

NUCLEAR MONITOR

March 27, 2025 | Issue #925

A PUBLICATION OF WORLD INFORMATION SERVICE ON ENERGY (WISE)
AND THE NUCLEAR INFORMATION & RESOURCE SERVICE (NIRS)

WISE/NIRS

Nuclear Monitor

The World Information Service on Energy (WISE) was founded in 1978 and is based in the Netherlands.

The Nuclear Information & Resource Service (NIRS) was founded in the same year and is based in the U.S. WISE and NIRS joined forces in the year 2000 to produce Nuclear Monitor.

Nuclear Monitor is published in English, 10 times a year, in electronic (PDF) format only. Back issues are published on the WISE website two months after being sent to subscribers (www.wiseinternational.org/nuclear-monitor).

SUBSCRIPTIONS

10 issues

NGOs / individuals 67,50 Euros

Institutions / Industry 235 Euros

US and Canada: Contact NIRS for details (nirs@nirs.org)

All other countries: Subscribe via the WISE website

www.wiseinternational.org

ISSN: 2542-5439

CONTACTS

WISE

info@wiseinternational.org

www.wiseinternational.org

NIRS

nirs@nirs.org

www.nirs.org

Nuclear Monitor

monitor@wiseinternational.org

www.wiseinternational.org/nuclear-monitor

Monitored this issue:

Kozloduy 7-8? No thanks!

2

In Bulgaria, there is a discussion about the construction of the new unit 7 and preparatory work for unit 8 at the Kozloduy nuclear power plant.

Based on his open letter to the Bulgarian government and parliament, Todor Todorov wrote an article about his vision on the construction of Kozloduy 7 and 8.

Problems with new French nuclear reactors

5

Jan van Evert

Uranium in Africa:

Opposition and Resistance re: Exploitation of Uranium

6

In this first part Gunter Wippel throws a light on successful opposition against uranium mining in three African countries: South Africa, Tanzania and Mali.

The second part will be published in a next edition.

Nuclear News

12

- World Nuclear Power Status
 - Emergency shutdown at Swiss nuclear power plant
- Jan van Evert

NIRS
Nuclear Information and Resource Service

wise
World Information Service on Energy
founded in 1978

Kozloduy 7-8? No thanks!

Todor Todorov

In Bulgaria, there is a discussion about the construction of the new unit 7 and preparatory work for unit 8 at the Kozloduy nuclear power plant.

Based on his open letter to the Bulgarian government and parliament, Todor Todorov wrote an article about his vision on the construction of Kozloduy 7 and 8.

Are we going to allow irresponsible politicians to push the country into a huge and unnecessary debt of over 50 billion leva?

Kozloduy 7-8 with Westinghouse reactors is just as unnecessary for Bulgaria as the corrupt Belene NPP project with Russian reactors.

The lack of vision and understanding of the public interest of our politicians has led to endless battles between different parties and a sad world "record" , 7 parliamentary elections in 3 years.

Engrossed in partisan bickering and lobbying interests, the native politicians caused the country to lose huge amounts of European funds meant for our country , they needed 20 votes in parliament to elect a president.

In all this chaos and inadequate actions of the political parties, there was one issue on which they showed surprising unity, the construction of a new Kozloduy 7-8 nuclear power plant, with Westinghouse reactors and a Hyundai plant builder. All parties supported this project and some of them want the Belene NPP to be built.

Politicians against the public interest

Traditionally for Bulgaria, energy mega-projects serve foreign interests and bring huge losses to the budget, burdening Bulgarian taxpayers.

The Belene NPP was "built" for over 30 years and brought the country a loss of over 3 billion

leva without reaching a completed plant, but Rosatom was paid 1.2 billion leva in 2016 for completely unnecessary 2 reactors that are still sitting wrapped in plastic at the Kozloduy site. There has never been an economic analysis that proves the need for the country of the Belene NPP, this project was completely unnecessary and became an example of corruption, but Russia's interests were more important for Bulgarian politicians.

Turkish Stream was built through Bulgaria in 1 year with 3 billion leva from the budget, without a single diversion on our territory. For several years now it has served the Kremlin as one of the sources of funds for the continuation of the war against Ukraine, which does not sound very Euro-Atlantic, but it serves the Kremlin's interests.

