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HALLGARTEN + COMPANY

Country/Sector Coverage

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Nuclear Energy & Uranium in Argentina

Milei as a Catalyst for Change

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- **±** While Milei has not spoken much on the theme of nuclear energy, all indications would suggest he is in tune with the Zeitgeist that favours this form of power generation
- **±** Amongst the new government's first announcements were a swathe of privatisations, including some covering State-held electricity generation & industrial assets in the nuclear space
- $\pm~$ The CNEA estimates that required supply for the remaining lives of just the traditional reactors in Argentina is 16.5mn lbs of U_3O_8
- **±** Javier Milei and Eduardo Eurenekian have a protégé/mentor relationship that goes back decades, Eurnekian is now moving into the uranium space
- **±** Eurnekian's Corporacion America has taken a strategic position in Blue Sky Uranium which would indicate a changing of the guard at this long-time Grosso Group entity
- Many of the privatization candidates were jettisoned during the passing of the keystone *Ley de Bases*, leaving one nuclear asset on the auction block, which may not be a bad thing
- Uranium's spot price has been sloppy over the last twelve months which has dampened some of the enthusiasm around uranium juniors
- The government's freeze on infrastructure projects (mainly due to them being sources of corruption/waste) has hampered the advancement of the fourth and fifth nuclear plants

Milei and the "P" Word

While Milei boosters would have us believe that all he touches turns to gold, that has not been the case if one looks at his omnibus legislative package which had a decidedly difficult birth and did not emerge from the Argentine Congress unscathed on its journey to law. This was particularly the case with the proposed privatization components.

In this note we shall review the current nuclear industry as well as highlighting the new kid on the block, a Canadian developer, that may lead Argentina back only the road to being fully vertically integrated.

The Travails of the Grand Plan

The original draft of the *Ley de Bases*, which came to grief in the Chamber of Deputies, considered 41 state-owned companies to be "subject to privatization." This gave the Executive Branch the possibility

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of proceeding with the total or partial privatization of the companies, the concession of the services they provided, or their liquidation and closure.

Then in the face of the reality that the legislative force of La Libertad Avanza (Milei's party) was minuscule there was a second version presented for legislative approval with the number of companies reduced to 11 (with YPF and Banco Nación, among others, being removed from the list). This left six declared subject to privatization, with another five possibly being privatized or concessioned.

This second version was approved by the Chamber of Deputies, but later, in the debate in the Senate, Aerolíneas Argentinas, Correo Argentino (the Post Office) and Radio y Televisión Argentina (the State media outlet) were removed from the list of companies to be privatized.

Thus, the law published in the Official Gazette finally declared four public companies subject to privatization, while another four being declared "subject to privatization or concession". This is a far cry for the original 41 and not exactly something to crow about.

The whittled down list consisted of:

- Enarsa (the wholesale electricity distributor)
- Nucleoeléctrica Argentina (the nuclear electricity generator)
- Yacimientos Carboniferos de Río Turbio (the state-owned coal mine)
- Intercargo (the ramps service at airports)

While those subject to privatisation or concession were:

- AySA
- Trenes Argentinos
- Belgrano Cargas
- Corredores Viales

For our purposes the interesting "survivor" on the list was Nucleoeléctrica Argentina.

The Process

On the 5th of August 2024, the government published the regulations of Title II of the *Ley de Bases*, which among other points provides the procedures for the privatization of public companies.

The regulations provide that the agency in whose jurisdiction the company subject to privatization is located must submit a report with a concrete proposal of the most appropriate method to make the procedure effective.

The report must state whether the privatization is total or partial; the proposed procedure for privatization; the deadlines for the call for interested parties and their publicity. The process of appraisal of the companies to be privatized and the inventory of their assets were also regulated.

Nucleoeléctrica Argentina S.A. – The Keystone

Nucleoeléctrica Argentina S.A. (sometimes abbreviated to NA-SA) is the exclusive generator of nuclear power in Argentina, with three plants under its management. It is owned by the Ministry of the Economy (79%), the CNEA (20%) and ENARSA (1%).

Its assets are the power generators (expanded upon in Appendix I):

- Atucha I (1974): produces 362 MW
- Atucha II (2006): produces 745 MW
- Embalse (1984): produces 656 MW

The privatization of this entity raises a number of questions principally whether a foreign acquirer would be acceptable, what percentage they might be allowed to have and whether the entity would seek a local listing like the highly successful privatisations of the 1990s. Additionally, the still extant price controls in the energy sector would imply either liberalization of prices or subsidies.

