'Fission Chips': An Activist's View on Anti-Nuclear Activism in South Africa from the 1980s to the 21st Century

By Mike Kantey

Abstract

In the following article, based partly on the excellent work of Dr David Fig, South Africa's energy policy is examined from the euphoria of the Reconstruction and Development Plan (RDP) to the nadir of the Accelerated and Shared Growth Initiative for South Africa (ASGISA). We further review the successive infiltration by the global nuclear industry from the German Pebble Bed Modular Reactor (PBMR) through the French company AREVA to the advent of the Russian VVER. Evidence of the decisive role played by Eskom is presented, while we show how energy policy became implacably skewed in favour of nuclear power by means of a 'policy-adjusted' IRP2010, which became the unchallenged justification for the nuclear fleet.

While much has been made of 'State Capture' and the alliance between the South African Presidency and the Gupta family through Oakbay Resources' interest in uranium[1], we will not include it here because it has been so well rehearsed in other publications. What we consider far more important to grasp is that 'State Capture' is not an entirely new phenomenon since what we call the 'Putsch of Polokwane' in 2007. From the time of General Jan Smuts to PW Botha, from Mandela to Zuma, the insidious relationship among international arms dealers, globe-trotting Mafiosi, and beneficiaries of the military-industrial global nexus, has remained a constant refrain: only names and places have been changed. As we see, parliamentary democracy is a very fragile bird, and it remains to pay tribute to a very rare, courageous, and determined South African civil society that can hold their elected leaders to account.

Introduction

South Africa's only nuclear power station at Koeberg, 28 kilometres north of Cape Town, was first mooted by the Apartheid government under

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Prime Minister B.J. Vorster. In the wake of Three Mile Island, the near nuclear disaster in Harrisburg, Pennsylvania in 1979, a few property owners under the leadership of Geoffrey Seeff formed a Non-Profit Organisation (NGO) called 'Stop Koeberg' (Arnold Abramowitz, personal comment, 1982). With the realisation that private lobbying and media activity would be ineffective against the determination of the Apartheid State, the name was changed to 'Koeberg Alert' in 1983. As the Anti-Apartheid struggle intensified in the early 1980s, however, and the deadline for commissioning Koeberg-1 approached, the author was part of a small group of progressive graduates from the University of Cape Town who formed a Nuclear Issues Group at the Cape Town Art Centre in Green Point. In 1983, at the suggestion of Dr Derek Yach and Professor Arnold Abramowitz, we formed a voting bloc and took over Koeberg Alert at which point the author was elected General Secretary and held that position until the late 1980s.

Largely drawn from the suburban middle-class, the organisation quickly swelled to over 100 active members in branches throughout the Cape Peninsula. Unable to penetrate the National Party's policy defences, we quickly chose to affiliate both to the United Democratic Front and the End Conscription Campaign. Similar groups were formed in the urban centres of Pietermaritzburg (the Society Against Nuclear Energy, or SANE) and Johannesburg. Without benefit of the Internet at that stage, researchers for Koeberg Alert, such as the late Peter Wilkinson, David Fig, and Thomas auf der Heyde, soon began to map a larger project: the overall uranium fuel chain and the clandestine development – with unofficial US, Israeli, French, and German support – of all the necessary ingredients for an Apartheid bomb (Moss & Obery, 1987).

At times, Koeberg Alert's various members and sympathisers were bombed, arrested, detained without trial, and tortured. In the late 1980s, after sharing offices with the End Conscription Campaign in Observatory, Cape Town, an office for Koeberg Alert was established at Community House in Salt River, a stronghold for the Mass Democratic Movement in Cape Town. The author was then elected as the Chairman of Tenants Committee. As activists we began to work more closely with the National Union of Mineworkers (who provided the bulk of nuclear workers), and affected communities in Atlantis (a dormitory worker suburb near Koeberg) and Namaqualand (where the nuclear waste began to be dumped). Both buildings were bombed by security forces, indicating the increasingly hostile relationship between the State and its opponents.