Bulgargas's contract with the Turkish company Botas for access to liquefied gas from Turkey brings our country losses of USD 500 000 per day regardless of whether the service is used, the term of this contract is 13 years. A term in which it will serve Turkey's interests, and our politicians are making heroic attempts to renegotiate the terms of this contract already signed by another caretaker government with a limited term in office.

The lobbyist project Kozloduy 7-8 with Westinghouse reactors and the plant builder Hyundai

The approach of the corrupt Belene NPP project applies to Kozloduy 7-8 as well. In the absence of public discussion, economic analyses and assessments of the need for new nuclear capacity, political decisions are being taken to launch this project. Parliament, without it being its duty, "chose" Westinghouse's AP1000 reactors as well as Hyundai as the builder of the plant. Caretaker

and full-time governments with limited time to govern have begun direct negotiations with Westinghouse and Hyundai, signing contracts and agreements and giving upbeat interviews with US embassy and government representatives. They persistently seek to tie Bulgaria to long-term huge debts for decades to come, and to change the country's energy mix in favour of an unnecessary new nuclear power plant.

Interim energy ministers are announcing in the Bulgarian media a price tag of \$14 billion for the construction of two AP-1000 reactors and are negotiating with the US EXIM Bank and a South Korean bank for two \$8 billion loans, so far with unclear terms and interest rates. A state guarantee of BGN 1.5 billion has already been budgeted for the launch of this project. Initially, Bulgarian Energy Holding (BEH) contributed BGN 500 million to the capital of the company Kozloduy - New Capacities NPP, very quickly the amount was tripled and the absorption has started. Apparently, this time the corrupt model of NPP Belene will be improved and accelerated with the waste of larger sums at the expense of the Bulgarian taxpayers. The reason for this string of irresponsible actions by Bulgarian parties and politicians when signing contracts for energy mega-projects is clear - so far no one has taken responsibility for the huge damage done to the country by signing contracts in foreign interests. We hope that the responsible institutions will wake up and do their duty.

An illegal NPP?

Interestingly, the European Commission (EC) has not yet been informed about the grandiose plans of Bulgarian politicians for a new NPP with reactors by Westinghouse and builder Hyundai. For 2 years now we have been reading in the media about negotiations with the companies chosen by the parliament, we have been seeing publicity photos of our ministers with American ambassadors,

bankers and politicians, but in our meetings in December in Brussels with the various departments of the EC no one had received any official information from the Bulgarian government. We assume that it is known to our rulers that they cannot build an illegal NPP in the European Union, if, as an old habit, they try to put the EC on fait accompli and thus get permission they will be disappointed.

The AP-1000 Westinghouse reactors - what are the facts

- In the USA, construction of two Westinghouse AP-1000 units began in 2013 at the Summer Nuclear Power Plant (in South Carolina).
- In 2017, due to unrestrained cost growth, construction was halted with over \$9 billion invested to date.
- In 2013 in the USA (in Georgia) construction began on two units of the same type at the Vogtle Nuclear Power Plant. They are due to enter service in 2023-2024.
- Construction time 10 years instead of the 5 years promised at the beginning.
- Cost about \$35 billion instead of \$14 billion promised at start of construction.

Most expensive reactors in the history of nuclear power.

- The cost of electricity produced by these reactors is \$170-180 per MWh.
- There is no nuclear power plant built in Europe with these reactors.
- In 2017, Westinghouse declared bankruptcy and set in motion a series of lawsuits, a direct consequence of the Summer NPP debacle and the \$9 billion lost. As of 2018, it has a new owner. Toshiba Corp sold its ownership for \$4.6 billion to Canada's Brookfield Asset Management.

Conclusions:

- ✓ The cost of Kozloduy 7-8 will be over \$30 billion instead of the promised \$14 billion. This will condemn our country to huge and unaffordable debts.
- ✓ No major growth in electricity demand is projected in the coming decades. A new nuclear power plant is not needed for the country's electricity balance.
- ✓ In 2024 alone, 481 new RES with a capacity of 938 MW have been commissioned in Bulgaria. In just 1 year new RES with a capacity of approximately one reactor in a NPP.
- ✓ After a minimum of 10 years of new NPP construction, new reactors will be completely unnecessary due to the rapid development of renewable energy technologies and especially energy storage technologies.
- ✓ The Kozloduy 7-8 project is contrary to the demographic, economic and energy development of the country.
- ✓ The price of the electricity produced by the new NPP makes it unsaleable on the liberalised European electricity market.
- ✓ The high price of energy from the new NPP poses a danger that Bulgaria will guarantee the purchase of the energy produced by the plant, this is a huge market risk for the country for decades and will destabilize the economy for a long time. With a lower energy price on the market, the state will make up the difference at taxpayers' expense.
- ✓ The nuclear lobby's attempts to push through a new nuclear power plant project at Kozloduy have the effect of diverting public attention from advancing existing, affordable, sustainable and cheaper solutions to the energy transition.
- ✓ We live in a very insecure and war-torn and conflict-ridden world. The example of the occupation by Russian troops of Europe's largest nuclear power plant, Zaporizhzhya, and its decommissioning is indicative of