German Lavalle – the New Guiding Light at the CNEA

In May of last year, the relatively new Milei administration appointed a new President of the CNEA. The incoming executive is a mixture of high-level nuclear scientist and enterpreneur, in a move fitting the *Zeitgiest*. German Lavalle is a doctor of Nuclear Engineering and graduated from the Balseiro Institute. Between 1996 and 2000 he was manager of International Relations and Technology Transfer at CNEA. Subsequently, he was rector of the Argentine University of Business (UADE) and of the very well-regarded Technological Institute of Buenos Aires (ITBA). Interestingly, he straddles the divide between the nuclear industry and the AI theme beloved of Milei. In 2007 he founded Candoit, a company dedicated to artificial intelligence, software development and engineering consulting.

The Nuclear Plan (Plan Nuclear Argentino)

In late December of 2024, the president, Javier Milei presented the *Plan Nuclear Argentino*, an initiative with a stated objective to "position the country at the global energy forefront and attract investments". At the presentation, he was accompanied by the head of the Consejo de Asesores (Council of Advisors), Demian Reidel, and the director general of the International Atomic Energy Agency (IAEA), Rafael Grossi.

Seemingly taking his direction of travel from Elon Musk, he stated, "We have a people privileged in human capital, with inhospitable lands at low temperatures throughout our Patagonia, which is a comparative advantage for setting up Artificial Intelligence servers". In a nod (we guess) to the uranium potential he claimed, "we have abundant energy reserves that are necessary to supply any development".

As is his style, he could not resist a sideswipe at the "countless smear campaigns by some international

foundations."

He appointed Demian Reidel as the person responsible for implementation of the Nuclear Plan. The head of the *Consejo de Asesores* expounded that it is an "ambitious plan that marks the rebirth of nuclear energy as the cornerstone of the Argentine and global energy future, in a global context in which Artificial Intelligence and technological advances demand more and more energy."

Reidel assured that our country is prepared to lead this energy evolution and that "it will do so with 100% Argentine technology, developed by our nuclear engineers, who are recognized among the best in the world." And he asserted: "This project is not only a technological advance, it is matter of national pride."

The Plan has the support of the International Atomic Energy Agency (IAEA), which represents somewhat of a seal of approval.

Interestingly, to give impetus to the plan, the national government will create the *Consejo Nuclear Argentino* (Argentine Nuclear Council), which will be chaired by Demian Reidel and made up of the Head of the Cabinet, Guillermo Francos, the Minister of Defense, Luis Petri and the president of the Comisión Nacional de Energía Atómica (CNEA) National Atomic Energy Commission, Germán Lavalle.

To kickstart the project, a small modular reactor (SMR) will be built on the premises of the Atucha Nuclear Power Plant. This initiative will also facilitate access to energy throughout the country and will considerably reduce power outages.

And then we have what we might call the "money" phrase as far as miners are concerned, "*En una segunda etapa, se desarrollarán reservas de uranio, que servirán para cubrir la demanda doméstica y posicionará al país como exportador de elementos combustibles de alto valor agregado*" which is to say "In a second stage, uranium reserves will be developed, which will serve to cover domestic demand and position the country as an exporter of fuel elements with high added value".

In the government's official release it stressed, beyond the usual feel-good statements that the Nuclear Plan has the objective of turning Argentina into a hub for Artificial Intelligence.

CNEA in the Spotlight

The CNEA spent much of 2024 in a financial fog. The publication, EconoJournal, reported that the Ministry of Energy had extended the 2023 budget for CNEA to meet the expenses of the institution approximately until May or June 2024.

Then in a "Decisión Administrativa 1018/2024" dated the 28th of November of 2024, it was resolved that "that the budget of the NATIONAL ATOMIC ENERGY COMMISSION, a decentralized organization within the orbit of the HEAD OF THE CABINET OF MINISTERS, is increased to meet operating expenses".

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Over and above this, the CNEA is seeking the necessary budget to press ahead with its three major projects – the prototype CAREM small modular reactor (SMR), the multipurpose RA-10 research reactor, and the Proton Therapy Centre.

CAREM

CAREM (*Central ARgentina de Elementos Modulares*) is Argentina's first domestically-designed and developed 32 MWe nuclear power unit, which has been under development by CNEA with INVAP and others, since 1984. It is a modular simplified pressurised water reactor with integral steam generators, designed to be used for electricity generation as a research reactor or for water desalination. As mentioned earlier, a CAREM plant is under consideration for desalination in Saudi Arabia.

