

NUCLEAR INTELLIGENCE WEEKLY[®]

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CONTENTS

- 2 KAZATOMPROM MODIFIES RAMP-UP PLANS
- 3 A \$1.4 BILLION LOAN FOR DIABLO CANYON?
- 4 NRC EXPEDITES 'DIRTY BOMB' RULE CHANGE
- 5 SCANDAL MAY HIT KISHIDA'S NUCLEAR PUSH
- 6 INSIDE IRAN'S JCPOA MOTIVATIONS
- 9 URANIUM MARKET UPDATE

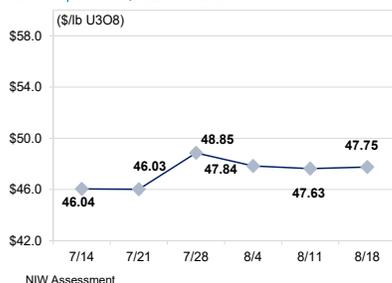
Market Points

Kazatomprom has scaled back plans to return Kazakh uranium supply to full production in 2024, cutting its initial target of 28,691 tU (75 million lbs. U3O8) by about 10%.

Spot market trading this week was tepid, with Energy Intelligence's Uranium Price Panel delivering an average price of \$47.75 per pound U3O8 on Aug. 18, barely changed from \$47.63/lb. U3O8 a week ago.

Texas-based Uranium Energy Corp. on Aug. 15 announced it will acquire Canada-based UEX, doubling its uranium resources and expanding its assets into Canada.

UPP: \$47.75/LB U3O8



WEEKLY ROUNDUP

US Enacts 'Game-Changing' Nuclear Tax Credits

- US President Joe Biden this week signed the Inflation Reduction Act that includes \$30 billion in nuclear production tax credits (PTCs) to prevent struggling reactors from retiring. Guggenheim Securities, in an Aug. 19 investor note, called the nuclear PTCs a “game-changing development” that justifies higher stock valuations for merchant nuclear power companies. They are now “closer to long-term contracted infrastructure ventures” than “the traditional commodity-exposed [independent power producers] of yesteryear.” Guggenheim singled out Constellation Energy, with its large midwestern fleet of merchant reactors, and Pacific Service Enterprise Group (PSEG), with two nuclear plants in New Jersey, as beneficiaries of the PTCs. Guggenheim said that depending on the status of New Jersey’s overlapping state subsidy program, there is “increased momentum” to strategically review assets, and posited that Constellation could benefit from an acquisition of PSEG’s nuclear assets, in part because it is already a co-owner of both PSEG nuclear sites.
- China General Nuclear (CGN) announced this week that Taishan-1 was reconnected to the grid on Aug. 15, more than a year after the French-built EPR was forced to shut down because of fuel assembly problems. The National Nuclear Safety Administration said on Aug. 4 it had approved the start-up after carrying out inspections Jul. 26-29 and getting an all-clear from the South China Nuclear and Radiation Safety Supervision Station of the Ministry of Ecology and Environment. But it warned the operator, the Taishan Nuclear Power Joint Venture Co. (TNPJVC), to “immediately” stop the start-up “if an event affecting the safety” of the unit occurs. The unit was shut down last Jul. 30 after EDF publicly urged TNPJVC, 51% owned by CGN, 30% by EDF and 19% by the Guangdong Energy Group, to do so. Discovery of the problem forced EDF to push back the target date for fuel-loading at Flamanville-3 from the end of this year to the second quarter of 2023.
- With both Russia and Ukraine warning of an imminent attack on the Zaporozhye nuclear plant by the other side, UN Secretary General Antonio Guterres reiterated a call to demilitarize the six-unit station. “Any potential damage to Zaporizhzhia is suicide,” the UN chief warned Aug. 18 after a meeting with Ukraine’s President Volodymyr Zelensky and Turkish leader Recep Tayyip Erdogan in the western Ukrainian city of Lviv. Erdogan underscored those concerns, telling reporters that he was worried about the danger of “another Chernobyl” at the plant. Energoatom, meanwhile, said the Russian occupiers “announced an unexpected ‘day off’” at the plant on Aug. 19, with only “operative personnel” allowed in and entry to “all other employees” closed. Meanwhile, a video circulated online on Thursday purporting to show at least five military trucks inside one of the plant’s buildings. The *New York Times* reported Aug. 19 that through an analysis of archival photos it had “determined that the videographer walked along a turbine inside the machine room of one of the complex’s six nuclear reactors” and that earlier this month Ukraine “released aerial surveillance footage showing several military vehicles driving into one of these buildings.”

NUCLEAR FUEL MARKET

Kazatomprom Dials Down Plans for 2024 Ramp-Up

Kazatomprom is reducing its 2024 production target by 10%, partly in response to supply chain challenges but also to maintain production discipline amid a volatile year in the uranium market.

