

05 August 2015

Our Ref: J31314
Your Ref: Email received 06 August 2011

Email: Harro.VonBlottnitz@uct.ac.za

Dear Harro von Blottnitz

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RE: ESKOM EIA CONCERNS FOR THE PROPOSED NUCLEAR POWER STATION AND ASSOCIATED INFRASTRUCTURE (DEA Ref. No: 12/12/20/944)

Comment 1:

NO PLAN FOR HIGH LEVEL NUCLEAR WASTE

I understand that comments on the revised draft EIA report for Nuclear 1 are due by 7 August. I have not registered as an interested or affected party, but have been urged by friends to consider the matter - I guess in my capacity as a serious scholar of matters of sustainable development. I have taken a look at the Executive Summary of the draft EIA report as downloadable from Eskom's website, and would like to offer just two high-level comments:

1) With respect to waste management:

The Executive Summary states:

"With regards to High-Level Waste (spent fuel), the only alternative currently available in South Africa is long-term storage of the spent fuel in the nuclear power station. Vaalputs is being considered as a disposal site for High-Level Waste, but the required authorisation processes for this will take several years, so currently the disposal of spent fuel at this facility is not a feasible option."

My comment here is that it is fundamentally unsustainable to leave a serious environmental and health risk for future generations to solve. We should not be proceeding with a project of this nature when we cannot deal adequately with its most important waste stream.

Response 1:

Thank you, your comments are noted. It is acknowledged that the issues of radioactive waste management is important and integral to debate surrounding nuclear energy and as stated the only alternative currently available in South Africa for spent fuel is long-term storage at the nuclear power station. However, please note that a radioactive Waste Management Institute is in the process of being established. One of the functions of this institute will be to identify a repository for high level waste in South Africa.

Comment 2:

In the opening paragraph of the Executive Summary, the sentence referring to 4% demand is missing the word "growth": but this is also wrong - average demand growth over the past decade was much lower - there was a 4% bounce-back after the recession. How seriously should I take a study that has such a mistake in its opening paragraph? More importantly though, have you seriously queried Eskom's projection of needing an over 40000 MW of new generating capacity over the next 20 years? I recently examined a Masters dissertation in which this claim was made but could not be tracked back to a published calculation. A serious reference to such a claim must be attached. I am not convinced at all that this claim is true - it is rooted in an outmoded 20th century view of economic growth rooted in heavy industry (esp. electricity-intensive metallurgy) - we now know that we need sustainable development, not economic growth that focuses heavily on people, not resource consumption.

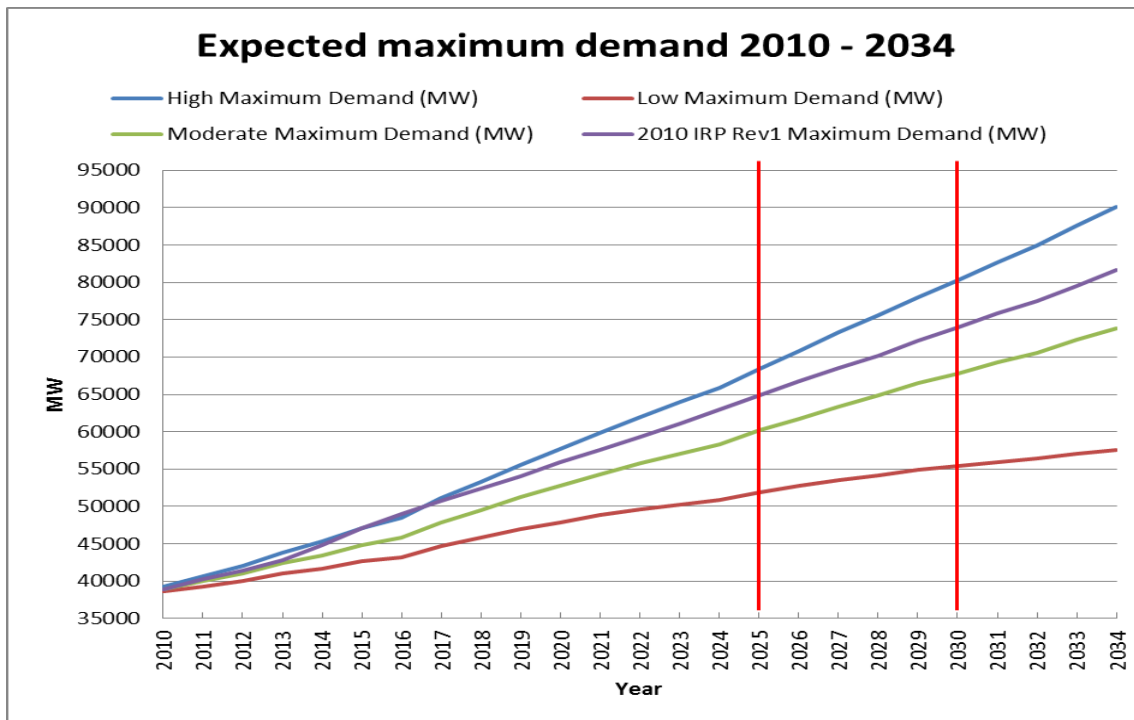
I hope that these comments can be considered.

Response 2:

Thank you for your comment. The error will be rectified.

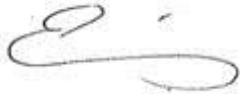
In terms of the reference to generating capacity and demand please refer to Chapter 4 of the Revised Draft EIR Version 2, which will be made available for public comment.

Projections of demand are based on the Integrated Resource Plan (IRP) 2010, which was commissioned by the Department of Energy. The following graph is an extract from that document and is based on the "Moderate Maximum Demand" scenario investigated in the IRP. The IRP requires 52 GW of new capacity by 2030 and assumes 3.4 GW of demand-side savings.



The National Development Plan (National Planning Commission 2012) seeks an increase of Gross Domestic Product (GDP) by 2.7 in real terms by 2030, which implies GDP growth of 5.4 % per year. If this growth rate or even a more modest growth rate is realised, the growth in electricity demand can be expected to continue and it will remain necessary to provide increased electricity generating capacity in South Africa.

Yours faithfully

A handwritten signature in black ink, appearing to be a stylized 'S' or 'G' followed by a horizontal line.

For GIBB (Pty) Ltd
The Nuclear-1 EIA Team