As well as relying on passive safety systems, CAREM's entire primary coolant system is contained within a single self-pressurised vessel and uses free convection to circulate the coolant. This eliminates the need for devices such as pumps within the primary circuit and decreases the extent and complexity of the piping system required. It also reduces the possibility of accidents involving a loss of coolant.

CAREM is fuelled by standard 3.4% enriched PWR fuel, with burnable poison (a neutron absorber that is incorporated in the fuel or fuel cladding of a nuclear reactor and gradually burns), and it is refuelled annually.



Above can be seen an aerial view of the CAREM SMR plant, as it was in November 2022.

Development started in 1980 by CNEA and technology company INVAP and it was first announced in 1984. Progress slowed in the early 2000s, but a 2006 government decree made the Carem25 program

a national priority. A second executive order in 2008 made the project directly responsible to the President of Argentina. The government licensed it as a prototype in 2009.

Before work was suspended in November of 2019, it was in line to be the world's first operating SMR.

However, the project faced a series of delays due to administrative and financial difficulties. Construction resumed in mid-2021 and the project will now go through a Critical Design Review, according to the Milei's Chief of Staff, Nicolás Posse, in his first management report submitted to the Senate. It is estimated that further investment US\$260mn would be needed to complete it.

In an interview last year with the journal, Nuclear Engineering International, Lavalle noted that to date most of the focus has been on the civil works. "The review is about engineering systems, basically the things that go inside the reactor, which are not yet manufactured, there are some components that are being done. The review may say, look, this modification should be made, these measurements made, or these tests done, that's what the experts are expected to conclude."

On the question of opening the project to the participation of a private partner, he noted: "I have not had the opportunity to discuss with any investor who wants to, nor do we have a defined policy on this". He said that if there is a private partner who wants to join this project, they would be welcome.

The RA-10 Reactor

The RA-10 is a multi-purpose research reactor located at the Ezeiza Atomic Centre (CAE – *El Centro Atómico Ezeiza*) in Buenos Aires province. It is a 30 MWt open-pool research reactor that will be used for the production of medical radio-isotopes and key research and training. It is based on the OPAL radioisotope production reactor that private technology company INVAP (from *INVestigación APlicada* – applied research) supplied to Australia in 2007. It will replace the 10 MWt RA-3 reactor on the same site, which began operations in 1967.

The project was approved by the government and was officially started by CNEA in June 2010. Argentina's Nuclear Regulatory Authority granted a construction license in 2014 and civil works began in 2016. INVAP is the main contractor. The assembly of the RA-10 pool – which will house the core of the reactor – was completed in August 2018.

In mid-2024, the RA-10 was said to be about 80% completed, according to its project manager Herman Blaumann. He claimed that the aim was to fill the reactor pool in December, after which preoperational tests would begin in July 2025 for operation in 2026.

The RA-10 will have a complex of associated facilities such as the Argentine Neutron Beam Laboratory (LAHN), the Laboratory for the Study of Irradiated Materials (LEMI) and the Radioisotope Production Plant (PPRF). The government says the RA-10 will require an estimated investment of US\$60mn to complete.

In his interview with Nuclear Engineering International, German Lavalle said that RA-10 was a priority.

"It is a reactor whose production of radio isotopes generates enormous interest in the world. The goal is to finish that project as soon as possible. I get calls from all over the world from those who want to buy the reactor products, so there is a lot of interest. It is estimated that it will take a year and a half to start production and we will try to meet that deadline."

The Proton Therapy Centre

As mentioned in our previous Nuclear Review, Argentina is one of the leaders at a global level in isotope development. The Proton Therapy Centre will be the first in Latin America that would use the technology to treat tumours more precisely than with the other methods. "It is more precise, it makes it possible to attack the tumour, without affecting the good cells that surround it. That's very good, particularly ... for the children, where all the organs are smaller, and where that precision adds even more value. With some of the auxiliary equipment that we are building in the centre, we hope that in the coming months we will be able to provide services to the public."

The Proton Therapy Centre needed ~US\$7mn to start supplying some nuclear medicine services in 2024 with an expectation of full operation in 2025.

On the Road Back to Vertical Integration

Clearly Argentina is a natural market with an existing nuclear power plant fleet that is currently under expansion and yet no indigenous mine production of Uranium. Since we wrote our last Nuclear Review on the country in August of 2023, the uranium price has shucked off the Fukushima Blues and while not frenzied it is certainly surrounded by more positive vibes than it has been in over a decade. To this must be added the political sea change in Argentina in the politics, the economics and the perceptions about Argentina as a mining jurisdiction.

Indeed, somehow the report went viral and we were invited in to the CNEA to discuss ways in which the mining aspect of the business could be supported and supportive of the industrial/generating aspect.

