technical Assessment Guide (TAG), and suggests four separate topics – Leadership, Decision-Making, Capable Organisation, and Learning Organisation. It does not prescribe the manner in which the review is

undertaken. This is beneficial for the Licensee – they can craft a review process that best meets the nature and needs of their organization. At the same time, however, it creates challenges for the Licensee due to the novelty of the questions – traditionally Periodic Reviews have been engineering-oriented whereas now there is a need to ask about such topics as *how* it learns, and *how* it takes decisions, etc.

Greenstreet Berman has been supporting AWE for many years, across the full spectrum of E/HF activities and including a range of activities that inform judgments concerning L&MfS. The site comprises a number of Facilities, each of which requires a Periodic Review at different times (they typically take place every 10 years for each Facility). Periodic Review has recently commenced in two Facilities, and the corporate approach to L&MfS review has been evolving (taking account both of their experience and of emerging industry and other guidance). We were asked to support the Periodic Review for a further Facility, and were able to engage with the Facility at the scoping stage, due to the Facility's wish to ensure that the review not only met the expectations of ONR but, more importantly, delivered benefit to the Facility in terms of insight and recommendations that could be considered to be SMART.

Various challenges were acknowledged at the scoping stage, including: understanding the differences between L&MfS at a corporate level and L&MfS at the Facility level; the potential need to disentangle shortfalls in the arrangements from shortfalls in how they are implemented, and whether such shortfalls lay with the corporate or local implementation; the need to establish relevant and measurable criteria for attributes such as leadership.

A major factor is that the review requires engagement with senior management, and an approach that permits leadership and senior decision-making processes to be examined in a critical manner. Furthermore, although the review is Facility-focused (it supports the Facility Periodic Review and hence needs to demonstrate that the claims made on safety management within the Facility Safety Case are underpinned by the arrangements), of necessity it needs to engage at a corporate level and may offer recommendations that are directed at those corporate arrangements.

### **3. The story so far**

At the time of writing this abstract, the work has commenced. The paper will present the emerging progress and a commentary on the review process. The intent is not to comment in any way on the quality of L&MfS within the organization – that would be neither possible at this stage nor appropriate, although the willingness of the organization to engage wholeheartedly with the review process is itself a powerful positive indicator.

The scope of this paper is to discuss the effectiveness of the emerging review process, considering such topics as the manner in which senior management engagement was sought early in the scoping phase, having an internal champion for the approach, having a 'credible' assessment team (in terms of competence, understanding of the organization, and impartiality) and a credible process for examining issues such as Leadership and Decision-Making, agreed criteria, and a clear understanding of how the outputs from the review would be structured and presented. In addition, some observations will be provided as to why such reviews are rightly within the purview of Ergonomics and Human Factors.