how vulnerable countries relying on nuclear power plants are.

We offer :

1. The Government to show the will and responsibility to protect the public interest. It will be a very good example for future governors.
2. Immediate termination of contracts, agreements, annexes to contracts with Westinghouse and Hyundai due to the economic unviability of the Kozloduy 7-8 project. The examples we have given of Westinghouse reactors being built in the USA are indicative enough of slow construction and very expensive energy.
3. Termination of meetings and agreements to negotiate loans for the construction of Kozloduy 7-8 with the US EXIM Bank, South Korean banks and any other foreign banks. Generations of Bulgarians will pay back these loans for an unnecessary nuclear project.
4. The US can be a very useful partner in energy efficiency , in new energy storage technologies instead of offering unnecessary and expensive reactors for NPP.
5. Immediately stop spending from the government guarantee to start the project.
6. It is highly likely that Kozloduy 7-8 will never be built, but any possibility of siphoning funds from the budget must be stopped, following the example of the corrupt Belene NPP project.
7. The government should adopt decentralisation of electricity generation as a priority in the energy sector. This will ensure real energy independence for the country and its citizens.
8. Household access to renewable energy and energy storage technologies.
9. Focus on energy efficiency, the cheapest energy is the energy saved.

10. Support for the development of energy communities that significantly increase local energy independence , and this is very important in times of global energy crises.

Contact:

Todor Todorov

Coordinator in the Just Transition Department at
Environmental Association Za Zemiata

t.todorov@zazemiata.org

+359887122801

Problems with new French nuclear reactors

Jan van Evert

France has delayed the start-up date for six new nuclear reactors from 2035 to 2038. The French government plans to build six new nuclear reactors. The State-owned company EDF and the government plan to seek approval from European competition authorities for the state support. The delay aims to ensure that EDF is better prepared to launch multibillion endeavours as long delays and cost overruns at reactor projects in France (Flamanville) and the UK (Hinkley C) have sent its debt soaring. A subsidized state loan will cover at least half of the construction costs of the new reactors. EDF must 'amplify actions' to present a binding cost and timetable assessment for the project by the end of this year, president Emmanuel Macron's office said in a statement following a nuclear policy meeting in March. That is understandable since France's state auditor had said in a report last January that a final investment decision on the six reactors should be made only once their design is well advanced and funding finalized. It said the estimated bill for construction, excluding financing costs, had ballooned to almost €80 billion (\$ 87 billion).

That is over € 13 billion per reactor.

The auditor also said that once the funding model is announced, there is likely to be a delay of at least one year while approval from the European Commission is sought for the state funding.

At the same time the new French reactor Flamanville 3 is experiencing serious teething problems. It was shut down on February 15th and will remain so until the end of March. It has already been shut down twice since it was connected to the grid on December 21st. The latest shutdown is caused by a temperature sensor in the primary circuit, which is responsible for transferring heat from the reactor core to the steam generators. A week later problems with the bearings of the alternator extended the shutdown. On top of that, there are issues with a second temperature sensor in the primary circuit. The operator still expects to reach full power output by the summer, despite these interventions.

Nevertheless, Flamanville 3 so far has used more power than it has produced (source: energy-charts.info).

Uranium in Africa: Opposition and Resistance re: Exploitation of Uranium

The article throws a light on – so far – successful opposition against uranium mining in three African countries: South Africa, Tanzania and Mali. To date, those projects grinded to a halt.