It is important to note that Argentina's nuclear program currently sources its uranium supplies from Kazakhstan and Canada.

At our meeting it was made clear that the quality of the Kazakhi material left much to be desired and that the extremely high price point on the contracts meant that the imported produced was doubly undesirable. It seemed clear to us that a local producer at \$100-\$130 per lb would be not only competitive but desirable.

Uranium Supply

The sourcing from foreign supplier at unattractive prices is a curious situation considering that Argentina potentially has its own supplies in the shuttered CNEA mines and the prospects of

potential uranium miners (principally Canadian) in Argentina.

Argentine uranium resources listed in the International Atomic Energy Agencies' Red Book total only about 15,000 tonnes of U_3O_8 , though the CNEA estimates that there are some 55,000 tonnes as "exploration targets" in several different geological environments. Uranium exploration and limited mining was undertaken from the mid-1950s until the last mine closed in 1997 for economic reasons. Cumulative national production until then from open pit and heap leaching at seven mines was 2,509 tonnes of Uranium.

We discuss prospective and actual players in the Argentine uranium space in Appendix II.

Risks

Argentine governments of all persuasions are pro-nuclear. Both sides of the political fence are also projecting themselves as pro-mining, or have a track record of being so. Despite those positives we would note the following risks:

- Uranium prices spent most of the last decade mired in despondency so there is a precedent of extreme lassitude in pricing
- Uranium production, even when conducted by the government, has attracted some opposition in Argentina in the past
- Financing uranium developers remains challenging
- Some provincial governments are against open-pit mining and maybe against mining of radio- active materials as well.

Much depends on the level of national sanction given to any given project by the national government (and the mood of the CNEA). Mining by state interests in Argentina has been traditionally very poorly managed and massively loss-making. It also frequently involved pursuing low-grade deposits (e.g. coal and iron) for nationalist considerations. Thus, it is no surprise that despite the resurgent nuclear power program the government has done little to reactivate the mines that CNEA has either exploited in the past or mooted as attractive for future exploitation.

This means that the government, if it truly wants a vertically integrated industry, shall have to give its blessing to one of more of the foreign operators and that blessing (in light of the various carrots and sticks at its disposal) should corral provincial governments into cooperation. This would mitigate then most of the potential internal opposition.

Uranium spot pricing, and thus financing prospects, are joined at the hip. If the former goes up, then the latter is enhanced with the trend of recent years being more positive than not.

Conclusion

As far as nuclear energy is concerned, Argentina continues to be the Latin American leader with three operational plants and a fourth on the way (and a fifth in contention). Currently the country is by far

the leader in technology, not only locally, but a contender at the international scale exporting technology in all directions - as well as products such as heavy water and medical isotopes. Anyone who underestimates the country's commitment to nuclear is deceiving only themselves as even the Chinese have found out when it comes to the topic of technology transfer.

Argentina has three reactors currently generating over 7% of the country's electricity, a fourth under construction and a history of producing, converting and enriching its own uranium.

The goal of our previous Argentine Nuclear Review was not to point out winners and losers, but rather to illuminate to investors that in Argentina there is a real prospect of a self-supporting uranium industry evolving. There would appear to be a compelling logic for a coherent mine-to-generator vertical integration in the Argentine nuclear industry with the only thing lacking is a project advanced enough to capture the government (and CNEA's) imagination to make this happen.

The privatization strategy of the Milei administration has yet to make waves in the Argentine nuclear pond. Indeed, since the Ley de Bases was passed, the issue of almost all the privatisations (excepting Aerolineas Argentinas) have dropped off the radar, and seemingly also off the priority list. One suspects that Mieli and his team are awaiting the mid-term elections in the Congress to cement his durability and thus provide a further boost for the economy and thus an improvement in sale terms for the various assets on the block. It is not really a case that the government (perversely for Argentina) "needs" the money.

The Argentine nuclear "complex" has always been in State ownership and arguably is the most successful thing that state intervention has ever achieved in the country. Even the opponents of Peronism would credit Peron with this. Thus, the nuclear industry is somewhat of a sacred cow, that does not deserve to be kicked. Clearly Milei, with his eye on AI possibilities, sees the nuclear power potential to fuel this "boom" and might have a sneaking suspicion that private operators might not do his will if the assets passed to their hands. As always in Argentina, we shall see.

Appendix I: The Plants

The Power Program

Currently, three nuclear reactors generate a meaningful percentage of the country's electricity.