The world’s largest uranium producer had initially planned to return to its subsoil use contract level of 28,691 tU (75 million lbs. U3O8) in 2024, after years of targeting annual production at 20% below the levels outlined in those contracts, which it will continue to do through 2023, the company said in its Aug. 19 financial report for the first half of 2022.

The decision to stagger the return into full production in 2024 reflects higher “mid- and long-term” demand from “new and existing customers.” At the same time, “the continued production discipline reflects Kazatomprom’s assessment of the supply-demand balance over the next two years and factors in the challenges the Company is expecting to face in terms of global supply chains and limited availability of certain key operating materials and reagents.”

Kazatomprom said it will “now begin working with joint venture partners and mining subsidiaries to incorporate the required changes into the 2023 budgets and development plans, accounting for the revised production levels in 2024.” As the Kazakh miner “monitors ongoing market developments” and maintains “the flexibility to react quickly to changing conditions,” it is not yet making any determinations on “mine development activity and production volumes beyond 2024.”

Total Kazakh output in the first half declined by 4% to 10,070 tU, compared with the equivalent 2021 period, due to the Covid-19 pandemic’s impact on wellfield development in 2021. In 2022, Kazatomprom plans to produce 21,500 tU on a 100% basis, and 22,800 tU in 2023 before targeting 25,300 tU in 2024.

Since Kazatomprom in 2017 first reduced production by 20% from the levels outlined in subsoil use contracts, the producer estimates it has so far removed about 29,000 tU total from the market, including about 3,300 tU due to the pandemic’s impact.

In this year’s first six months, however, Kazatomprom has seen its revenue from uranium sales more than double to nearly 500 billion Tenge (\$1 billion) from the 2021 period, largely reflective of higher uranium prices. But the wider price swings so far this year, and amended 2001 Kazakh transfer pricing regulations, may have limited the producer’s ability to capture the full extent of higher prices, which reached levels not seen in a decade.

When it comes to short-term deliveries to utilities, Kazakh transfer pricing regulations dictate that the transaction reflect the spot price at delivery rather than when the deal is struck. Prices in the first half swung between roughly \$42 per pound and \$64/lb.

“The market volatility during that time lag between price-setting and delivery becomes more evident as volatility increases, in both rising and falling price conditions,” the company said in its earnings update.

The company also delivered into long-term contracts that “incorporate a proportion of fixed pricing that was negotiated prior to the sharp increase in spot price.” That’s why Kazatomprom’s “average realized prices in the first half of 2022 compared to the same period in 2021 were lower than the increase in the spot market price for uranium over the same intervals.”

Spot uranium activity this week was once again lackluster with Energy Intelligence’s Uranium Price Panel delivering an average spot price of \$47.75/lb. U3O8 on Aug. 18, up slightly from \$47.63/lb. U3O8 on Aug. 11.

Among North American juniors, Vancouver-based UEX Corp. accepted a merger offer by Texas-based Uranium Energy Corp. (UEC) on Aug. 15, allowing a competing offer by Toronto-based Denison Mines to expire. UEC — which acquired Rosatom subsidiary Uranium One late last year — said the acquisition of UEX doubles its uranium resources and it now stands to benefit “from a new development pipeline with significant exploration potential in Canada.”

Jessica Sondgeroth, Washington

URANIUM PRICE PANEL

For the week ended August 18, 2022

	Weekly Spot Market Prices													
	Chg.	Aug			Jul					June				vv
		18	11	4	28	21	14	7	30	23	16	9	3	26
Price (\$/lb U3O8)	0.12	47.75	47.63	47.84	48.85	46.03	46.04	47.53	50.00	47.13	47.39	52.25	49.40	46.67
Total Assessments	1.00	10.00	9.00	8.00	9.00	10.00	9.00	10.00	10.00	10.00	11.00	10.00	10.00	12.00
% within 1 StDev	2.22	80.00	77.78	75.00	55.56	80.00	55.56	70.00	60.00	90.00	72.73	70.00	40.00	75.00
Low (\$/lb U3O8)	0.25	47.50	47.25	47.50	48.50	45.75	45.50	47.00	49.25	47.00	46.60	51.70	49.00	46.00
High (\$/lb U3O8)	0.25	48.25	48.00	48.25	49.25	46.25	46.75	48.50	50.75	47.50	48.50	52.50	50.15	47.50
Variability*	0.21	0.25	0.04	0.00	0.00	0.00	0.31	0.50	0.16	0.06	0.09	0.40	0.32	0.05

*This represents the value of the potential range of conceivable final averages that might result when random elimination is used to balance market positions within the panel.