SOUTH AFRICA – Karoo uranium project stopped by locals

South Africa has a strong anti-nuclear movement; in 2018, after a five year legal battle, two women from two NGOs had stopped a deal by then-president Zuma to buy up to 10 nuclear power plants from Russia ¹. It was a black woman, Makoma Lekalakala and a white woman, Liz McDaid who won the court case – and were awarded the Goldman environment prize; they work for Earthlife South Africa and for Southern African Faith Communities' Environment Institute (SAFCEI) respectively.

In the Karoo, a vast semi-desert area, Peninsula Energy, an Australian company, had acquired a uranium project from AREVA South Africa in 2013. Peninsula planned mining a variety of ore bodies stretching across three provinces: Eastern, Northern and Western Cape, over a range of 7000 square kilometers.

By 2016, an EIA was prepared; public participation in the process was small, the desert-like area is thinly populated, in addition, people were concentrating on rejecting a shale gas project in the area. Residents were divided: some were interested in jobs, others were more concerned about impacts on environment and health ².

The uranium project would cover some 700,000 hectares (7000sqkm) and “ ... would have wiped out years of painstaking recovery of the semi-arid plains and threaten the very existence of several rural communities.” ³ The impact of the use of water in the semi-desert area would be catastrophic: “The Karoo uranium deposits are scattered over a large zone of 200 by 300 kilometers which requires long-haul trucking of ores over poorly constructed dust roads for hundreds of kilometers to reach a planned Central Processing Plant. For this plant alone, the company has already applied for a water licence to abstract 1.3 billion litres of groundwater annually, roughly the total water consumption of the Central Karoo Municipality. It is unclear where that amount of water could come from.”

(For more details see: **Uranium Mining threatens South Africa's iconic Karoo** <https://theecologist.org/2016/apr/28/uranium-mining-threatens-south-africa-ic-karoo>)

When residents of the Karoo area learnt about uranium mining plans and realized that mining company Peninsula had secured exploration licenses in their backyards, they were upset. Locals, also informed by Southern African Faith Communities' Environment Institute (SAFCEI) soon understood that large scale uranium mining would present at least as great a danger as fracking. The environmental assessment office was flooded with statements opposing uranium exploitation. Then it turned out that behind

¹ www.theguardian.com/world/2018/apr/23/goldman-prize-awarded-to-south-african-women-who-stopped-an-international-nuclear-deal

² <https://www.wise-uranium.org/upza.html#KAROO>

³ <https://theecologist.org/2018/apr/24/victory-campaign-against-uranium-mining-project-south-africa-karoo-region>

Peninsula a Russian oligarch backed the company, and people got even more suspicious.

By July 2016, the company reduced its project to about 12% of its original size; a new EIA was prepared due to the shortcomings of the previous one.

By April 2018, Peninsula Energy announced its complete withdrawal from the project ^{4 5} – a year after the nuclear power plant deal had been finally stopped ⁶.

The plans to build important parts of a nuclear fuel chain in South Africa had come to an end.

However, in 2023 South Africa's NECSA signed a Memorandum of Understanding with Russia's TVEL re: production of nuclear fuel ⁷.

In February 2025, a former subsidiary of Peninsula Energy, Lukisa Invest 100 (Pty) Ltd., applied for a mining right for uranium and molybdenum for a period of 30 years. The plans have a similar set-up as Peninsula's plan, a series of mining pits and a central processing plant near the main ore body ⁸.

TANZANIA – Civil Society opposes uranium exploitation

From 1885 to 1918, a German colony existed in what is today Tanzania. After WWI, it was transferred to the UK. By 1961, it became independent.

In 1978/79, German Uranerzbergbau GmbH, a company funded in parts by the German government of the time, followed airborne radiometric survey with groundwork. One of the authors publishing results was J. Borshoff, Uranerz Australia (Pty) Ltd. who would later

found Paladin and mine uranium in neighboring Malawi ⁹.

At the time of the 2007 uranium price boom, exploration companies flocked also into Tanzania; they targeted mainly two regions: Bahi and Manyoni area in Central Tanzania and Southwest Tanzania, Ruvuma region.

In Bahi region, Australian companies started drilling, often in local peoples' fields, without informing them or the village authorities, creating confusion. Tanzanians soon realized that uranium was no good news: it might contaminate water, fields and crops and damage peoples' health. More important, it might lead to people losing their land – their very means of existence as farmers and herders due to the kind of strip mining envisioned by the companies (Australian based URANEX and Mantra).