Atucha 1

The backstory to these is that in 1964, the focus shifted to nuclear power, and following a feasibility study for a 300-500 MW unit for the Buenos Aires region, bids were invited. With the country's policy firmly based on using heavy water reactors fuelled by natural uranium, Canadian and German offers for heavy water designs were most attractive, and the offer from Kraftwerk Union was accepted. The 100% financing that came with the deal was a major attraction for the Argentine authorities.

That plant, known as Atucha 1, was built at Lima, 115 km northwest of Buenos Aires, and entered commercial operation in 1974. It has a pressure vessel, unlike any other extant heavy water reactor, and it now uses slightly enriched (0.85%) uranium fuel which has doubled the burn-up and consequently reduced operating costs by 40%.

Embalse

In 1967, a second feasibility study was undertaken for a larger plant at Embalse in the Córdoba region, 500 km inland. In this case a CANDU-6 reactor from Atomic Energy of Canada Ltd (AECL) was selected, partly due to the accompanying technology transfer agreement, and was constructed with the Italian company, Italimpianti. The Embalse plant entered commercial operation in 1984, running on natural uranium fuel. In 2010, an agreement was signed to refurbish the plant to extend its operating life by 25 years and increase its power output by around 7%. It was for a long while running at about 80% capacity to limit neutron damage to pressure tubes.

The life of the Embalse CANDU-6 type plant was extended in partnership with Candu Energy Inc. This latter firm is a subsidiary of SNC-Lavalin Group which took over the reactor division of Atomic Energy of Canada Ltd in 2011.

In late 2016, the plant received the last two of four steam generators, fundamental elements for the life extension of the plant. The plant was reconditioned to deliver power for another 30 years through the replacement of the four steam generators. The plant was restarted in early January 2019, with power upgraded to a gross capacity of 683 MW and 635 MW net.

Atucha 2

In 1979, a third plant – Atucha 2 – was ordered following a government decision to have four more units coming into operation in the period 1987-97. It was a Siemens design, a larger version of unit 1, and construction started in 1981 by a joint venture of CNEA and Siemens-KWU. However, work proceeded slowly due to lack of funds and was suspended in 1994 when the plant was 81% complete.

Interestingly, this coincided with the years in which the Menem administration was most vigorously privatizing electricity assets. To our memory we cannot remember the nuclear plants ever being proposed for sale. Certainly, mothballing the new nuclear plant would have been good news for the newly minted owners of the thermal generators that the government had just sold.

In 1994, Nucleoeléctrica Argentina SA (NA-SA) was set up to take over the nuclear power plants from CNEA and oversee construction of Atucha 2.

In 2003, plans for completing the 692 MW Atucha 2 reactor (745 MW gross) were presented to the government. The Siemens design of the Atucha PHWR units is unique to Argentina, and NASA was seeking expertise from Germany, Spain and Brazil to complete the unit. In 2003, plans for completing the 692 MW Atucha 2 reactor (745 MW gross) were presented to the government. Completing Atucha 2 by 2010 was expected to cost US\$ 600 million, including \$400 million for heavy water.

The Neuquen heavy water plant completed production of 600 tonnes of heavy water in June 2012, and this was expected to be loaded around April 2013, after loading the 9.76 metre-long fuel assemblies, which commenced in December 2012.

Effective completion of Atucha 2 construction was in September 2011. On June 3, 2014 reached its first criticality, and on June 27, 2014 began to produce energy. On 19 February 2015, the plant reached 100% power production for the first time, increasing the percentage of nuclear power in Argentina's energy mix from 7% to 10%.

Further Plants – Expansion Interrupted

As far back as August 2006, the government announced a US\$3.5bn strategic plan for the country's nuclear power sector. This involved completing Atucha 2 and extending the operating lifetimes of Atucha 1 and Embalse.

A feasibility study on a fourth reactor (Unit IV aka Atucha 3) was undertaken, originally planned to start construction after 2010 with a projected US\$2bn capex. In July 2007, NASA signed an agreement with AECL to establish contract and project terms for construction of a 740 MWe gross Enhanced CANDU 6 reactor, as well as completing Atucha 2.

However, in January 2019 reports suggested that the fourth unit would now be a 1150 MWe Hualong One unit (which had been planned as the fifth unit). China is to finance 85% of the reactor's construction. This was confirmed in 2021, and in February 2022 an EPC contract was signed by NA-SA and CNNC. In a further sign that Argentina was "doing a China" on China, in September 2022 it was reported that progress was being hampered by Argentina's desire to fabricate the unit's fuel assemblies domestically, see anon.

The Fifth Reactor

In 2007, a further 740 MWe Enhanced CANDU 6 unit was proposed.