UNITED STATES

Governor Floats \$1.4 Billion Loan for Diablo Canyon

California's Democratic governor is proposing the state provide a \$1.4 billion forgivable loan to Pacific Gas & Electric (PG&E) to keep the 2,250 megawatt Diablo Canyon nuclear power plant open until at least 2035, a full decade beyond its currently planned decommissioning date. But the proposal leaves unanswered questions about loan repayment, safety and a 2016 agreement with neighboring communities and plant workers to close the plant by 2025.

Citing a looming 1,800 MW shortfall in state energy supply, Gov. Gavin Newsom proposed and distributed to lawmakers draft legislation late last week that would not only provide the loan for the plant's extended operation but exempt it from state environmental and technical reviews, typically required under state law extending coastal zone permits. The loan pathway relies heavily on the awarding of federal grant funding for struggling reactors and runs head first into a 2016 joint proposal with environmental groups, neighboring communities, and plant workers to close the plant in 2025.

"If an extension is in order, it needs to be done in a manner that adequately mitigates for the significant environmental impact of releasing warm water into the marine environment over an extended period of time," said State Sen. John Laird, a Democrat whose district includes the plant, at an Aug. 12 state agency workshop on the proposed extension. "There's a fine line between overriding processes and speeding them up."

But the governor's office, in a fact sheet accompanying the draft legislation, is proposing to exempt state agencies from making determinations under the California Environmental Quality Act, that would address the thermal releases and their impact on marine life. The fact sheet "clarifies that a Coastal Development Permit and additional coastal studies will not be required," as "extended operations at the Diablo Canyon site" would be "an express priority under the Coastal Act, for a limited time, in order to protect the State more broadly by maintaining our clean energy supply." The Coastal Act typically requires permits for activities with potential environmental consequences, but allows exemptions under certain circumstances.

Besides arguing that these exemptions would be valid under the act, Newsom's legislation would also require that the relevant state agencies — the California Public Service Commission, the State Lands Commission, the Coastal Commission, the State Water Resources Control Boards and the State Historic Preservation Office — "take actions within 180 days" of the bill's passage to support extended operations at Diablo Canyon.

The governor's office and the California Energy Commission contend there is a capacity shortfall of 1,800 MW that threatens the state's plan to decarbonize the electricity sector by 2045. It attrib-

utes the shortfall to increases in cooling demand and delays in bringing new renewable capacity on line, aided by supply-chain disruptions and a dispute over federal solar tariffs.

Community Engagement

Expediting the extension of state permits within 180 days of passage doesn't allow much time for public input, a concern expressed at the Aug. 12 workshop by Greg Hass, a senior staffer for US Rep. Salud Carbajal, a congressional Democrat who represents the plant's district. Carbajal is pushing for a large wind farm project that in part relies on Diablo Canyon's closure for grid connection.

But the governor's office is vague on community engagement. The California legislature codified the 2016 joint proposal in 2018 legislation — SB 1090 authored by Laird's predecessor Sen. Bill Monning — that allowed PG&E to recover from ratepayers more than \$300 million in costs associated with retiring the plant, namely for employee retention, the reimbursement of PG&E for Diablo Canyon license renewal costs, and a Community Impact Mitigation Program (Cimp). So far, \$85 million for the Cimp "has been completely transferred from PG&E to the impacted local governments" and \$225.8 million in "funding for the employee retention program is in the last stages of being fully liquidated," the governor's office said.

The governor's proposed legislation "would not amend SB 1090 or seek to 'claw back' the funding approved for the Cimp and employee retention program." Rather, the governor's office suggests opening "a public process" directed by the California Public Utilities Commission "to evaluate and determine how best to ensure these interests are identified, discussed and meaningfully considered."

For the plan's skeptics, there just isn't enough time. "The bottom line is we are now faced with a situation where everything that would have been done to renew Diablo Canyon's operation beyond 2025 ... would have to be collapsed into a three-year window if there's a decision taken to extend the life of the plant," Laird said.

Safety

Among various technical challenges to supporting Diablo Canyon's life extension, the state senator also reiterated safety concerns "about the completeness of existing seismic studies and their possible lack of review by neutral third parties."

Union of Concerned Scientists (UCS) nuclear safety director Ed Lyman notes in an Aug. 15 report that since the UCS produced a 2013 report on Diablo Canyon's seismic risks, "considerable additional information has been released" and "clearly shows there are gaps in the seismic safety of Diablo Canyon that should be closed if the plant is going to continue to operate beyond 2025." And while the US Nuclear Regulatory Commission would have to make a safety determination to renew the plant's operating license, the agency, "as part of its drive to transform into a more 'risk-informed' regulator, cites the low calculated radiological risk to the public from nuclear plant accidents to justify not taking action to

increase safety across a wide range of areas, including seismic protection,” according to Lyman’s report.

As a condition for the extension of Diablo Canyon’s operations, Laird called for further examination “of existing seismic analysis” to provide “answers as to where there may be gaps and or whether retrofitting is required.”

