

Company to Invest US\$3.2 Billion in Tarapacá Deposit

BHP Sets Cerro Colorado Reopening for 2031-2032 in Strategic Investment Plan

Environmental Impact Studies Continue After Setback in Preliminary Drilling

Revista Norte Minero. February 2025 Edition.

On Monday, July 3, 2023, Cerro Colorado | BHP began the gradual suspension of its operations with the cessation of extraction activities at this deposit located in the Tarapacá Region, northeast of Pozo Almonte and 9 kilometers from the town of Mamiña.

The mine began production in 1994 and had to close temporarily due to the expiration of its mining exploration permit, in addition to failing to obtain authorization to extract water from the Lagunillas sector.

However, BHP already has plans to restart operations in 2031-2032 after conducting an Environmental Impact Study (EIA). This aims to extend the mine's lifespan by 20 more years but with a new approach.

Midway through the year, the mining company explained that the project is currently at the pre-feasibility stage, which includes gathering baseline information required for environmental assessment.

The project's construction phase would begin in 2028, once the necessary permits are obtained, and consequently, Cerro Colorado's operational reopening could take place by the end of this decade. The reopening project seeks to maximize the use of existing facilities and potentially expand them, according to BHP.

Another characteristic of the new project is that it will use seawater in its operations.

BHP is focused on adopting sustainable practices for Cerro Colorado's restart. The company aims to integrate renewable energy sources to reduce costs and improve energy efficiency. Additionally, it plans to optimize logistics processes to lower carbon emissions.

The road to realizing this key initiative for Tarapacá is not simple.

In May of this year, BHP submitted a permit request to the Environmental Assessment Service (SEA) proposing an investment of approximately US\$60 million to conduct 370 drillings through the construction of 185 platforms and the execution of 92 test pits both inside and outside the deposit.

However, the Environmental Assessment Service (SEA) of Tarapacá rejected the project submitted by Cerro Colorado, which sought to obtain information for the study and development of future mineral projects.

According to the Regional Directorate of the Tarapacá Region, the project under evaluation corresponds to a modification project rather than a new project, as the owner stated in the Environmental Impact Statement (DIA).

Therefore, the agency indicated that the project's name should explicitly specify that it is a modification.

The project was also rejected due to the lack of clarity in its name and the non-specificity regarding the type of drilling.

Nevertheless, expectations for the reopening project remain intact. The multinational has now launched an investment plan of US\$10 billion, which could reach US\$17 billion if the Cerro Colorado project progresses without complications.

In fact, BHP will invest up to US\$600 million in Pampa Norte (which includes Spence and Cerro Colorado) to increase concentrator capacity and US\$120 million to extend cathode production at Spence until 2031. Cerro Colorado would resume operations in 2031-2032 with an investment of up to US\$3.2 billion.

"After the economic instability caused by the pandemic and social unrest, inflation continues to moderate as the economy recovers," the mining company highlighted during the project presentation, emphasizing that Chile is a stable country for investments, with strong institutions and stability in its monetary and fiscal policy.

Aurora Williams, Minister of Mining: "We Have Clear Evidence That the Public-Private Alliance Is Successful in Chile"

■ The Government, along with an unprecedented delegation, will participate in the iconic PDAC fair in Canada. At the event, they will update the country's Mining Exploration Catalog.

Diario Financiero - February 28, 2025
BY PATRICIA MARCHETTI

Attracting more mining investment, updating the country's exploration catalog, and strengthening Chile's global positioning are among the objectives of Minister of Mining, Aurora Williams, in her sixth participation in the international Prospectors & Developers Association of Canada (PDAC) fair. This event, the world's most important in mining exploration, gathers 30,000 attendees from 135 countries.

In Toronto, from March 2 to 5, she will be accompanied by a delegation that is expected to be the largest Chile has ever taken to the event in its 24 years of participation, surpassing 230 people and 170 entities from the national mining ecosystem.