It was also during this dark period that State utility Eskom chose four sites, other than Koeberg, for the commissioning of future nuclear power stations:

Thyspunt, on the western side of Cape St Francis and Jeffreys Bay, near Oyster Bay, in what is now the Eastern Cape Province

Bantamsklip, past Hermanus and Gansbaai, next to Pearly Beach in the Overstrand, in what is now the Western Cape Province

Brazil & Schulpfontein on the Namaqualand coast, west of Kommagas and south of Hondeklipbaai, in what is now the Northern Cape Province (Hallowes & Munnik, 2007).

The complex built at Pelindaba near Pretoria in the early 1960s also grew in strength during the mid-1980s, a capital-intensive, highly polluting nuclear complex. Later, more sites were added, which included the infamous uranium enrichment plant, or "Z-plant", and Advena/Kentron Circle Facility, where research and the secret development of nuclear weapons took place (Fig, 2005).

In the late 1980s, Koeberg Alert gave birth to the Cape Town Ecology Group, while Earthlife Africa was born in Johannesburg, with later branches in Cape Town, Durban, Pietermaritzburg and Pretoria. With the advent of democracy in the 1990s, many activists were absorbed into the now unbanned African National Congress (ANC), and later into government administration. Others assumed leadership positions in various environmental and development service organisations, such as the Environmental Monitoring Group and the Development Action Group in Cape Town. At a national workshop in February 1994, veteran anti-nuclear activists in the ANC came together once again to make their objections to the nuclear industry clear (Environmental Monitoring Group, 1994). By 1995, the friendlier Reconstruction and Development Programme (RDP) had been replaced by the more controversial GEAR (Growth through Economy and Redistribution) when macro-economic policy became the sole determinant of industrial strategy, including the principles of "mineral beneficiation" and the importance of "foreign direct investment" (FDI), leading to the encouragement of energy-intensive large smelters and metal-working plants (Marais, 1998).

One of the major industries that benefitted from sanctions-busting had been the weapons production company, the Armaments Corporation of South Africa (Armscor), responsible not only for conventional weapons production but also the clandestine nuclear weapons industry. During the period known as the "the Government of National Unity," Foreign Minister Roelof "Pik" Botha had made sure that the jobs for veterans of Armscor and the bomb factory at Advena might be secure. According to Rob Adam (then CEO of the Nuclear Energy Corporation of South Africa, or NECSA), "when the Government had shut down the nuclear programme … there had been serious infrastructure, hot cells, fuel-testing centres and skilled staff, which had threatened to become redundant. It was for this reason that they had decided to employ this technological muscle in other ways and on other programmes, which allowed them to preserve the national skills base in the nuclear domain" (Parliamentary Working Group – PMG, 2007).

One of the earliest appearances of this initiative is described in a subsequently deleted internet site, "Chronology of the Pebble Bed Modular Reactor (PBMR)," written by a former South African Atomic Energy Corporation (AEC) employee, Dr Johan Slabber. Slabber claimed that, after meeting Professors Rudolf Schulten and Kurt Kugeler at Aachen University in 1988, they had discussed the potential of the PBMR. When Slabber joined the Armscor electronic systems supplier Integrated Systems Technology (IST) in 1989, he had suggested the reactor technology to Eskom. Slabber further alleged that – soon after the unbanning of the ANC, in April 1990 – Armscor had appointed IST to do a preliminary design and feasibility study on the PBMR as a potential source of propulsion in a nuclear submarine and that the project had been headed up by Chris Oberholzer. In March 1992, IST apparently received Armscor approval to investigate the commercial potential through the offices of Dieter Matzner and this was when it was brought before Eskom. According to the Nuclear Regulatory Commission (NRC), Eskom had been investigating the PBMR option since 1993, under the auspices of its Integrated Electricity Plan (IEP) (NRC, n.d.).

Eskom's website claims that "by 1993 it had become clear that building a new traditional Pressurised Water Reactor (PWR) such as Koeberg would be prohibitively expensive" (Eskom, n.d.). Slabber maintains that, over the following five years, "the South African government was kept up to date on all Eskom's findings" (Kantey, 2017). At the very same time, then, that the Department of Minerals & Energy under Minister Penuell Maduna of the Mandela-led Cabinet was conducting an extensive and fully inclusive, energy-policy consultation, which led to the White Paper on Energy being released in 1998, elements inside Eskom – with the full and active participation of CEO Reuel Khoza – were engaging in "discussions with potential local and overseas partners … and it was found that the PBMR would be a cost-effective option" (Kantey, 2017).