Funding

Newsom — who was instrumental during his term as lieutenant governor in securing the agreement for the 2025 closing — first reversed course on Diablo Canyon after the US Department of Energy earlier this year opened the first tranche of its \$6 billion Civil Nuclear Credit program to applicants. The qualifications for the first award period quickly resulted in Diablo Canyon being the only eligible nuclear power plant. With adequate state support, PG&E is expected to apply for the funding.

That federal funding, according to the governor’s proposal, could be used to repay a loan from the state’s general fund of up to \$1.4 billion to PG&E to cover the costs associated with relicensing. PG&E would also “be allowed to collect a \$7 per megawatt hour fee during the permit extension period on top of the other relicensing expenses,” the fact sheet states. The legislation would also, based on repayment conditions, potentially forgive loan funds expended on plant life extension, provided that any unspent funds are repaid.

But for Rochelle Becker, executive director for the Alliance for Nuclear Responsibility, a party to the 2016 settlement to shutter Diablo by 2025, the loan proposal “begs the question of how responsible PG&E has been in the past.” Becker cited PG&E’s two bankruptcies, one in 2001 and one in 2019, and subsequent state bailouts, as well as legal challenges over its role in California’s 2017 wildfires.

Jessica Sondgeroth, Washington

SAFETY

NRC Moves to Expedite Rule Change on ‘Dirty Bomb’ Prevention

The US Nuclear Regulatory Commission (NRC) is accelerating its timetable for a rule change aimed at preventing the illegal acquisition of radioactive material that could be used to make a “dirty bomb,” Energy Intelligence learned this week.

The move follows the release of a US Government Accountability Office (GAO) report last month revealing that the government watchdog successfully purchased what it describes as high-risk radioactive material — or so-called category 3 material — from two US vendors using a forged NRC paper license. The NRC uses

the “high-risk” definition only for categories 1 or 2 out of a five-category system where category 5 is considered low risk and 1 and 2 highest in terms of potential impact of human exposure to radioactive material. But the GAO report said that with its two purchases of category 3 material it “demonstrated that a bad actor might be able to obtain a category 2 quantity by purchasing and aggregating more than one category 3 quantity from multiple vendors.”

When the GAO presented this information to the NRC, officials said they were proceeding with a rulemaking containing “new verification regulations” that would address the problems but which would not be implemented until late 2023. The agency had no plans for “immediate corrective actions to address the issues that GAO found,” according to the report, requested by the chairman of the House Committee on Homeland Security, Bennie Thompson of Mississippi, who released it on Jul. 20. The rulemaking would also determine how the 39 NRC “agreement states” — authorized to regulate certain radioactive materials on the agency’s behalf — would monitor category 3 material.

Asked about the timetable on Aug. 16, NRC spokesperson Dave McIntyre told Energy Intelligence in an email that the agency now plans to expedite the rulemaking.

“Upon release of the report, we immediately contacted manufacturers of these radioactive sources to ensure they are vigilant with sales, especially for new customers or unusual activities. We are also expediting a rule change already in progress that will be a durable regulatory resolution for license verification with sales of Category 3 sources, including consideration of multi-factor authentication.”

Asked for more specificity on the timing of the rulemaking, McIntyre said that the “aim is to get a proposed rule to the Commission in early 2023 — staff is still working to expedite the schedule. The Commission only directed the rulemaking last December.”

The new rule, if finalized, would provide what the GAO called “two acceptable methods for verifying licenses.” These include “direct contact with the regulator, such as through a phone call” or through a strengthened NRC license verification system, including “voluntary” entry of licenses into NRC’s web-based licensing system to permit online verification of licenses. Whether Congress considers these measures acceptable is an open question.

The committee called the report “concerning” and said in a statement that only recently “Racially and Ethnically Motivated Extremists groups have advocated for a dirty bomb attack on the homeland. Such an attack would have a severe socioeconomic impact on the country and possibly result in significant loss of life.” It urged “quick action” to remedy the gaps identified in the report. Asked if the committee was planning further action in response to the report, a source told Energy Intelligence that it would be “soon” but that “I can’t say anything further today.”

Too Little, Too Late?

While the NRC's accelerated timetable is undoubtedly welcome, the GAO report points out that it has been warning the agency about such dangers since at least 2006 and that in a 2016 investigation "we established three shell companies and successfully obtained a valid license for one of these companies that we altered to secure commitments to purchase a dangerous quantity of radioactive material."

During a 2007 investigation, "we established a shell company through which we obtained a valid NRC license that we altered to secure commitments to purchase a dangerous quantity of radioactive material." In March 2006, the GAO demonstrated it was possible "to transport unlicensed radioactive material through ports of entry into the U.S. using a fraudulent license."