By 2008, local NGO Foundation for Environmental Management and Campaign against Poverty (FEMAPO) published a booklet in Kiswahili outlining the risks of uranium exploitation, focusing on Bahi area, often referred to as a 'swamp', in reality a periodically flooded basin without drain with fishing as well as growing of rice ('paddy') in the wet season and cattle grazing and agricultural activities in the dry season.

The FEMAPO team travelled from village to village, informing the local people in ways understandable by people with less formal education. On several occasions, international experts were invited to share scientific information, as well as persons from other African countries with experience of uranium mining from Niger, Namibia and South Africa.

4

<https://www.graaffreinetadvertiser.com/News/Article/Local-News/uranium-mining-in-the-karoo-is-dead-201902181007>

⁵ Further sources : <https://karoospace.co.za/uranium-mining-threatens-the-karoo/>
www.circleofblue.org/2016/africa/karoo-uranium-fossil-energy-development-defies-water-scarcity-reason/,
<https://safcei.org/uranium-mining/>

6

<https://www.reuters.com/article/markets/currencies/south-african-court-declares-nuclear-plan-with-russia-unlawful-idUSKBN17S25Q/>

⁷ <https://www.world-nuclear-news.org/articles/russia-and-south-africa-sign-mou-on-nuclear-fuel>

⁸ <https://www.wise-uranium.org/upza.html#KAROO>

⁹ <https://inis.iaea.org/records/a5fbn-cxk54>, IAEA-TecDoc-322

They talked in tightly packed spaces to the local people, translation into Kiswahili was provided ¹⁰.

In 2012, Tanzanian NGOs FEMAPO and CESOPE, in cooperation with Germany-based uranium-network.org, compiled another information booklet **“Uranium Mining – what does it mean for Tanzania?”** (not available on internet).

In September 2013, a major conference **“Uranium-mining: Impact on Health and Environment”** and a field trip were organized with participants from IPPNW Switzerland, Germany, France, and the US, from Niger as well as from neighbouring Zambia; a focus was on ensuring that people – particularly from Africa – with experience of uranium mining shared their experiences.

The conference was covered by national media ¹¹. It also led to something between an invitation and a summons by the Ministry of Mines to the organizers; the government did not appreciate the independent approach the conference organizers had taken. Late Bob Mtonga, IPPNW Zambia, summarized the outcome of the visit briefly: “They want us to sing from their songbook”.

Contributions and results were published in ... **“REPORT OF THE INTERNATIONAL CONFERENCE ON URANIUM MINING:**

IMPACT ON HEALTH AND ENVIRONMENT HELD ...” OCTOBER 4TH AND 5TH 2013, 2013 ¹² and in

“Uranium Mining - Impact on Health & Environment”, 2014, by Rosa-Luxemburg Foundation which had cooperated, together

with Legal and Human Rights Center, in organizing the conference ¹³.

Some arguments and insights of the conference were picked in **“Uranium Mining In Tanzania: A Stairway to Prosperity or Highway to Impoverishment?”** by B. Parasalaw in The Tanzania Lawyer magazine (Vol. 1, 2016, No. 2) ¹⁴.

The attention the opponents to uranium plans got, was not always wanted: at times, persons active in the matter were followed around by authorities, had uninvited visits, were questioned; things once got to a point where an active person had to leave the country for some time. Nevertheless, the opposition of local people remained strong ¹⁵.

Following the conference, a group of international guests traveled to Songea / Ruvuma region. In the area, Australian company Mantra had defined the Mkuju River deposit – and sold it in 2010 for 1,15 billion US\$ to Russian ROSATOM and its subsidiaries¹⁶, creating a great profit for its Australian shareholders.

Local NGOs organized a workshop on uranium mining and its impacts, local people attended. They had never heard about the downsides of uranium exploitation. They had only been told that the mine – Mkuju River Uranium project – would bring jobs and prosperity. Older people were concerned, among other things, in regard to the safety of young girls and women in the face of a major influx of male workers.