Meanwhile, macro-economic policy changes in central government were moving to meet Eskom and the nuclear industry half-way. Soon after the inauguration of Nelson Mandela in April 1994, the progressive economic policy of the post-Apartheid Reconstruction and Development Programme (RDP), which included a massive commitment to electrification for the masses, had given way to powerful World Bank and the International

Monetary Fund influence (Marais, 1998). Alec Erwin, who would become Minister of Public Enterprises in the Mbeki government, understood well the industrial strategy necessary to implement this policy, especially following the time he spent in the National Union of Metalworkers (NUMSA). Erwin soon became a champion of the PBMR. This shift in attention coincided with a global resurgence in the nuclear industry, which quickly and astutely hijacked the global warming debate to support its ailing cause in the aftermath of the 1986 disaster at Chernobyl (Kantey, 2017). Nevertheless, given the strong participation of anti-nuclear activists in the Mandela Government's Energy Policy process, it was hard to see any shift in official policy in the South African Government's 1998 White Paper on Energy. We see in the section on nuclear energy, for example, a well-defined call for a re-appraisal of the South African nuclear industry (Department of Minerals and Energy, 1998).

At the very close of the Mandela era, therefore, one may argue that the stage was set for fierce, but muted debates within the Tripartite Alliance with regard to the production of electricity. The older guard, who had cut their teeth on the old Soviet school of Marxism, were clearly in favour of retaining those State assets which were the crown jewels of the Apartheid State; the younger, aspirant and wildly Neo-Conservative African elites saw lucrative opportunities in the prospect of "corporatisation" (the translation of a State-owned enterprise into a quasi-corporate structure with equally fat salaries) or outright privatisation (the selling off of the State asset to private investors, usually with a proviso that paid positions had to be reserved for Black African directors) (Kantey, 2017). Given the tremendous pressure that activists had put on the energy policy-formation process, however, the White Paper was understandably cautious: "Whether new nuclear capacity will be an option in the future will depend on the environmental and economic merits of the various alternative energy sources" (DME, 1998).

Despite the wide consultative process leading up to the Energy White Paper of 1998, however, Eskom was determined to engage in a nuclear build programme, regardless. In 1999, the PBMR (Pty) Ltd was constituted as a separate company, owned by the South African Government, through the State-owned Industrial Development Corporation, the State-owned Eskom and the UK-based company, British Nuclear Fuels Limited (BNFL). In 2001, the new Cabinet under Thabo Mbeki decided to pursue a pro-nuclear power reactor policy, without any broader consultation (Fig, 2010). During this time, an equally fierce opposition arose within the major cities and at the proposed coastal sites within South Africa. The Koeberg Alert organisation in Cape Town no longer existed as such, but had morphed into a more loosely held Koeberg Alert Alliance, with Earthlife Africa's Cape Town branch having assumed the reins, while supported by fraternal branches in Pretoria, Johannesburg, and Durban. This network had led, in turn, to the birth of the national Environmental Justice Networking Forum.

Given the long-established cordial relationships with the National Union of Mineworkers, a resolution was successfully passed at a Congress of South African Trade Unions at their 7th Annual Congress, as follows: "... we call on government ... to make South Africa a nuclear-free zone, ending its funding of the Pebble-Bed Modular Reactor and ensuring that the nuclear waste from Koeberg is not dumped in other parts of Africa" (COSATU, 2000).

Black Economic Empowerment in the Nuclear Power Sector

Despite popular opposition, however, the counter-thrust was provided by sectional bourgeois interests, who were benefiting directly from their affiliation to the ANC. Eskom's non-executive chair, Reuel Khoza, was at that time also the founding chair of investment holding company Co-ordinated Network Investments, which held a 29% stake in Integrated Systems Technology (IST), one of the main beneficiaries of the R90m spent on the reactor's research and development (*Business Day,* 29 November 1999). The proponents then tried to rush through a nominal Environmental Impact Assessment, signed off in June 2003 with a positive Record of Decision by – ironically – former End Conscription Campaign member Crispan Olver, then Director General of the Department of Environment and Tourism. They were stopped in their tracks, however, by a successful legal challenge from Earthlife Africa, which finally threw out the Environment Impact Report in January 2005. Another setback to the PBMR project arose when United States shareholder Exelon unexpectedly withdrew in April 2003 and one cannot help speculating that popular pressure in

both South Africa and the United States had driven them away, as well as the suppressed information that the project was not commercially viable without massive taxpayer support.