All this happens in a tense environment due to tariff threats on copper from the United States. "Our position is to observe how the different issues announced by President (Donald) Trump develop, and while this unfolds, the markets are experiencing a degree of volatility. Naturally, we believe this will be a topic discussed (at the fair)," Williams told DF.

For the PDAC, the Ministry created a Fair and Mining Activities Committee in a public-private collaboration to strengthen Chile's presence and participation in such events. This committee is led by the ministry and includes InvestChile, ProChile, Fundación Imagen de Chile, the National Mining Society (Sonami), the Mining Council, the Chilean Chamber of Construction, and Cesco.

- What does Chile gain by attending as a bloc in this Committee?

- It highlights the importance of the public-private alliance for mining. We will present ourselves after significant agreements such as the recent one between Codelco and Anglo American (to jointly operate Andina-Los Bronces) or the agreement between Codelco and SQM (to exploit lithium in the Salar de Atacama). Therefore, we have clear demonstrations that the public-private alliance is successful in our country and involves major global players.

- Do you consider that there has been a paradigm shift regarding the importance of the private sector?

- For our Government, private development has always been important. Perhaps, the concept of "public-private" is more related to ownership because if we look at Codelco's operations, it behaves like a private company in the Chilean mining industry. So, the public-private distinction is more about ownership than market behavior.

This delegation also serves to demonstrate how mining business can be conducted in our country effectively through public-private partnerships.

- Do Codelco's partnerships with foreign firms also reflect an internationalization strategy?

- Chile already has global players in its mining market. I believe we are already at that stage. Internally, we may not fully appreciate the significance of the global actors operating in Chile, those who have trusted, invested, and successfully developed their businesses here.

- Why is this not fully appreciated?

- One reason is that mining operations are conducted outside urban areas. Very few people have visited a mining site, and when they do, they are often surprised by what they see—the scale, safety standards, innovation, and technology used. Perhaps there is a lack of public knowledge about mining operations, and the general perception may be based on outdated notions. Naturally, the industry must also make an effort to engage with society and showcase its work and impact.

Exploration Catalog

During the fair, Chile will present a new version of the 2025 Mining Exploration Catalog, which has expanded from 36 to 47 copper, gold, iron, and other mineral projects across regions from Arica to Los Lagos. Notably, 13 of these projects belong to Enami.

"Our primary interest is to increase investment in exploration while also maintaining Chile's leadership in mining," emphasizes the minister. She also highlights that Chile arrives at the global event as the top mining exploration destination in the Americas and the fourth worldwide, securing 6% of the total exploration budget (US\$ 794 million), behind Canada, Australia, and the U.S.

In this context, Williams notes that "Canada has become one of the main investors in Chile's mining sector," with companies such as Barrick, Kinross, Capstone, Teck, and Aclara, among others.

The event's opening keynote will be delivered by BHP's global CEO, Mike Henry. Subsequently, the Chilean delegation will participate in at least four forums, the "Chile Seminar," InvestChile's business roundtable, Corfo's networking event, and Enami's roadshow. One of the key features of the delegation will be the official relaunch of the Chile Mining brand, reinforcing the national mining identity at the event.

"Our position is to observe how the issues announced by President Trump develop. Naturally, we believe this is something that will be addressed (at the fair)," said the minister regarding potential U.S. tariffs on copper.

Electricity Coordinator Admits Delay in Contingency Defense Plan for Northern Zone Since 2021

A defense plan to address contingencies in the northern zone, commissioned to a consultancy in 2018, has yet to be executed. The Electricity Coordinator reported the delay since 2021 and added that, according to information from ISA Interchile, "this specific defense plan was not designed for the type of event that occurred on February 25," which, however, will be part of the failure analysis.

PULSO

By Víctor Cofré

The Electricity Coordinator, the independent entity responsible for coordinating the operation of the National Electric System, conducted a Study on Extreme Contingencies and Defense Plans for the Northern Zone in April 2018.

Through extensive work, the organization's operations management analyzed various scenarios with different severity levels. The extreme contingency was considered a low-probability event, including scenarios where the contingency propagated in an uncontrolled manner, affecting one or more facilities and potentially leading to a Total Blackout. The study considered the main transmission projects expected to enter service between July 2018 and June 2021.

