



Australian Government

Australian Radiation Protection and Nuclear Safety Agency

Our Ref S2008/00010

2 June 2008

Dr Ron Cameron
A/Chief Executive Office
Australian Nuclear Science and
Technology Organisation
Private Mail Bag 1
MENAI NSW 2234

Dear Dr Cameron

Imposition of Licence Conditions on ANSTO Facility Licence FO-0157 under the *Australian Radiation Protection and Nuclear Safety Act 1998*

I refer to your submission dated 27 May 2008 and the email from Dr Storr to Ms Evans of 30 May 2008 (the "submission") with respect to the imposition of licence conditions on the OPAL operating licence pursuant to paragraph 36(2)(a) of the ARPANS Act.

I have considered the submission and find as follows.

Licence Condition 1

At the time of my letter of 1 May 2008, ARPANSA was not aware that ANSTO had already commenced in-core testing to more fully characterise the vibrational behaviour and other forces acting on the fuel plates and other structures in the core.

The submission confirms that this work had commenced before my decision of 1 May 2008 and continues. Accordingly ANSTO seeks to amend the licence condition by removing the requirement that I approve the proposed program of work. In doing so, ANSTO acknowledges that when reviewing the program of work, I can determine whether or not it is satisfactory. On this basis, I agree to modify the licence condition which I now impose, to read as follows:

ANSTO shall, within six months of the date of imposition of this licence condition, develop a program of work, for review by the CEO of ARPANSA, to characterise more fully the vibrational and other forces acting on the fuel plates and other structures in the core, the program to involve experimental work and theoretical calculations.

Licence Condition 2

The submission did not raise any objections to proposed licence condition. Accordingly, I now impose the following as Licence Condition 2:

ANSTO shall complete a review of the design of the modified fuel assemblies within two years of the date of imposition of this licence condition in the light of the outcome of the work program required by the above licence condition and having regard to international best practice in nuclear safety.

Licence Condition 3

In relation to this licence condition, I note ANSTO's comment that no other regulator requires longitudinal testing be carried out. However, I would suggest that this is because no other regulator (or operator) has been faced with the dislodgement of several fuel plates in the manner that has occurred at OPAL.

Nevertheless, I have considered ANSTO's assertion that:

- the imposition the third proposed licence condition would not provide a significant safety benefit having regard to CERCA's extensive experience and its detailed understanding of the swaging process which results in producing a consistent reliable swaged joint; and
- both CERCA and ANSTO consider that the lateral pull tests now undertaken are sufficient to demonstrate the strength of the swaged joint.

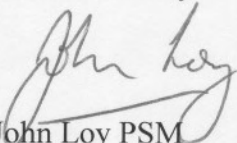
I have also considered the outcomes of the longitudinal pull tests that have been carried out on assemblies swaged by CERCA and the observations of my inspector who, on 21 and 22 May 2008, undertook an inspection of the CERCA manufacturing facility. He informs me that the process in place at CERCA, together with the quality assurance documentation monitoring this process, are sufficient to ensure a good reproductibility of the quality of the manufactured product, including but not limited to the swaged joint. On this basis, I have decided not to impose the proposed third licence condition.

I would, however, expect that the issue of the testing of longitudinal strength be taken up as part of the review as required by licence condition 2 above.

Notification of review rights under the ARPANS Act 1998

You may request the Minister to reconsider my decisions to amend this licence. Any such request must be made in writing and submitted to the Minister within 90 days of the date of receipt of this letter. The Minister's decision must be given within 60 days of the date of any request by you. If you do not receive a response from the Minister within 60 days, this is deemed to be confirmation of my decision. A request for review of the Minister's decision may, in turn, be made to the Administrative Appeals Tribunal within 28 days of the Minister's decision.

Yours sincerely



John Loy PSM
CEO of ARPANSA

Cc: Dr Ron Cameron
Dr Greg Storr