In a July 2014 agreement, signed by the Argentine and Chinese presidents, covered Chinese cooperation in pressurised water reactor (PWR) construction in Argentina, and CNNC claimed that NA-SA had issued a pre-qualification certificate for the ACP1000 design.

Then in February 2015 a cooperation agreement was signed, by the federal planning minister and the president of China's National Energy Administration and vice president of CNNC, to "participate in the construction of a new nuclear plant featuring a light water reactor and enriched uranium in the Republic of Argentina, adopting ACP1000 technology."

The ACP1000 technology will become Hualong One, in the light of China's policies, and China will supply the fuel. This is curious as China is a net uranium importer itself and Argentina potentially having its own uranium supplies restored.

The agreement provides for NA-SA to be the architect-engineer of the project. It calls for the parties to strive for the maximum local content in the new unit in terms of materials and services. This will be achieved through the transfer of technology to Argentine companies, including the manufacturing of components and fuel fabrication. Between 50% and 70% of components and 100% of the civil works for the reactors will be sourced in Argentina, limiting foreign inputs to components and engineering services not available there. The agreement also guarantees the supply of enriched uranium and fuel assemblies throughout the life of the plant.

The framework agreement for the project was signed by CNNC and NA-SA in November 2015. A commercial contract and financing agreement were envisaged by the end of 2016. The president suggested that the reactor cost was likely to be US\$7bn. A further contract between CNNC and NA-SA was signed for construction of the Hualong One unit in May 2017.

Reports in January 2019 suggested that plans for this Unit V project might be cancelled, but in August 2021 NA-SA was reported to be considering it as a Canadian project for a CANDU reactor with the site undecided. This might have been an attempt to ginger up the Chinese by adding some competitive tension.

Siting as a Political Tool

Possible sites mentioned, but unconfirmed, for further plants are in Monte Lindo, La Emilia, Riacho Tohué, Riacho Pilagá – all on the Paraguay River in Formosa province in the north. Colonia Bouvier in Formosa has also been mentioned, but in connection with a full-sized (100-200 MWe) CAREM reactor.

In 2017, Río Negro province came to the fore as a possible location but was then withdrawn. How much more likely this province might have been to being in contention, if Blue Sky had actually advanced to development of its uranium mining project, remains moot.

The Infrastructure "Ban"

One of the first measures of the Milei administration was to freeze (or cancel, where possible) a swathe of infrastructure projects that were seen as bleeding the State dry, while not advancing or having been crafted at highly disadvantageous prices (or both). This had effects for both small and large projects in the Federal government purview, nuclear included.

The Plan Nuclear seems to have cracked open the vaults and directed some cash towards SMR causes.

Conclusion

Over recent decades, the fourth and fifth reactors have alternately been seen as vital or quixotic White Elephants. The revival of nuclear energy as a respectable, indeed desirable, mode of generation at the global level puts Argentina in a strong position. However, Milei is stingy with infrastructure funds and justifiably sees uncontrolled spending on further mega-plants as undesirable and indeed somewhat retro.

If SMR's are the future and Argentina can source them from itself then that is where the money should go. A flock of geographically dispersed SMRs, particularly in the energy deprived north of the country, makes mighty sense and will provide potentially a showcase for Argentine nuclear technology at a time when SMRs are almost the word on everyone's lips.

Appendix II: The Players

Players & Punters

The reawakening of investor interest in Uranium coincided with the reemergence of Argentina as an investment option under Milei, with the almost inevitable result that the long-becalmed U-scene in Patagonia started to see corporate actions. Then the spot-price of Uranium retreated in 2024 leaving some of the junior "recovery" stories stranded like whales on the beach.

In our Uranium/Nuclear Review of the country in August of 2023 we covered some of the transactions undertaken by Consolidated Uranium (TSXV: CUR | OTCQX: CURUF), but scarcely was the ink dry on our note than Consolidated merged with IsoEnergy (TSXV: ISO; OTCQX:ISENF), and a spinco was mooted to house the exploration and past-producing elements of the merged companies' prior portfolios. That merger was finalized in December of 2023.

As it happened, the entity created from the ashes of the IsoEnergy merger was Jaguar Uranium. Consolidated, it may be recalled, had picked up the past exploration portfolio of the TSX-v listed U3O8 which had wandered off to Colombia and a name change at just the wrong moment. This had left Blue Sky (TSX-v: BSK), soldiering on as an eternal explorer despite having several PEAs under its belt on its U/V assets in Patagonia. Then along came Piche Resources, with a listing on the ASX bolstered by some veteran uranium sector executives. This made the Argentine Uranium Stakes into a three-horse race.