¹⁰ Personal communication of FEMAPO with the author of this article

¹¹ <https://www.thecitizen.co.tz/tanzania/news/uranium-mining-bad-tz-told-2498120>

¹² https://www.academia.edu/32650240/REPORT_OF_THE_INTERNATIONAL_CONFERENCE_ON_URANIUM_MINING_IMPACT_ON_HEALTH_AND_ENVIRONMENT_HELD_AT_BLUE_PEARL_UBUNGO_PLAZA_OCTOBER_4_TH_AND_5_TH_2013_Prepared_by

¹³ www.rosalux.or.tz/study-uranium-mining/

¹⁴ <https://tanzlil.org/akn/tz/doc/journal/2016-07-01/the-tanzania-lawyer-vol-1-2016-number-2/eng@2016-07-01/source>

¹⁵ Personal communication of FEMAPO with the author of this article

¹⁶ <https://www.themoscowtimes.com/2010/12/15/rosatom-buys-australias-mantra-a3770>

Within the next years, CESOPE and other civil society organisations critical of uranium exploitation, cooperated on the issue of uranium mining and educated themselves and others about the impacts of uranium exploitation.

German NGOs repeatedly invited delegates from Tanzania (and other countries affected by uranium exploitation) to Germany and neighboring countries to inform MPs about the impacts of uranium exploitation in their countries; it was clear to everyone that uranium was mined for use in nuclear power plants in industrialized countries – and this needed to stop, too.

On another note:

The Mkuju River project is located in UNESCO World Heritage Site Selous Game Reserve; the area should have been off-limits for exploration and mining activities.

The struggle against uranium mining was taken to another level, addressing the UNESCO World Heritage Committee (WHC) to stop exploration and exploitation of uranium in a World Heritage Site.

At the UNESCO's 2012 WHC annual meeting in Saint Petersburg, the Russian delegation managed to get – “in an exceptional and unique manner ... approve[d] the proposed boundary modification of the Selous Game Reserve” – by the Committee; the application had been made by the Russian WHC delegation; Russia voted in favor of the boundary change – regardless of the conflict of interest they were in. This procedure was highly questionable ¹⁷.

In spite strong opposition from IUCN, WWF

and other environmental NGOs, the road was open for Russia's state-owned company ROSATOM to mine uranium.

Environmental protection NGOs continued to protest, among them Rainforest Rescue who collected nearly 60,000 signatures against the boundary change and the mining ¹⁸.

In 2014, World Heritage Site Selous Game Reserve was listed as UNESCO World Heritage Sites in danger ¹⁹, also due to the fact that roads leading to the mine made access for poachers easier, and elephant population was decimated ²⁰. Selous remains in the in danger list to date.

The precarious situation was brought to the attention of the UNESCO WHC repeatedly, to little avail. UNESCO watchdog World Heritage Watch published repeatedly on the matter in its annual reports ²¹.

Since 2012, however, the mining projects, both in Manyoni and Bahi area as well as the Mkuju River Project did not go forward. The price of uranium had fallen as quickly as it had sky-rocketed in 2007.

In regard to the **projects in Bahi and Manyoni area, the IAEA stated that they had not received 'a social license'**; in other words, resistance on the ground was too strong to go ahead.

In 2015, the IAEA slashed Tanzania's legislation in regard to radiation protection due to a lack of an adequate “legal and regulatory framework” ²².

CESOPE and others met repeatedly with TAEC, pushing for (better) legislation re: uranium mining and radiation protection; in case it

¹⁷ <https://tanzlii.org/akn/tz/doc/journal/2016-07-01/the-tanzania-lawyer-vol-1-2016-number-2/eng@2016-07-01/source,p.49,50>

¹⁸ www.rainforest-rescue.org/petitions/883/unesco-sacrifices-wildlife-preserve-for-uranium-mine

¹⁹ <http://whc.unesco.org/en/decisions/6081/>

²⁰ WHC decision based on a 2008 Reactive Monitoring Mission Report: <https://unesdoc.unesco.org/ark:/48223/pf0000389376>

²¹ Tanzania: Selous Game Reserve at Risk Through Unsustainable Developments, by Günter Wippel, in World Heritage Watch Report, page 39-42, <http://world-heritage-watch.de/wp-content/uploads/2018/06/2017-WHW-Report-Krakov.pdf>

²² www.iaea.org/newscenter/pressreleases/iaea-mission-says-tanzania-faces-challenges-radiation-safety-regulation

should not be possible to prevent uranium exploitation, it should at least be regulated strictly.

In 2016, UraniumOne announced the plan to change from open-pit mining to (cheaper) ISL, or a “world first” combination of both ²³. The current license (of 2012) does not license ISL mining, though.