Enter AREVA and the French Connection

It was also at this time that the traditional suppliers of the Koeberg Nuclear Power Station, the French nuclear industry giant AREVA (now called Framatome), was offered "industry technology rights and cooperation" in the PBMR reactor programme. AREVA said the deal might include fresh fuel supply, waste management and power transmission and distribution. AREVA CEO Anne Lauvergneon was promptly appointed to Thabo Mbeki's Presidential Economic Advisory Committee.

Since the PBMR had been abandoned in the short term, tenders were issued for either a Toshiba-Westinghouse AP1000 or an AREVA EPR, then under stuttering construction in Finland. Projected costs of these reactors were then about R120-billion each. Long-standing spokesman Tony Stott indicated that Eskom would no longer be driving the programme: "The future of nuclear is bigger than just Eskom now … the government will now play a bigger role in taking it forward, because the nuclear build is important for the development of the country's capabilities" (Kantey, 2018). By 2010, the PBMR company said that it needed a minimum of an extra R31 billion to complete the demonstration plant. The State, however, having already devoted R9 billion with nothing to show for it, became impatient, and put an end to the programme (Kantey, 2018).

Taking the Struggle to Parliament Once More

The actual experience of participation in the Environmental Impact Assessments, however, and the failure of civil society and the labour movement to make any real impact of their own on decision-making, forced the alliance of anti-nuclear forces on to the offensive, largely led by Earthlife Africa members still sympathetic in principle to the cause of the Tripartite Alliance. Thus, by staving off the easy passage of the EIA and the haphazard launch of the PBMR, those progressive forces opposing nuclear power began to have an influence beyond civil society and the labour movement and began to stir the long-dormant consciousness of the parliamentarians. What was most curious, however, is that the debate seldom centred on the substantive issues of public health, possible catastrophic accidents and the unsolved problems of nuclear waste, but strictly on economic questions. This emphasis – almost by default – forced the anti-nuclear movement to shift their focus to economic arguments and the financial media, especially the influential newspapers, *Business Day* and *Business Report,* and the august financial magazine, the *Financial Mail,* as well as *Engineering News*.

Loyal Support from the Administration is Gathered

While President Mbeki made a clear commitment to building a fully-fledged nuclear industry in his State of the Nation Address on 8 January 2007, the Draft Nuclear Energy Policy and Strategy for the Republic of South Africa was only approved by Cabinet on 8 August 2007, after a desultory round of public participation whose contents were never acknowledged, nor made public (ANC Daily News Briefing, 23 August 2007). As Deputy General Secretary of the South African Communist Party, ANC MP and National Executive Committee member, Jeremy Cronin, noted in an interview: "The structures of the bureaucracy remain hostile to public participation and pressure … Increasingly policy is formed by directors general of government departments and their senior management, or even worse still, by external and very often private sector consultants from the European Union or North America" (HBS, 2014).

Having committed to the furtherance of the nuclear industry, an official Nuclear Energy Policy was approved by Cabinet on 8 August 2007. The lack of adequate consultation led in turn to the founding of the Coalition Against Nuclear Energy (CANE), whose founder members included the Namaqualand community, the Pelindaba Working Group, and the Koeberg Alert Alliance, among others.

As 2008 proceeded, discussions were equally far advanced for the awarding of a contract for either a Toshiba-Westinghouse AP1000 Pressurised Water Reactor (PWR), similar to those at Koeberg, or the AREVA-led European Pressurised Reactor (EPR), then under stuttering construction in Finland. Projected cost of these reactors was about R120-

billion each (Hill, 2008). In his 2007 Budget Speech, however, Finance Minister Trevor Manuel had warned that "in an economic discussion, it is not appropriate to throw numbers around without a sense of rigour or without some interrogation" and this had long been recognised by such luminaries as the *Financial Times* (Taylor, 2001): "Nuclear generation will remain *uneconomic unless electricity prices rise or it receives state financial help*, according to forecasts compiled by the government's energy review team. It concludes that by 2020, nuclear power will remain more expensive than wind generation and about the same cost as electricity produced from power stations burning specialist green energy crops"*[emphasis added]*.