Blue Sky Uranium (TSX-V: BSK, FSE: MAL2; OTC: BKUCF) - Reading the Runes

This junior Uranium company has managed to become the Grand Old Dame of the Argentine uranium space mainly via a process of attrition of other players. Its Ivana Uranium-Vanadium Deposit project is in Rio Negro.

Blue Sky has long been a member of the so-called Grosso group of companies in Vancouver, which have a focus on Latin America. We have written on various Grosso group companies over the decades, including coverage of Blue Sky, specifically in stand alone notes or our nuclear reviews.

In early June of 2024, Blue Sky announced that it had entered into a binding term sheet (with Corredor Americano S.A. (COAM), an Argentine subsidiary of the Corporación América Group, to complete an option agreement in respect to the Ivana deposit.

The Corporación América Group (www.corporacionamerica.com) is a conglomerate with diversified

investments across Latin America and Europe, with significant stakes in the energy (www.cgc.energy), airport (www.caap.aero), agribusiness, services, infrastructure, transportation and technology sectors.

The main aspects of the transaction were:

- COAM can earn up to a 50% indirect interest in the Property by spending up to US\$35M and advancing Ivana through to completion of a feasibility study, and to drill key exploration targets located in adjacent areas of the Property.
- Following a positive feasibility study, COAM can earn an additional 1% upon its decision to fund the capital cost of the Project and further 29% interest by funding 100% of the estimated capital costs to achieve commercial production.



The Milei – Eurnekian Nexus

The denizens of the mining markets seem to have misunderstood (or, more likely, totally overlooked) the relevance of Eurnekian landing at Blue Sky. For the uninformed the close relationship between Milei and the multifacted empresario deserves to be brought into the equation. Eurnekian had shown no interest in mining until suddenly his protégé landed in the Casa Rosada.

In a September 2023 report in the run up to the final round of the election, the prominent newspaper, La Nacion started its piece with "*Los caminos de Javier Milei conducen a Eduardo Eurnekian*" meaning essentially that the roads of Milei lead to Eurnekian. And so, they should in light of the decades long mentorship of one by the other. Milei only resigned from Corporacion America on the 9th of December 2021, on the eve of Milei being sworn in as a deputy.

Milei seemed to dwell in the court of Eurnekian as sometimes tolerated, sometimes not, economic court jester. The same article stated from witnesses that Milei often became histrionic and when "el Armenio" tried of him, would order him out of his office.

In the run-up to the election, it was viewed in high places that if Milei won then a posse (pardon the pun of ex-Eurnekian executives would land in the cabinet. Those named were:

- Guillermo Francos who became firstly the Minister of the Interior and is now the Chief of Cabinet
- Nicolas Posse a former Aeropuertos 2000 executive who became Chief of Cabinet, only to resign in May 2024 and be replaced by Francos
- Mariano Cuneo Libarona who is the Minister of Justice & Public Instruction

So to say that Eurnekian interests were well represented is somewhat of an understatement.



Source: La Nacion

Firstly, we should note that Corporacion America owned 35 airports in Argentina, including the two

most important, Ezeiza and Aeroparque. Since 2011, it has also controlled the airport in Natal in Brazil.

In a presaging of what might happen in the nuclear space, Milei has dedicated himself to unwinding the Gordian knot of the state-owned airline, Aerolineas Argentinas, a bugbear of his former employer and indeed of most Argentines for its epic losses, featherbedding and inefficiency. Milei put it up for sale from the get-go, then it transitioned to the "too-hard" basket (in the face of legislative roadblocks) and, of late, has been subject to slow dismemberment via deregulation of the ramps/baggage services, return of planes to leasing companies, staff redundancy/retirement incentive programs and the introduction of an open-skies policy, which suits everybody, but undoubtedly does not disadvantage Eurnekian as the owner of the most important airports in the country.

How might this relate? When we first heard of the touchdown of Eurnekian at Blue Sky, a lightbulb came on. As one of the country's most successful "doers" he is clearly not on-boarding at the long static Blue Sky to indulge in more of the same. Eurnekian may, or may not, end up with part of the nuclear generating pie in Argentina via the privatization process engineered by his protégé. He does not need to get a slice. What he does need is some long term supply contracts and that would move Ivana into development.

From our own discussions with the nuclear authority, the highly unfavourable contracts with Kazakhstan (for a sub-par product) have made the CNEA well-disposed to seeing the revival of a domestic source(s) of supply. Contracts at highly attractive prices for both sides could be carved out in light of the sheer egregiousness of the current arrangements with Kazakhstan.

