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THE GEOLOGICAL SOCIETY OF NAMIBIA

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Talk title	**The Rise and fall of Nuclear Power: Here we go again in 2025 ... or are we?**
By	**Dr. Nortin Titus**
Date	**Thursday 27th February 2025**
Time	**17h30**
VENUE	**Auditorium of the MME**

Abstract:

THE RISE AND FALL OF NUCLEAR POWER: HERE WE GO AGAIN in 2025….OR ARE WE?

Dr. Nortin Titus
Geological Society of Namibia Talk 27.02.2025

(Source: https://www.alfalaval.com/industrias/energia-e-industria/energia-nuclear/)

“Too cheap to meter” was the term coined by Lewis Strauss, the Chairman of the Atomic Energy Commission of the United States in 1954 referring to the promise of cheap electricity from fission. The phrase drove the psyche of the American public and utility companies to place orders for nuclear power plants leading to an accelerated adoption of nuclear energy during the 1950s and 60s in the US. Sixteen years later, during the oil embargo, saw a second wave of accelerated adoption of nuclear power during the 1970s and 80s, in particular Europe with France leading the charge in a quest to secure its own energy independence. Then, Chernobyl. Europe and the rest of the world turn its back on nuclear power, associating the technology with nuclear weapons and an unacceptable societal risk when things go wrong. Nuclear power was dead, or was it? In the mid-2000s, the uranium price suddenly climbed bringing focus back to nuclear power due to the demand for uranium. China, having adopted nuclear power on the eve of the Chernobyl disaster, build a significant number of nuclear power reactors within 20 years to lead a revival of nuclear energy. Numerous countries changed their policy positions towards nuclear energy and were scrambling to place orders for new power reactors. This flurry of activity and enthusiasm towards nuclear energy was short lived, with a once in a millennium event hitting the island of Japan so violently, that it is believed to have displaced Japan by 2 metres to the east, and dropping its local coastline by half a meter. The Fukushima Daiichi nuclear accident in 2011, was the nail in the coffin for nuclear energy with many country immediately putting on hold the orders for nuclear power plants and in some cases, forcing all their nuclear power plants to close. Nuclear power was finally dead in the 2010s, seeing an overall decline in output globally and little to no orders being placed for new reactors. Or was it dead? Global warming, then climate change and now, the climate crisis, has nations dusting off their old nuclear power plans and jumping into line to order their own. Suddenly, nuclear power is back in fashion and a solution to the climate crisis and the preferred route to accelerated decarbonization of the global energy system. Is this a new cycle? Is it hype? What is going on?

The world has seen this before and with the apparent rise (and fall) of nuclear power, how long until we see history repeat itself and nuclear power being abandoned. Are we in an upcycle of nuclear power or is its demise around the corner? In this talk, I will unpack the evolution of the global nuclear energy landscape since its adoption in the 1950s as an energy source and discuss the future of nuclear energy, its impact to the global economy and its potential role in a future Namibia.