Despite a failed attempt to artificially inflate electricity prices, however, it was this economic question which put paid to the State's larger ambitions, but the bureaucracy seemed unperturbed by the cancellation of the "Nuclear-1" bid for the larger stations. Director-General of the Department of Public Enterprises, Portia Molefe, stated that a "nuclear task team" would develop "a framework for procuring a nuclear technology partner to support both the nuclear power station build programme, and the associated industrialisation process" (Van der Merwe, 2008). The hunt was now on for a strategic partner that would "co-develop the nuclear industry in South Africa, and assist in the introduction of broadening of the nuclear base" (Kantey, 2018). As long-standing spokesman Tony Stott indicated: Eskom would no longer be driving the programme: "The future of nuclear is bigger than just Eskom now …The government will now play a bigger role in taking it forward, because the nuclear build is important for the development of the country's capabilities" (Kantey, 2018).

The Final Emergence of 'State Capture'

In late 2007, however, President Thabo Mbeki was replaced by Jacob Zuma as head of the ANC, in the 'Putsch of Polokwane'. In December 2008, following the Global Financial Crisis and with Anglo-American's Bobby Godsell installed as chairman of Eskom, the entire "Nuclear-1" deal was stalled: "Eskom announced that it would not proceed with either of the bids from AREVA and Westinghouse, due to lack of finance, and the government confirmed a delay of several years. The revised projection for nuclear increase is that the next plants will come online in 2019, and 6000 MWe might be operating by 2025" (The World Nuclear Association, 2010).

In October 2010, the Department of Energy released its draft Integrated Electricity Resource Plan (IRP) for 2010-2030. Although nuclear was included in the energy mix only from 2023, a decision on this "must be finalized as quickly as possible" and a procurement process set up. At least 9.6 MWe new nuclear capacity by 2030 was included in the plan, significantly less than the 2007 target (World Nuclear Association, 2010). For the following seven years, up to the present, this became the rallying cry for pro-nuclear apologists in government, in the parastatal companies, and in the body of the new (Revised) Draft Environmental Impact Reports for Nuclear-1.

During the course of 2010, the South African Civil Society Energy Caucus, in conjunction with the Coalition Against Nuclear Energy, made well over 400 submissions in the public participation process leading up to the publication of the Integrated Resource Plan for the production of electricity (the IRP2010). In every single submission – whether from the Labour Movement, the Churches, NGOs, or Community-Based Organisations – these well-informed members of civil society rejected out of hand the employment of nuclear energy for electricity production. Yet, within two weeks of the nuclear catastrophe at Fukushima, and before Germany and Switzerland had turned their backs completely on nuclear energy, Minister of Energy Dipuo Peters had declared her support for six new nuclear reactors in South Africa. At a conference in Cape Town, she further trumpeted the development of a nuclear-export market to the rest of Africa, and this call was supported by both the International Atomic Energy Agency (IAEA), and the African Union (Greenpeace, 2021).

Is there Life after Fukushima?

In March 2011, the author was visiting a friend in Port Elizabeth when disaster hit Japan: first the devastating tsunami and then immediately following on, the sustained crisis at the Fukushima-Daichi series of four nuclear power plants. Glued to the television set for 48 hours, the author was astounded to see one reactor blow up like a small-

scale atom bomb in front, with bits of broken fuel-rod elements cascading from the explosion, like so many radioactive black-wattle seed pods on the screen. Nevertheless, at the end of that year, then Minister Peters was standing firm in justifying a nuclear future for South Africa (*Mail & Guardian*, 9 December 2011).