That same year, the Electricity Coordinator commissioned the company Estudios Eléctricos S.A.—in partnership with SEIS S.A.—to define the technical specifications for implementing the Extreme Contingency Defense Plan (PDCE) in the northern region. This was outlined in a follow-up report from April 2019: "The purpose of the Defense Plan is to effectively and reliably address the extreme contingencies identified in the study, mitigating their impact to preserve the operational security of the National Electric System."

The study was delivered in March 2019, comprising 223 pages.

A month later, the "Study for the Detailed Design of the PDCE for the Northern Zone of the National Electric System" analyzed a severity 6 contingency: a short circuit in one of the circuits of a double-circuit line that results in the disconnection of both circuits in the 2x500 kV lines between the Los Changos and Polpaico substations, in the northern zone. This includes the Pan de Azúcar-Polpaico section, affected by Tuesday's blackout.

"The studies concluded that for severity 6 contingencies in any of the four 2x500 kV sections between Cumbre and Polpaico, operating with transfers above certain power thresholds, there is a risk of a Total Blackout in the National Electric System (loss of consumption equal to or greater than 70% of the demand, according to the Technical Standard), due to transient instability phenomena that could impact the entire system," the report stated, noting that the consultant's proposed defense plan estimated a 10-month implementation period.

"However, it was estimated that its implementation and activation would require a longer period due to the project's scale, the number of facilities involved, coordination among facility owners, testing of new equipment, and the need to intervene in operational equipment, among other aspects. These timelines should be reassessed during the detailed engineering development phase," the report added.

The plan was to be executed by the three electricity transmission companies operating in the area: ISA Interchile, which operates the substation where Tuesday's failure occurred; Transelec, the market's largest player, controlled by Canadian and Chinese investors; and TEN, owned by France's Engie. A report by El Mostrador indicated that the plan was not executed in the following years due to successive delays and exchanges of letters with the Electricity Coordinator, in which the companies requested to put the work out for tender.

"The Delay Has Been Reported Since 2021"

The Electricity Coordinator addressed the delay in this plan yesterday but warned that it is not necessarily related to Tuesday's blackout, according to information provided by ISA.

"The Extreme Contingency Defense Plan (PDCE) that we developed and mandated is part of a complementary service that supports system security in the event of specific failures. To this end, a set of specific failures with varying degrees of severity was identified. In this case, the measures mentioned in this document are among those that must be implemented by companies owning facilities in the 500 kV corridor (ISA Interchile, Transelec, and TEN), as mandated in 2020," said the Electricity Coordinator, chaired by Juan Carlos Olmedo.

"The Coordinator has been monitoring the progress of this service since it was mandated. The delay in this plan has been reported periodically in accordance with technical regulations since 2021," it stated.

At the end of its statement, the Coordinator addressed its connection to this week's contingency: "This particular defense plan was not designed for the type of event that occurred on February 25, according to the information received so far from ISA Interchile. This issue will be part of the failure analysis to be conducted."

Former Energy Minister Criticizes Government's Tone Toward Electric Companies

Former Energy Minister Rodrigo Álvarez criticized the government's tone in blaming electric companies for Tuesday's massive power outage across much of the country.

Speaking on La Tercera's streaming program "Desde la Redacción," Álvarez noted that this blackout was the first of its magnitude since the system's interconnection and differed from other similar events where causes were known. He stated that much information is still missing: "We still don't know, and it's crucial to find out."

Regarding the response time for system recovery, he commented, "My impression is that it was somewhat slower. I expected an outage lasting several hours (...), but the restoration seemed a bit slower, which is why clarity is so important."

He then disagreed with President Gabriel Boric's tone in accusing the companies in this situation: "I don't think it was appropriate at that moment, especially when we need to signal the need for significant investment."

He also criticized Energy Minister Diego Pardow: "He has every right (...) to strongly criticize a company that caused this outage and has yet to provide a solid explanation," Álvarez said. However, he emphasized, "The moral authority tone does not seem appropriate to me."

