



Friends of the Earth Adelaide

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Nuclear-Powered Submarine Construction Yard Project – Site Licence Application

It is premature for ANI to be making a site licence application for the Nuclear-Powered Submarine Construction Yard while the Commonwealth Government's Strategic Impact Assessment (SIA) and the State Government's Environmental Impact Statement (EIS) processes are not complete. Friends of the Earth Adelaide (FoE Adelaide) made submissions to both these processes and we are still waiting to hear the outcome. All the comments we made in those submissions remain valid and have not been responded to, so we are resubmitting them as part of this submission (attached).

According to the FAQ document, "The EIS received over 180 submissions. A Response Document has been prepared for the State Planning Commission..." Where is this response document? According to the PlanSA website it is still "Pending". And where are the 180 submissions? They have never been published, despite repeated requests by FoE Adelaide for them to be published. Likewise the submissions to the SIA process.

We are somewhat surprised that ANI is initiating this public consultation. Is this a preliminary consultation, which will be followed by a public consultation by the Australian Naval Nuclear Power Safety Regulator (ANNPSR) once it receives a formal licence application? Or has a licence application already been submitted? We note that according to ANNPSR's web site, "There are currently no licence applications submitted for activities at Osborne Naval Shipyard."

Public consultation is very important, but it has to be sincere. The fact that this consultation has been initiated before the SIA and EIS processes have been completed, the fact that public comments submitted to those processes have not been published, plus the fact that neither the public comments on the Australian Naval Nuclear Power Safety Regulations nor a response document were ever published force us to conclude that public consultation on the nuclear submarine project is not sincere. Indeed, it is not clear what it is that you are asking people to comment on, since you have not provided an actual licence application document, not even in draft form.

In conclusion:

- *A site licence application is premature. No licence application should be made, at least until the SIA and EIS processes are complete and public submissions and official responses to those processes are published.*
- *If, at some future date, a licence application is made, a public consultation process should be conducted by ANNPSR.*

We resubmit our submissions to the SIA and EIS processes, along with our submission on the Australian Naval Nuclear Power Safety Regulations (attached) and request that these submissions be treated as submissions to the current consultation.

Given that a site licence application is premature and it is not even clear what we are supposed to be commenting on, we will not at this stage provide detailed comments on the documents published on

your website. However, we cannot overlook an error that casts doubt on the qualifications of ADI to manage nuclear safety. Your *Guide to Reading Site Licence Application Summary Overview* contains the following definition:

Natural Background Radiation: Ionising radiation comes from a variety of natural and artificial sources such as the sun, space, the earth and building materials. These levels are not harmful and exist all around us...

This is not in line with the scientific consensus on the health impacts of radiation (although the nuclear industry continues to peddle this type of misinformation). According to the International Commission on Radiological Protection (ICRP – the primary international body in protection against ionising radiation), “The LNT [linear, non-threshold] theory remains the most prudent risk model for the practical purposes of radiological protection” (ICRP 2005, p. 113).¹ ‘No threshold’ includes background radiation.

The 2023 update of the International Nuclear Workers Study (INWORKS – covering 309,932 workers in France, the UK and the US) concludes,

This major update to INWORKS provides a direct estimate of the association between protracted low dose exposure to ionising radiation and solid cancer mortality based on some of the world’s most informative cohorts of radiation workers. The summary estimate of excess relative rate solid cancer mortality per Gy is larger than estimates currently informing radiation protection, and some evidence suggests a steeper slope for the dose-response association in the low dose range than over the full dose range. These results can help to strengthen radiation protection, especially for low dose exposures that are of primary interest in contemporary medical, occupational, and environmental settings.²

So background radiation contributes to the cumulative health risk, in proportion to the level of the radiation in the particular location (which varies considerably throughout the world and is higher now than in the 1940s due to atmospheric nuclear testing). Indeed, at low doses the impact is likely to be proportionally larger. Any additional radiation from nuclear powered submarines increases that proportional risk, which is not zero, even if any additional mortalities and other health impacts are not detectable amidst the high incidence of cancer etc. in the population. The statement that background radiation is ‘not harmful’ is, therefore, misleading to say the least. It is either deliberately misleading, or ignorant. Either way, it suggests that ANI is not qualified for the role it has been given in the nuclear powered submarine project.

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¹ International Commission on Radiological Protection, *ICRP Publication 99: Low-dose Extrapolation of Radiation-related Cancer Risk*, 2005

² Richardson et al, ‘Cancer mortality after low dose exposure to ionising radiation in workers in France, the United Kingdom, and the United States (INWORKS): cohort study’, *BMJ*, 16 August 2023: <https://www.bmj.com/content/bmj/382/bmj-2022-074520.full.pdf>