A year later, 2017, the Mkuju River Project was officially ‘suspended’ by ROSATOM it, referring to the low price of uranium ²⁴. A pilot project for in-situ-leaching (ISL) was performed nevertheless.

In 2018/19, a review of the Mkuju River Project ESIA was done by an expert from the US to get an independent review of the ESIA; he was invited to Tanzania and spoke about the relevance of a proper ESIA. Although the ESIA is – according to Tanzanian law – a public document, it was extremely difficult to get access to it. It lacks, among other things, appropriate public consultation.

In 2022, ROSATOM said they “plan to start commercial mining of uranium in Tanzania in several years.” ²⁵ In 2024, a Strategic Environmental Assessment was announced by the government of Tanzania. The results remain to be seen.

Conclusion

Local NGOs were strong in their opposition against uranium exploitation; they were supported by lawyers, a human rights NGO in Tanzania and by NGOs from outside Tanzania providing information as well as support for their stance; meeting with other Africans impacted by uranium mining was of key importance.

MALI

As reported in NM921 (page 6), a uranium deposit in the far southwest corner of Mali, close to the border to Guinea, a uranium-silver-copper deposit had been discovered by Cogema in the late 1970s. Due to its remote location, other, easier accessible deposits (in Niger) at hand were preferred, and with a low price of uranium at the time, the deposit had not been developed.

By 2008, Canadian company Rockgate Capital acquired the project, and started drilling despite difficult access to the area; the company also built a small air strip.

Local communities, the 21 villages of Falea, were not welcoming these activities. The area has fertile land, water, forests and agriculture – unlike more desert-like areas of Mali; local people live a traditional life style, supporting themselves.

The procedure of the exploration teams was not helping either: a local spring, important to the villagers, fell dry following the drilling of exploration boreholes; in another place, the run-off from a drilling rig polluted the area, noise from the rigs operating 24/7 right besides houses was bothering people ²⁶.

Falea inhabitants were well connected with personalities in the capital, Bamako, as well as with European NGOs via an agricultural cooperation. Soon, a plan was hammered out to organize a major conference in Mali’s capital Bamako, inviting international experts as well as Africans from neighbouring Niger who knew already about uranium mining and its consequences. ARACF, the Association of the people of the 21 villages, opposed uranium development.

²³ www.thecitizen.co.tz/News/Business/Uranium-One-to-use-latest-technology-at-Mkuju-River/1840414-3423476-ms8vmi/index.html

²⁴ www.world-nuclear-news.org/UF-Tanzania-uranium-project-suspended-1007178.html

²⁵ <https://interfax.com/newsroom/top-stories/85232/>

²⁶ Reports of participants in the field trip to Falea, including photo documents; not available on internet.

Friends of Falea in Europe created an impressive 23-panel exhibition ^{27 28} (in French and English) on the situation, explaining the local culture, the impacts of uranium and the resilient NO of the local community to the mining project. The exhibition was shown in a variety of locations in Germany, Switzerland and France, including the European Parliament in Strasbourg, raising awareness for the issue.

Early in March 2012, Members of the European Parliament Eva Joly and Michelle Rivasi travelled to Mali, visited the community of Falea and the villagers organization ARACF. The two MEPs later also talked to several Mali ministers, highlighting the adverse consequences of uranium mining ²⁹ and asking to re-consider uranium exploitation.

Later in March 2012, the organization of the local communities of Falea, ARACF, organized in cooperation with IPPNW /PSR Switzerland and uranium-network.org, Germany, a three day conference **Uranium, Sante et Environnement** (Uranium, Health and Environment) in Mali's capital Bamako, including a 10 person delegation from the villages of Falea and Kenieba (500km from Falea to Bamako) and a 6 person delegation from Niger (who travelled 2500km by 4x4 from Arlit in Niger) as first hand witnesses of the impact of uranium mining.

International guests from the US, Canada, Germany, as well as NGO persons from other African countries (Niger, Gabon, South Africa ,Tanzania, Chad, Zambia, Cameroon) were invited to speak out about their experiences with uranium exploration and mining happening all over Africa at the time. Local organizers had procured interpreters also for Bambara, the main language in Mali in

order to enable local people from Falea region to understand the presentations.

The conference ended with a clear appeal to the authorities, supported by the local council of Kenieba, to not allow uranium exploration to go ahead in Falea.

After the conference, a 10 person group participated in a field trip to Falea, witnessing the impacts of the exploration drillings first hand.

