APPENDIX 1 – RESPONSE FROM MARK FOY, NII TO QUESTIONS RAISED AT WCSSG MEETING ON 3RD APRIL 08 BY MARTIN FORWOOD

Martin

Herewith is a response to the 2 questions you asked of me at the WCSSG meeting held in Whitehaven Civic Hall earlier this month, they have been produced with significant input from the appropriate HSE inspectors back at Bootle i.e. the author of the revised HAL stocks Specification and the SMP site inspector.

Question 1.

Related to the fact that NII's revised HAL stocks specification quotes limits in terms of tonnes, where the original specification dealt with volumes, and you asked why the change had been made. You also asked about NII's strategy for continued HAL stocks reduction and how this is reflected in the new specification, as you couldn't understand why they don't appear to reduce - the figures shown in tonnes for the oxide component stay at the same level right up until 2014.

Response

The previous oxide control curve was revised because under certain circumstances, the volumetric limit used did not always promote optimal operational decisions that were in the best interests of safety. The new limits for Oxide-derived liquors in the revised Specification 679 are evaluated in the terms of the mass of Uranium originally present in the front end Oxide fuel from which the stored HAL is derived. The new limit is more closely aligned with the actual hazard and as such, does not suffer from the operational problems inherent in the original control curve.

The limits on HAL liquor stocks set out in the revised Specification 679 are based fundamentally on those within the original NII Specification 343. The new limits in the revised Specification reflect:

1. A step reduction (i.e. a tightening) of the limits to lock-in the reductions in stocks that have occurred as a result of the unplanned THORP shutdown.
2. A change from volumetric to mass-based Oxide HAL stock limits for the reasons outlined above.
3. Improvements in SL's management of its HAL stocks which have reduced forward uncertainties.
4. Increased operational uncertainties at HALES - principally associated with future evaporative capacity and the timing of new capacity coming on-stream.

The new curves run parallel to the old ones (or in the case of oxide, where the old curve would have been if the limit had been set in terms of mass rather than volume). The new oxide curve runs flat for the next few years simply because the old curve was also flat for this period and the combined liquors curve clearly reflects the need for a continuing reduction in overall HAL stock levels.

In regard to our strategy, NII continues to be committed to regulating to achieve a reduction in historically-accumulated HAL stocks, down to the lowest reasonably practicable steady state holdings. It is for SL to determine what the lowest reasonably practicable levels are, and for NII to assess such claims and then regulate in accordance with our Enforcement Policy Principles.

NII's work on the next (2008) Biennial Review has already begun. One of our main areas of focus will be on what the lowest reasonably practicable steady state holding actually is, recognising that the original curves were set without the detailed modelling that SL now has in place to determine workable stock levels.

Question 2.

Asked outside the formal proceedings of the meeting, was regarding the provision of a little more detail on Licence Instrument 685 for Nuclear Site Licence 31G - Acknowledgment to Safety Documentation - Addendum to PMP 06/SMP/1282/P - The Proposal is to Implement Additional Safety Memorandum Cult Nos. 11989 in Support of the Campaign Change for the Manufacture of 16 x 16 Grohnde Fuel.

Response

This Licence Instrument permissions minor modifications in an area of SMP where the fuel assemblies for the PWR reactors are assembled and checked prior to storage and dispatch to the customer.

When SMP completed the first run of fuel assemblies for the NOK reactor, which were 14x14 assemblies (14 rows of fuel pins wide by 14 rows deep), they moved on to the second campaign as per the agreed commissioning strategy for the facility. The new run of assemblies (the Grohnde campaign) were 16x16 assemblies, larger and also longer than those for NOK. Experience gained during the production of the first campaign indicated that a modification to a part of the mechanical handling equipment (the fitting of a more powerful drive motor) was necessary to enable easier handling of these larger, and heavier, fuel assemblies. A safety submission was made to NII which covered the resetting and modification work necessary for the campaign change, and following a satisfactory review, NII issued LI 659 to permission the modifications.

As part of this work, SMP performed a review across all the mechanical handling equipment in Area 500 to identify if any other modifcations were desirable considering the experiece gained from the first campaign. Eventually two further minor modifications were proposed to ensure that drive motors on other parts of the mechanical handling equipment were totally fail-safe in operation.

At that time, work on the campaign change was still continuing, and as these modification were very simple and easily implemented, they were permissioned as amendment to the existing safety submission for the campaign change (rather than as a completely separate submission). LI 685 was issued to permission the amendment.

I hope the responses are sufficient to answer your questions satisfactorily, should you require any more information /clarification please feel free to contact me.

We are also currently preparing a response to your FOI questions on flasks and flask components, which we hope to be able to provide to you shortly

Regards

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