Terms of the Mineral Agreement Between the U.S. and Ukraine

■ Having secured some concessions but without post-war security guarantees, Zelensky will arrive in Washington this Friday to meet with Trump and sign the agreed terms.

Diario Financiero - February 28, 2025
LONDON/KYIV BY B. HALL/C. MILLER

This Friday, Zelensky will have his first meeting with Trump since the latter returned to the White House. Ukraine and the United States have reached an agreement on the joint development of the European country's mineral resources through an "investment fund for reconstruction." The agreement, dated February 25 and first obtained by the Financial Times, is significantly less burdensome and broader in scope than Washington's initial proposal.

References to potential revenues of \$500 billion from mineral extraction were removed, and explicit U.S. security guarantees for Ukraine—which Ukrainian negotiators had sought in exchange for sharing profits from their valuable natural resources—were excluded.

Although the Ukrainians managed to limit the agreement's scope and reject some of Washington's initially stringent terms, several crucial details remain unresolved. These issues will be discussed this Friday when Ukrainian President Volodymyr Zelensky arrives at the White House to meet with his U.S. counterpart, Donald Trump, in an attempt to finalize the deal.

Allocation of Revenue

Kyiv and Washington will create a "joint investment fund," to which Ukraine will contribute 50% of all revenues obtained from the "future monetization" of its government-owned natural resources.

In theory, the fund will invest in post-war reconstruction and Ukraine's economic development, potentially covering all sectors, not just natural resources.

Ownership and Control

The project will be jointly owned by the U.S. and Ukrainian governments. However, additional details regarding ownership and governance—critical issues—will be determined later in a "fund agreement."

In its initial offer, the U.S. had pushed for 100% ownership and full decision-making rights. Instead, the agreement states that the "maximum percentage of capital ownership" by the U.S. and its "decision-making authority" will be subject to "the extent permitted by U.S. laws."

This limitation may stem from legal restrictions faced by U.S. agencies in participating in such a fund. For instance, if the U.S. International Development Finance Corporation were to manage the U.S. stake, its equity investments would be legally capped at 30% of any given project's ownership.

Neither the U.S. nor Ukraine will be allowed to sell shares in the fund without mutual consent.

Investments or Payments

This aspect remains vague and will be settled in the final fund agreement.

The agreement states that the fund will collect and reinvest revenues "at least annually in Ukraine to promote the country's security and prosperity."

However, it does not mandate full reinvestment of revenues and adds that the final fund agreement "will provide for future distributions."

Ukrainian Resources

Ukraine has vast deposits of critical minerals, including lithium, graphite, cobalt, titanium, and certain rare earth elements. It also has oil, gas, and coal reserves. These resources are covered by the agreement as long as they are "directly or indirectly" owned by the Ukrainian government, along with associated logistics infrastructure.

However, the agreement does not apply to deposits that already generate government revenue through taxes, royalties, or licensing fees—effectively excluding current operations by state-owned oil and gas companies Ukrnafta and Naftogaz, which are among Ukraine's most lucrative extractive industries.

Ukraine's mineral deposits have not been significantly explored or exploited, a process that takes years even in stable jurisdictions. Additionally, there is a lack of data on reserve quality—critical information for investors before

committing capital to new mines. A significant portion of these deposits lies in territory controlled by Russian forces.

Exploiting Ukraine's critical minerals would require massive investments. In theory, the fund could finance some of these ventures, but it would start from scratch unless the U.S. provides upfront capital. Furthermore, projects would take years to generate taxable operating profits.

Security Guarantees

Trump has described the mineral agreement as a form of "repayment" for the aid the U.S. has provided to Ukraine. He has spoken of enormous profits from the plan, estimating between \$350 billion and \$500 billion. Given the challenges in commercializing these deposits, the actual returns are likely to be only a fraction of those figures.

Washington has argued that the mere presence of U.S. economic interests in Ukraine would be enough to deter future Russian military aggression.