With the resistance on one hand and a falling price of uranium on the other hand, the project did not go forward; Rockgate then sold it to Denison, some more exploration drilling was done. Finally, Denison sold the project again to GoviEx. GoviEx tried to pass it on to another company – without success. As of 2024, the project is on hold, and with the present unrest in Mali it is unlikely to get restarted soon.

The organizers had also invited filmmaker Sri Prakash from India – who had produced a film on the impacts of uranium mining in India (“Buddha weeps in Jadugoda”) participated in the conference and produced a film “**Gere dan**” (see:

https://www.aidjhu.org/rsvp_for_gere_dan)

Conclusion

Civil society organizations throughout Africa used many methods to resist uranium exploitation following the 2007 uranium price boom. International cooperation with African NGOs and individual as well as with experts from other parts of the world played an important role, too.

The lead was always with African NGOs. Scientists from Europe or the US helped at the request of African NGOs. African NGOs had also formed an African Uranium Alliance which had difficulty getting funding; it remains active as a transnational informal network.

²⁷ <http://www.falea.info/wp-content/uploads/2014/08/Falea-expo-english-web.pdf>

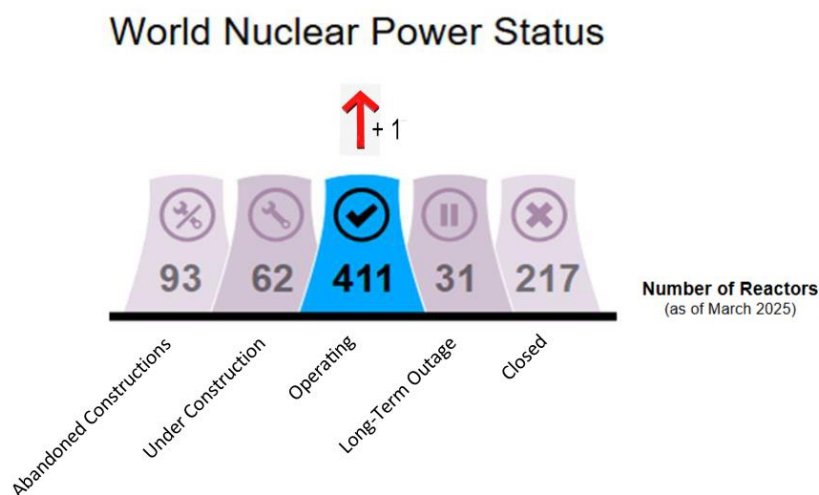
²⁸ <https://www.flickr.com/photos/linkeimep/9197859423/in/photostream/>

²⁹ https://www.falea.info/?page_id=210

It's also worth mentioning that European NGOs, mainly in Germany and France, repeatedly invited NGO persons from affected African countries to Europe for tours informing a general public as well as for meetings with MPs in Germany, France and

the EP, pointing out the detrimental impact of the use of nuclear power in industrialized countries on countries in the Global South from which the fuel for nuclear power, uranium, is sourced.

NUCLEAR NEWS



Compared to the last edition of the Nuclear Monitor (924);

- ✓ Construction of Leningrad 2-4 has started in Russia.
- ✓ The status of 1 nuclear power reactor (Rajasthan-7) in India has been changed from under construction to operating.

Emergency shutdown at Swiss nuclear power plant

Jan van Evert

One of the reactors of the Swiss nuclear power plant in Beznau was shut down automatically on Sunday March 23rd . A failed connection to the 220 kilovolt power grid caused the shutdown, according to a statement from operator Axpo early Monday morning. The shutdown caused non-radioactive water vapour to escape through the roof of the turbine building.

Beznau lies seven kilometers from the German border. Affected was the reactor in unit 2.

Beznau 1 and Beznau 2 went into operation in 1969 and 1971 and are among the oldest still

operational nuclear power plants in the world. Axpo has announced the shutdown of Beznau 2 in 2032 and Beznau 1 in 2033.

Switzerland has two other operational nuclear power plants. In 2017 Swiss citizens approved in a referendum the gradual phase-out of nuclear power in their country. This was the result of a long process initiated following the 2011 nuclear accident in Fukushima, Japan. However, the Swiss government says it's open to ending a ban on the construction of new nuclear power plants in order to keep all options open for the country's future energy mix.