The first Environmental Impact Report for Nuclear-1 having been released, the author had been privileged to attend hearings throughout the country. The opposition had been particularly fierce at the designated site of Thyspunt. One of the further highlights of the tour had been a visit to the Agri at Bredasdorp in the Overberg region, where a farmer had sidled up to the author in the car park and muttered, *"Laat hulle kom: ons sal die Semtex uithaal"* ("Let them come [to Bantamsklip]: we'll haul out the plastic explosive"). Earlier in the process, there had been a meeting in Kimberley, the provincial capital of the Northern Cape, where nuclear power stations had been mooted for the coast of Namaqualand at Brazil and Schulpfontein. A community leader had stood up and said publicly, *"Dis baie maklik, menere: as julle aan die kus kom, gaan ons julle net skiet"* ("It's very simple, gentlemen: if you come to the coast, we'll just shoot you"). The sites mysteriously disappeared from discussion further on, and only the three southern coastal sites remained.

It was at this point that the national Coalition Against Nuclear Energy (see www.cane.org.za) held a summit in Plettenberg Bay, not so much to generate a "top-down" response, but rather (given its non-hierarchical nature) to "meet-and-greet" and exchange notes. This was followed later by the emergence of the anti-nuclear campaign itself, TSUNAMI, with strong affiliation to the Civil Society Energy Caucus, and other, related structures among the civil-society, NGO, and faith-based social movements.

At the predicted "end of the world" in 2012, however, then Energy Minister Dipuo Peters proclaimed yet again that the South African Government was still committed to a nuclear future as "part of the move to cleaner energy" (Reuters, 2 March 2012). The magic figure of 9,600 MW nuclear was repeated, a refrain that characterised all propaganda from 2007 onwards, and – in the light of the original calculation made in consort with the French company AREVA – it would make sense in the light of three coastal sites carrying two EPRs of 1600 MW each. "R300-billion was allocated to the energy sector over the next three years" (Kantey, 2017). A National Nuclear Energy Executive Coordination Committee (NNEECC) would "oversee" the roll-out of the nuclear build programme and review the decision about the procurement of the stations (Kantey, 2017).

Zooming Forward to the Nice Big Present

It was at this crucial time that the name of Rosatom first reared its head. South Africa had applied to join the Brazil-India-China-Russia bloc in 2010, and was admitted at the end of that year, while the new South African president, Jacob Zuma, joined the 2011 summit in Sanya, China. It has been alleged that the relationship between Zuma and Russian President Vladimir Putin goes all the way back to the 1980s when both men were working for their respective intelligence agencies. What is far more important to note, however, is that Rosatom Overseas, the international arm of Russia's State-owned nuclear energy group Rosatom, signed a memorandum of understanding (MoU) with the South African Nuclear Energy Corporation (Necsa; Campbell, 2012). One of the aspects of that MoU was "the manufacture of nuclear fuel and the fabrication of power equipment" (Campbell, 2012).

Meanwhile, the local opposition to the expansion of the nuclear industry in South Africa was in full flight. Under the able leadership of Peter Becker, the Cape Town-based Koeberg Alert Alliance was able to organize a global anti-nuclear conference, where a number of important Indian, African, and

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Russian activists were able to meet and share insights, and which served to boost the already active alliances and coalitions across regional and international borders.

Meanwhile, the national Coalition Against Nuclear Energy continued with a constant barrage of commentary in the local and national media, especially the financial media. In July 2012, the Coalition convened a well-attended meeting in Port Elizabeth to launch the NoPEnukes campaign in sympathy with the nearby Thyspunt Alliance, incorporating not only activists from Jeffreys Bay and Cape St Francis, but also academics and members of the Eastern Cape Environmental Justice movement. The counter blast was immediate from Energy Minister Dipuo Peters at a Black Business Dinner, held on 6 July 2012: "I am getting more and more convinced that the whole nuclear debate is coming from communities that don't want to see this country growing … I also want to make an appeal to you to partake in this debate, since one of the first nuclear sites under consideration is that at Thyspunt, in the Kouga area. At this stage only the anti-nuclear groups have been lobbying the news media and business in this part of the country, and that with wrong information and unfounded claims" (Peters, 2012).

A few months previously, the Minister had promised the completion of the fatally flawed Environmental Impact Report "by the end of the year" (Creamer, 2012), but another barrage of high-quality comments and inputs from members of the national anti-nuclear coalition, as well as intense lobbying of the key stakeholders, delayed the final report by another five years.