Meanwhile, between 2011 and 2020 the NRC reported 4,512 events involving nuclear materials, including "instances of lost or stolen radioactive materials, radiation overexposures, leaking sources of radioactive material, and other events." Since 1990 there have been "34 specific events involving the theft, sabotage, and vandalism of high-risk radioactive materials," the GAO report said, citing NRC officials.

In one such event in April 2019, a technician was arrested "after stealing three iridium-192 radiography devices from his workplace in Arizona. According to a court filing, the technician intended to release the radioactive material at a nearby mall but was arrested after a 2-hour standoff and before he could do so." The GAO also noted that "current assessments of the threat environment show an increasing interest in using radioactive material for making a dirty bomb," according to the report, citing officials interviewed within the Department of Energy's National Nuclear Security Administration.

Beyond that, the NRC does not consider the detonation of a dirty bomb containing category 3 material as enough of a disaster to issue "immediately effective orders," the GAO said. Instead NRC "only considers events that result in prompt fatalities and immediate health effects from radiation." But the impact of a category 3 dirty bomb "could be expected to cause hundreds of deaths from evacuations and billions of dollars of socioeconomic effects." An incident at the University of Washington in May 2019, for example, involved about 1 curie of cesium-137, which is less than a category 3 quantity, but the cleanup and other costs amounted to \$156 million, the GAO noted.

In its latest investigation, the GAO said it didn't attempt to purchase category 1 and 2 materials "because those quantities require vendors to verify the validity of licenses" either through the regulator or through the license verification system. "NRC does not specifically require vendors to verify the validity of licenses for category 3 radioactive materials." Instead "transferors have several options, including obtaining a copy of the transferee's license, for verifying that the transferee has a license."

And that's precisely what GAO took advantage of. Its investigators "provided a copy of a license that we forged to two vendors and subsequently obtained invoices; paid the companies; had the material shipped for pickup by a representative of our shell company" — which was actually one of the investigators — "and confirmed delivery of the material." The material was subsequently returned to the vendors.

Stephanie Cooke, Washington

JAPAN

Kishida's Nuclear Push Hits Hurdle in LDP 'Moonie' Scandal

Prime Minister Fumio Kishida may have less bandwidth to carry out energy policies, including a push from within the conservative government to promote advanced reactors, in the wake of a scandal over Liberal Democratic Party (LDP) ties to the former far-right Unification Church.

Kishida gained considerable momentum through the triumph of his conservative LDP in the Jul. 10 House of Councillors election, but that has dissipated amid deepening probes into links between politicians in the LDP and the right-wing opposition Japan Innovation Party and the far-right Family Federation for World Peace and Unification, the successor to the former notorious Unification Church founded by the late South Korean anti-communist proselytizer Sun Myung Moon in 1954. The linkages may have been a factor in the assassination of former Prime Minister Shinzo Abe after the suspected assassin reportedly testified that his family had been ruined after his mother made huge donations to the church with whom he associated the late statesman.

Kishida had been expected to carry out a post-election Cabinet adjustment, mainly because of the poor health of then-Defense Minister Nobuo Kishi, but this turned into a makeover in which seven ministers who acknowledged ties with the sect, including Kishi, were removed. The top spot at the Ministry of Economy, Trade and Industry (Meti) went to a veteran official and politician, Yasutoshi Nishimura, on Aug. 10. He has a wide brief, including achieving Kishida's Jul. 14 instruction to Meti to get "at most" nine reactors operating "this winter." At best this target will be reached with a punctual return to service of Kansai Electric's Ohi-3 on Jan. 23 and held for at most three weeks. In early February two units begin regular inspections — Shikoku Electric's Ikata-3 and Kyushu Electric's Sendai-1. One uncertainty is Kansai Electric's Mihama-3 whose return to service has been indefinitely delayed due to a serious water leak reported Aug. 16.

The Cabinet reshuffle and Nishimura's appointment to lead Meti followed the first meeting Jul. 27 of the "GX (Green Transformation) Executive Committee," convened by Kishida and composed of 14

prominent business and financial executives and academics, entrusted with the task of “proposing urgent policies” to overcome the energy crisis, and transform the economic and social system with clean energy.

Kishida said that at its next meeting, the committee “will discuss institutional support measures for the maximum introduction of renewable energy” with “a clear indication of the items that require political decisions on concrete measures,” such as the resumption of nuclear power plant operations and future development plans. Nishimura, as Meti minister, would be responsible for implementation of any approved measures. Although news media reported that the second meeting would be held in mid-August, no date has yet been announced or listed on the Cabinet Secretariat’s GX-related webpage.