Zelensky sought clearer guarantees of future U.S. military assistance and security assurances in the agreement. He did not obtain them. In fact, on Wednesday, Trump stated during the first cabinet meeting of his second term: "I am not going to provide security guarantees beyond the minimum."

"I am not going to provide security guarantees beyond the minimum," Trump stated, despite Ukraine's initial demands in the mineral pact negotiations.

Households Pay Between 8% and 13% of Their Bills for Energy Transmission:

How Electricity Bills Would Change After the Transmission Investments Chile Requires

If the Kimal-Lo Aguirre project begins operation in 2030, transmission costs would increase by 8%.

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Power outages have highlighted, for several experts and system stakeholders, the need for more transmission infrastructure. However, this increased investment to transport electricity from power plants to consumption centers will have to be financed by electricity consumers, both households and businesses.

Since 2016, customers have paid the full cost of the energy transmission system. This transmission cost is labeled as "electricity transport" on electricity bills. Before that year, this cost was shared between customers and power generators, and some experts believe it may be necessary to return to that mechanism.

For a household consuming 200 kWh per month, between 8% and 13% of the total bill corresponds to the transmission charge, according to calculations by consulting firm Systep. The charge for this component depends on the customer's location.

On the other hand, Javier Bustos, executive director of the Association of Non-Regulated Electric Clients (Acenor), states that major energy consumers, such as mining companies, Metro, and EFE, may pay between 10% and 20% of their electricity bills for transmission.

Additionally, Bustos asserts that both households and businesses have seen an increase in transmission costs over the past five years. From 2020 to 2024, this cost has risen by 37% in dollar terms, he states.

Costs That Must Be Passed to Prices

Although more transmission infrastructure is needed, these increased investments will have to be financed by energy consumers. In a hypothetical scenario, Claudio Espinoza, managing partner at Aclai, estimates that if the current transmission capacity were doubled, the impact on final bills would result in increases of between 12% and 14%, depending on the type of customer.

Currently, the environmental approval process is underway for the Kimal-Lo Aguirre transmission line project.

This high-voltage power line will span 1,346 kilometers and include 2,691 towers. Additionally, it will have a capacity equivalent to 25% of the country's daily electricity demand. According to the project's website, the transmission line is expected to begin operation in 2029.

Specialist Humberto Verdejo, from the University of Santiago, estimates that if Kimal-Lo Aguirre were to begin operation today, the transmission charge on electricity bills would increase by 10%. If it starts operating in 2030, the cost of transporting energy will rise by 8%.

The Role That Power Generators Could Play

The greater need for transmission infrastructure has reopened the debate over whether the cost should be shared with power generators, as it was before 2016. This would not only ease the rise in electricity bills but also address concerns among experts who believe that generators not bearing transmission costs leads to inefficiencies in the electricity system.

"As nothing is perfect, this exemption for generators distorts what economists call the locational signal. That is, since generators do not pay for transmission, they can install their plants anywhere in the system, even if that location is not the safest or most efficient for the system and energy sources," says Espinoza.

According to Bustos, the transmission charge was modified because, prior to 2016, it was difficult for generators to anticipate how much it would cost them. "To avoid creating a barrier to the development of the first renewable energy plants, which are generally located farther from consumption centers, it was thought that directly charging customers would be easier or more practical. But this created the issue that generators stopped considering transmission costs, and they now do not necessarily install their plants in the best location for the system, but rather where it is most advantageous for them," he explains.

The decision to share costs between customers and generators is not simple. As Espinoza points out, "In the end, the customer pays for everything (...); if the charge is assigned to generators, they will inevitably incorporate it into their prices, making the market less transparent." Another point, noted by Rodrigo Jiménez, general manager of Systep, is that when generators were charged, they "opposed certain projects or proposed numerous

alternatives, which hindered progress.” However, he adds that even now, with transmission fully paid by customers, investment has not significantly accelerated either.

12%-14%

Electricity bills would increase if transmission system capacity were doubled today.

Since 2016, transmission costs have been financed solely by customers, whether households or businesses.