In the first quarter of 2013, then Deputy President Kgalema Motlanthe addressed a Nuclear Africa conference in Midrand, between Johannesburg and Pretoria, and painted a rosy future for the industry (Campbell, 2013). Without any indication of what type of technology would be commissioned, the contenders were all lined up: the Toshiba-Westinghouse AP1000 from the United States, the Rosatom VVER-1000; the AREVA EPR from France; and South Korea Electric Power Corporation's (Kepco) APR-1400. Although it was alleged that Motlanthe was 'close to China', they only appeared as contenders for the projected spend in 2014. At the end of 2013, however, the "Update" for the Integrated Resource Plan for Electricity (the IRP 2010-2030) dropped a bombshell, when it suggested that, largely founded on a sluggish demand for electricity, no nuclear base-load capacity would be required until after 2025, and possibly even later, after 2035 (Update to IRP 2010-2030, 2013: 8).

The next bombshell dropped on 23 September 2014 by the local *Mail & Guardian* and Agence-France Presse (AFP), and seemingly introduced contradictions: "Russia's Rosatom State Atomic Energy Corporation said on Monday it will provide up to eight nuclear reactors to South Africa by 2023, in a $50-billion strategic partnership between the two countries." According to Rosatom, the delivery of the reactors would enable the foundation of the first nuclear power plant based on Russian technology on the African continent (*Mail & Guardian*, 23 September 2014). Rosatom Director-General Sergey Kirienko estimated the value of the deal at around $50-billion, given that one reactor costs around $5 billion. Subsequently, the inter-governmental agreement, signed in Vienna on the margins of the 58th IAEA conference, called on Russia to help build infrastructure in South Africa and to train African specialists at Russian universities (*Mail & Guardian*, 23 September 2024).

Later, *TimesLive* published the following: "On Friday, the *Mail & Guardian* quoted an ANC source saying that Zuma took control of the deal, ironed out the details with Putin on the sidelines of the BRICS (Brazil, Russia, India, China and South Africa) summit in Brazil in July, and finalised it in Moscow last month." Sources told the newspaper Zuma subsequently instructed Joemat-Pettersson to sign the deal on the sidelines of the IAEA conference in Vienna. It was furthermore reported that Zuma did not take the ANC's national executive committee into his confidence on the matter, and only gave details to his most trusted Cabinet ministers and MPs (*TimesLive*, 26 September 2014).

As one can imagine, such a massive bombshell had equally massive repercussions, some of which are still being felt today. The anti-nuclear movement were overjoyed at the amount of publicity and solidarity it received from unexpected quarters: from the right-wing parties, through the official liberal Parliamentary opposition, all the way to the more traditional supporters on the left. The

author perceives that there is no need to delve comprehensively into the extraordinary success of Earthlife Africa and SAFCEI in overturning once again a necessarily flawed and over-hasty pro-nuclear decision on the part of the South African Government.

Conclusion

This article sufficiently shows that, while activists have long opposed nuclear power for economic, political, environmental, worker- and public-health reasons, elements within the ANC-led Government have consistently pursued a nuclear path for private gain among the more favoured elites.

To what extent truly popular movements, or the still active and militant grassroots social movements, may find each other once again in a Mass Democratic Movement against corruption and self-enrichment in the name of 'the people', and to what extent the dead-weight of advanced capitalism and out-and-out bribery and corruption may ultimately triumph over a less sophisticated population, remains to be seen. Having fought this battle without interruption or distraction since 1982, the author can only quote the late Paul Jacobs, who died of cancer while campaigning for the rights of US soldiers deliberately exposed to radiation in the south-western deserts of that country. In a 1980s documentary, entitled *Paul Jacobs and the Nuclear Gang,* he quotes from the Jewish Talmud, even while he shows the bald signs of radiation and chemotherapy himself: "You have no obligation to persist, but you have no right to desist."

Endnotes

The author wish to acknowledge funding from the University of Johannesburg and Open University for the article processing fees.

[1] See, for example Pieter-Louis Myburgh. (2017). *The Republic of Gupta – A story of State Capture*, Penguin, 81.

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