

NUCLEAR INTELLIGENCE WEEKLY[®]

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URANIUM

Kazatomprom to Proceed With Budenovskoye-6 and -7

Kazatomprom is proceeding apace with what promises to become the world's largest in situ recovery (ISR) uranium mine — with a capacity for producing more than 15 million pounds of uranium a year — now that the company has contracted for the mine's first three years of production, starting in 2024.

That was this week's blockbuster news in London from Kazatomprom's Chief Commercial Officer Askar Batyrbayev. This advances the narrative around Budenovskoye-6 and -7 from possible to probable plans for churning out U₃O₈ beginning in 2024 — at 2,500 metric tons of contained uranium — to 6,000 tU by 2026, which translates into the project's nameplate capacity of 15.6 million lbs. U₃O₈. The plans for what may be Kazakhstan's largest green-field project were announced in November, but in line with the company's overall approach to uranium production they remained “subject to annual review” and could “be adjusted based on Kazatomprom's ongoing assessment of market conditions.”

This week Batyrbayev told the World Nuclear Fuel Conference (WNFC) that “the first three years of commercial production of that asset is already being contracted. We wouldn't make an announcement and start mining if we were sure that production would put pressure on the market. So we've made all those arrangements. We have removed all this critical transition period up to 2026,” so Budenovskoye “can become the biggest mine in Kazakhstan” and the “biggest ISR mine in the world.”

Batyrbayev said that 2024 production at Budenovskoye remains slated for 2,500 tU, with 2025 output increasing to 4,500 tU, and 2026 production at full capacity. This project will “definitely add value to our portfolio in terms of cost, efficiency,” Batyrbayev told the WNFC. “We have some mines that will be going off line. We'll have to rebalance our portfolio. We are trying to remain cost effective and one of the most competitive producers.”

Sales and Timing

According to the November announcement, all of Budenovskoye's output will initially be sold to “the Russian civil nuclear energy industry.” Following reductions in uranium output across

Kazakhstan for the past several years, the Russian fuel-cycle industry has struggled to secure enough feed for its vast domestic conversion and enrichment complex. Analysis presented separately at the WNFC indicated that Russia's enrichment plants may have engaged in significant underfeeding, possibly because of millions of pounds of U₃O₈ not coming from Kazakhstan.

Russia's new source of supply, however, will come not via a Rosatom stake in Budenovskoye-6 and -7, but rather via an offtake agreement with majority owner Kazatomprom and 49% owner Stepnogorsk Mining and Chemical Plant LLP. That minority partner remains mysterious; asked about Stepnogorsk in an edited September interview with Energy Intelligence, Batyrbayev would only say that the two companies' joint venture has the subsoil use rights to the project. In May 2020 a Kazatomprom spokesperson told Energy Intelligence that Stepnogorsk continues to provide refining services to Kazatomprom, and it “became involved in the Budenovskoye project because it made sense to ensure long-term utilization of the facility.”

As of Dec. 31, Budenovskoye-6 and -7 boasted proven reserves of 114,200 tU, second in Kazakhstan only to Inkai in terms of proven reserves. But ramping up the Budenovskoye deposits will only be one lever Kazatomprom can pull as it responds to a tightening uranium market. For several years Kazatomprom has pulled back output at both the mines it wholly owns and those it owns with joint-venture partners, to 20% of the capacity licensed under subsoil use agreements. In January, Batyrbayev told Energy Intelligence that this country-wide reduction will continue in 2023 “because we don't see that material is needed by the market. We will see if the market changes our decision.”

Batyrbayev noted to the WNFC attendees this week that “we're operating at minus 20%. If we see that the market needs that material, first we can return back to 100% capacity. We can go to 120% capacity of our subsoil use contracts. Each step will add an additional 6,000 tons.” And this could then be further supplemented by the 6,000 tU output from Budenovskoye-6 and -7.

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