Eurnekian could very well become to king of nuclear in Argentina.

Lo Que Queda

In the wake of the COAM deal on Ivana, Blue Sky's promotional material now claims that its flagship is the Amarillo Grande Project was an in-house discovery of a new district that "has the potential to be both a leading domestic supplier of uranium to the growing Argentine market and a new international market supplier".

Piche Resources (ASX: PR2) – Hedging its Bets

Now upon the scene has appeared Piche Resources, with whom we have met several times in Buenos Aires over the last two years. This comes with auspicious antecedents as its guiding lights are from Peninsula Energy and Areva/Avocet/Lion One. The assets are in Chubut province and in Western Australia. The stock began what was a torturous path towards a listing on the ASX, but the process took so long that the first heat of the Uranium recovery had cooled and, worse, some of the selling restrictions on earlier investors had expired, making their stock free trading.

Thus, the trading pattern has been almost all downwards from the get-go.



Jaguar Uranium (NYSE: TBD) - Son of Consolidated

We were initially confused when IsoEnergy (TSX: ISO; OTCQX: ISENF) made its long-awaited disposal of its Argentine uranium assets. But did it dispose of them?

We had written about these assets in August of 2023 in the context of the purchase of the pastproducing Huemul uranium mine in the province of Mendoza by Consolidated Uranium. This asset was added to the Laguna Salada asset that Consolidated had acquired from the successor to the TSX-v listed U3O8, one of the long-suffering pioneers of Uranium exploration in Argentina, that we had written about a decade ago before uranium went into its post-Fukushima funk.

The Huemul purchase was swiftly followed by IsoEnergy merging with Consolidated to get its hands on the producing North American assets of Consolidated to bulk up its own producing portfolio. The Argentine "exploration" assets thus looked surplus to requirements. Therefore, it was no surprise when IsoEnergy eventually made an announcement that it had sold the assets to the unlisted Jaguar Uranium. The only surprise was how long the disposal had taken.

But closer examination reveals that IsoEnergy were not really disposing of the asset, but folding it into Jaguar, which was jointly owned with Greenshift (TSX-v: GCOM), a hitherto Colombia-focused developer, that happened to be the old U3O8. So, the whole matter had a certain circularity.

IsoEnergy was to receive in consideration, upon closing of the transaction:

- USD\$10mn of Class A common shares of Jaguar Uranium (i.e 2,000,000 Jaguar shares) at a deemed price of USD\$5.00 per share
- A 2% net smelter returns (NSR) royalty payable on all production from the Laguna Salada Project. Jaguar will have the right to buy back 1% of the royalty for a period of seven years at a price of USD\$2.5mn
- A 1% NSR royalty payable on all production from a portion of the Huemul Project
- An option to acquire a 1% NSR royalty payable on all production from the remainder of the Huemul project

Jaguar holds yet another uranium asset, La Rosada, in Chubut and, despite the past uncertainty over that province (and Piche's apparent torpor), it adds another arrow to the quiver should Chubut pivot to the internal mood change in Argentina.

As Argentina and uranium both seemed to come in from the cold, Jaguar Uranium potentially appeals to the Doppel-Zeitgeist. We had speculated that Jaguar might make its way to the market via an IPO or RTO or merely by dividending out the 22% held by Iso and the 42% held by Greenshift to their respective shareholders as a means of getting an instant float for the nascent listing.

After some discussions with management, we learned that Jaguar had been pursuing a US-listing and was quite advanced in that process, but nothing much has happened on that front of late. Whether this slowdown was created by exchange bureaucracy (as befell Piche with the ASX) or some market timing issues related to uranium's downwards retracement, is not clear to us, though it may be a bit of both.

Summary

The uranium story in Argentina is a case of "boom interrupted", yet again. The spot price at the global level acts as nothing more than a mood amplifier, the rest of the action is below the surface at the contract level. We would have said that none of the Argentine uranium wannabes were prospective to become producers but the entry of Eurnekian into the fray is not the advent of yet another explorer inspired by "drill, baby, drill". Eurnekian, pointedly, is not a promoter, but a doer. Thus, we would expect that he will want to see the rubber hit the road at Ivana with a move to construction. This will electrify the scene for the two other visible players and the invisible local holders of uranium pasture in Argentina.

This dichotomy would be further accentuated if the move forward by Eurnekian was accompanied by a long-term supply contract with the Argentine nuclear establishment.

Jaguar looks prospective to follow in his footsteps, but it needs to stop market-timing and insert itself on the radar, such a move would then only accentuate the pressure on Piche to rediscover its mojo, which has been remarkably missing in action.

Important disclosures

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