The longer-term prospects for nuclear remain as complicated as ever with other prospective restarts, including Tokyo Electric’s two advanced boiling water reactors at Kashiwazaki-Kariwa, stalled. Nevertheless, in a report to the GX Executive Committee, then-Meti Minister Koichi Hagiuda presented a chart from Meti’s Agency for Natural Resources and Energy (Anre) forecasting nuclear’s share of peak-time power supply rising from 6.54% in fiscal 2022 to 9.53% in fiscal 2023, while the share of “new energy sources,” such as solar and wind, would remain at about 11%. While there was no figure in the chart for 2021, the comparable figure for 2020 was 2.3%

In an Aug. 12 news conference, Nishimura continued to adhere to the position of the sixth basic energy plan approved last October that the government was “not envisioning the construction, expansion or replacement of nuclear power plants at this time” despite repeated calls for a change in that policy by many LDP parliamentarians and major business leaders.

Replacement Nuclear Power Plants?

However, during the last few months, Anre’s nuclear power advisory subcommittee has been deliberating a draft schedule for promoting “innovative” reactors, including small modular reactors (SMRs), that would enter the commercial market in the 2030s. Adoption of such a plan would signal a shift and should require a “political decision” by Kishida to break with current policy, but whether he will have the political clout or will to make such decisions is now more uncertain.

The scandal, combined with the social impact of rising inflation and another surge in coronavirus infections, triggered a 13 percentage point plunge to 46% in approval ratings in NHK’s monthly benchmark pool published Aug. 8, with the share of disapproving respondents rising from 21% to 28%. An overwhelming majority of 82% of respondents told NHK that the explanations offered by the LDP of its links with the sect “were insufficient,” compared to 4% who were satisfied.

A member of Meti’s nuclear policy advisory committee told Energy Intelligence Aug. 17 that the ongoing flap over the LDP’s links

with the Unification sect was likely to continue affecting Cabinet approval ratings and discourage major policy decisions.

“I am concerned about how much the draft program for new type or ‘innovative’ reactors will be discussed at the next GX program implementation review meeting later this month,” he said. “It’s likely that the dip in Cabinet approval ratings will affect the issue of new nuclear plant construction.”

A senior industry professional told Energy Intelligence that “I doubt whether anything new will be materialized by the new Cabinet since the time to change the fundamentals surrounding nuclear power, such as public perception and ‘not-in-my-back-yard’ attitudes and the slowness of the regulatory process will take years if not decades.”

“Such a time scale is far too long compared with the time required to accommodate the fast-changing environment, especially short-ages in fossil fuel supplies and the hikes in fossil fuels triggered by the Russian invasion of Ukraine,” said the professional, who added that “the best thing to do now is spreading facts about the importance of energy self-supply.”

The opposition is not going to let go of the scandal either. The left-liberal Constitutional Democratic Party (CDP) and four other opposition parties filed a joint petition Aug. 18 for the convocation of an extraordinary Diet session focused on “points of interaction” between the LDP and the Family Federation for World Peace and Unification, as well as measures to cope with Japan’s seventh wave of the Covid-19 pandemic and rising inflation.

A Tokyo-based political analyst told Energy Intelligence Aug. 18 that “Kishida’s situation is stable and he’ll get through this crisis, but the LDP will now become more dependent on Komeito.”

“Kishida’s already changed the Cabinet. Now it will be up to its performance, especially in terms of the economy and controlling the pandemic, to see whether it can staunch the flow of blood,” commented a less sanguine Taipei-based analyst.

Dennis Engbarth, Taipei City

IRAN

What’s Driving the JCPOA Talks From Inside Tehran?

Iran and the US might appear to be closer than ever to reviving the 2015 nuclear deal after nearly 18 months of on-again, off-again talks. But optimism is still premature. Tehran submitted its formal response to the EU’s proposed “final text” of a new nuclear pact on Monday following an extraordinary meeting of Iran’s Supreme National Security

Council chaired by President Ebrahim Raisi. Reading the tea leaves is challenging.

After the submission of Iran's response, Foreign Minister Hossein Amir Abdollahian suggested that an agreement could be reached within days — if the US were to make further compromises. But he added: "What the people want from us is an outcome from these negotiations ... The people want to see results from us." He also spoke of the reality of give-and-take negotiations. Days later, however, Abdollahian noted that "other stages may be discussed" once Iran's red lines are respected and economic benefits guaranteed.

In Washington, State Department spokesman Ned Price said the US had received Iran's comments through the EU and was still studying them on Wednesday.

On the Iranian side, any return to the so-called Joint Comprehensive Plan of Action (JCPOA) will ultimately be guided by what matters most to Supreme Leader Ayatollah Ali Khamenei, the country's ultimate decision-maker, which is preserving the Islamic revolution — and the current structure of leadership. To be sure, reviving oil exports and establishing better ties with Mideast Gulf neighbors do provide benefits — but they need to serve the domestic priority. And a deal could cut both ways, offering wins but also presenting risks.

