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THE BENEFIT OF ALIGNED POLICY IN THE MANAGEMENT OF LOW LEVEL WASTE

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Abstract

The nuclear industry, like most industries, finds itself with a host of conflicting commercial and regulatory drivers that often lead to less than optimal outcomes. In the 1980's and 90's and into this century, the management of low level nuclear waste in the United Kingdom found itself driven by strong commercial drivers and a changing regulatory regime. By 2006 the rate of waste being disposed in the only national repository was quickly outpacing the capacity of the site, and a forward look at the decommissioning waste inventory indicated that a new Low Level Waste site would need to be located, constructed, and permitted. At that time, many estimates calculated that the site could be full as early as 2030.

This paper will describe how several things came together starting in 2006 which enabled the Low Level Waste programme in the UK to make dramatic steps to solve the crisis.

I THE RIGHT FOUNDATION

The first section of the paper will describe how the UK government effectively set the stage for a successful programme by developing and issuing a national policy for the management of low level waste. In addition to this, government took action to separate the national repository from Sellafield, and set up as a separate and independent Site License Company (known today as the LLWR Ltd.) under the regulatory oversight of the Environment Agency (EA) and the Office of Nuclear Regulation (ONR). Finally a procurement was run to find a parent company that would manage the newly formed license company with a remit to develop and run a National Programme for the Management of Low Level waste based on the recently issued LLW Policy.

II THE RIGHT CONTRACT AND THE RIGHT CONTRACTOR

In March 2008, a contract was awarded to a consortium led by AECOM and including Studsvik and Areva. This section of the paper will describe how the contract was set up and demonstrate how it was incentivised to align with the government policy. With this expanded remit, and the alignment between contract and policy, the new parent company quickly took the lead in developing the UK Low Level Waste Strategy which received parliamentary approval in 2010, essentially turning the policy and the strategy into law and placing responsibilities for its execution on key players within the UK nuclear industry.

At this point the typical tensions between commercial and regulatory drivers started to converge into a single unified national strategy; there was now alignment between government policy, the government backed national strategy, and the commercial contract to operate, not just the Repository, but to manage the national programme. The stage was set to enable the new AECOM led consortium to fundamentally change the industry. This section will further define how the LLWR expanded its service offering from the single service of the disposal of LLW to a wide array of services ranging from metal melting, to characterisation services, to packaging and transport. Around this, a unique set of programme management arrangements were developed to orchestrate the waste producing sites, the repository, and the supply chain to ensure the government' s strategy was effectively delivered on the ground.

III THE RESULTS

The results are nothing less than dramatic. Just 8 years after the placement of the commercial contract and 6 years after the issuance of the national strategy the fundamental capacity issues that plagued the low level waste industry in the UK have all but vanished. In 2009, virtually all the low level waste generated (95%) was disposed at the Repository. Today the tables have been turned –the strategy is being delivered. More than 85% of the waste generated is now treated and diverted, with just 15% of the waste disposed of at the Repository resulting in annual savings in excess of \pounds 50 million across the UK. However, by far the largest benefit is that the UK is no longer concerned about siting a new Low Level Waste Repository site; latest estimates, using the current rates of waste diversion, indicate that the LLWR will not reach its capacity until well into the

next century, saving the UK taxpayer the billions of pounds required to bring a new nuclear disposal site into existence not to mention the political challenge of finding a local community willing to accept it.

IV. REFERENCES

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 Strategic Environmental Assessment
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- Nuclear Decommissioning Authority UK Strategy for the Management of Solid Low Level Radioactive Waste from the Nuclear Industry: August 2010

Country or International Organization

AECOM

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