Attractions of a Deal

A revived nuclear deal could be seen as strengthening the leadership, by enabling Tehran to gain access to frozen foreign reserves worth around \$100 billion and return to the oil market at a time of high prices and buoyant demand — capturing market share in Europe as it turns its back on Russian supplies. Energy Intelligence's Research and Advisory unit estimates under its "breakthrough" scenario that Iran's exports could rise within nine months to around 2 million barrels per day from around 600,000–900,000 b/d now.

Those windfall revenues could allow the leadership to signal to the Iranian people that the revolution can still deliver results, shoring up a sense of its legitimacy while offering a release valve for already-struggling Iranians hit by unrelenting global inflationary pressures.

With this in mind, the benefits of a new nuclear deal could prove sufficiently attractive for Iran's leadership even under the assumption that a future Republican president in the US could abandon it — and even absent meaningful foreign investment from Western companies amid concerns over the deal's longevity. "Even if you expect that the deal might fall apart in two years' time, take the deal now, give the economy some breathing room and use the opportunity to stabilize the system and prepare for the eventuality in 2025," Esfandiyar Batmanghelidj, founder of economic think tank Bourse & Bazaar, recently told Energy Intelligence.

For ordinary Iranians, of course, the question is to what extent recovered and new funds would actually end up benefitting the people versus ending up in proxy battlegrounds to bolster Iran's influence there. "Many people say that even if sanctions are removed the oil revenues will be spent on Syria, Yemen and Lebanon, and I believe that too," one Iranian source said.

Risks — and the Status Quo's Appeal

That concern speaks to stakeholders in the Islamic republic likely content with the status quo, notably those associated with the powerful Revolutionary Guard. The Guard's sprawling business interests across the country, along with its smuggling activities that also include oil, have made the organization a powerful economic and political force. The Guard has also been handling Iran's under-the-radar crude export sales rather than state National Iranian Oil Co., said one Iranian official, with the bulk ending up in China.

To some extent, however, the reality of a more limited deal — one that allows for more exports but does not open the floodgates for Western investment in Iran's economy — could ease possible concerns by the leadership and Revolutionary Guard about what lies ahead: This time around, unlike in 2015, there is no talk of the JCPOA being transformational for Iran's orientation and regional behavior, economy or nature of government.

With key stakeholders in the regime and in the economy long used to operating under sanctions and in opposition to the West, a deal seen as not rocking the boat too much could be easier to stomach.

Managing the Optics

Iran's leadership will also need to portray any deal as a win, especially after heavily criticizing the original agreement struck by the previous Hassan Rohani administration. In short, an agreement will need to be seen as extracting key concessions while producing tangible benefits.

Should talks stumble, the Raisi government can point to the US as being the one to blame, having withdrawn from the pact in May 2018 in the first place. Tehran could also make a case that shortcomings in the US political system are preventing Washington from guaranteeing a deal, in line with its long-held view of US untrustworthiness.

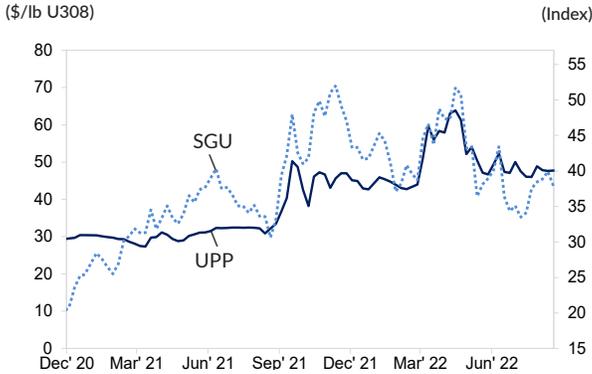
Both parties seem to wish to avoid a complete collapse in the negotiating process. But if it came to that, Iran could expect Washington to ratchet up sanctions, intensifying Iran's economic woes. That would put Iran's relationships with Russia and China to the ultimate test. Neither country has provided the far-reaching economic support Tehran may have welcomed after US sanctions snapped back in 2018–19. Looking ahead, China is likely to remain cautious, although fellow sanctions-hit producer Russia may prove more eager.

Oliver Klaus, Dubai

URANIUM MARKET UPDATE

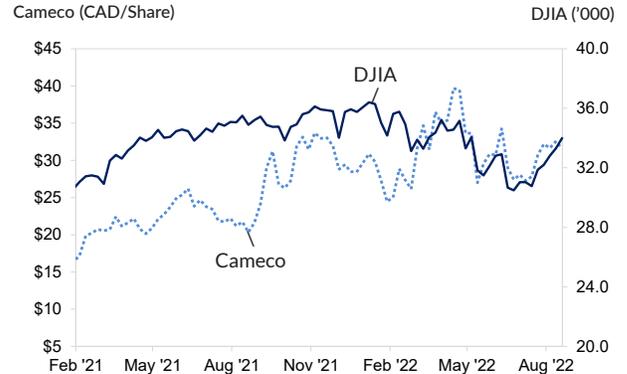
All prices as of Thursday, August 18, 2022

UPP VS. SOLACTIVE GLOBAL URANIUM INDEX
(previous 52 weeks)



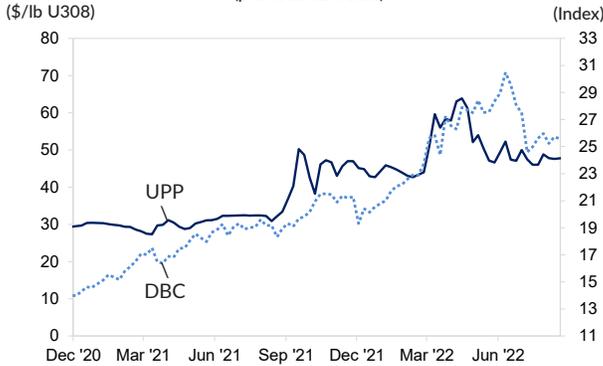
The Solactive Global Uranium Total Return Index, created by Structured Solutions AG, tracks the price movements in shares of companies active in the uranium mining industry. Calculated as a total return index and published in US\$, its composition is ordinarily adjusted twice a year.

CAMECO VS. DOW JONES INDUSTRIAL AVERAGE
(previous 52 weeks)



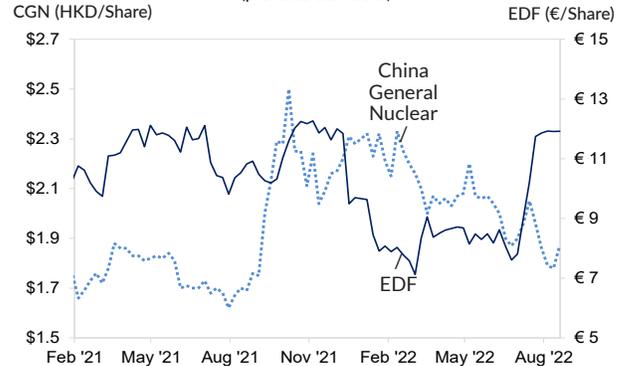
Canadian uranium miner Cameco's stock is valued in Canadian dollars compared with the US dollar on the Dow Jones Industrial Average (DJIA). Roughly two-thirds of DJIA's 30 component companies are manufacturers of industrial and consumer goods. The others represent industries ranging from financial services to entertainment.

UPP VS. POWERSHARES DB COMMODITY INDEX
(previous 52 weeks)



The PowerShares DB Commodity Index Tracking Fund is designed to provide investors with a broadly diversified exposure to the returns on the commodities markets. It is based on the Deutsche Bank Liquid Commodity Index, which is composed of futures contracts on 14 of the most heavily traded and important physical commodities.

EDF VS. CHINA GENERAL NUCLEAR
(previous 52 weeks)



The stock valuation of France's Electricite de France (EDF), largely owned by the French state, is in euros compared to state-owned China General Nuclear (CGN) Power Co., valued in Chinese yuan renminbi. Both companies build nuclear power facilities, design and service reactors, operate nuclear reactors and supply nuclear components and technology.

MONTHLY SPOT MARKET PRICES

		2022							2021				
	Chg.	Jul	Jun	May	Apr	Mar	Feb	Jan	Dec	Nov	Oct	Sep	Aug
Uranium (\$/lb U308)													
Low	-	45.50	45.50	46.00	52.50	51.00	42.50	43.00	42.00	43.00	36.00	36.00	32.20
High	-2.00	50.50	52.50	54.00	64.00	60.00	44.50	46.50	47.00	47.50	48.00	51.00	36.00
Conversion (\$/kgU)													
Low	+2.00	32.00	30.00	30.00	28.00	26.00	16.00	16.00	16.00	15.00	16.00	19.00	19.00
High	+4.00	37.00	33.00	33.00	30.00	28.00	17.00	17.00	17.00	18.00	19.00	21.00	21.00
Enrichment (\$/SWU)													
Low	+5.50	89.50	84.00	84.00	82.00	100.00	59.00	57.00	56.00	56.00	55.50	55.50	54.00
High	-55.00	95.00	150.00	150.00	150.00	150.00	61.00	59.00	57.00	57.00	57.50	57.50	56.00

NIW monthly UF6, SWU and U308 prices rely on the general consensus of direct market participants and is informed by actual market transactions. This section was previously known as the Nukem Weekly Report and the Nukem Price Bulletin. The methodology for NIW's weekly UPP price is different - more information about the methodology behind that price is available on page two.

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