



ASX RELEASE

22 January 2024

ASX CODE

PNN

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Argentina

Salta Lithium Project

Santa Ines Copper-Gold Project

Australia

Eyre Peninsula Uranium-Halloysite-REE Project

Musgrave Nickel-Copper-Cobalt-PGE Project

Power expands uranium prospective footprint in South Australia

- Power Minerals granted 447km² Whichelby exploration licence (EL6961) on South Australia's Eyre Peninsula, adjacent to its existing Cungena licence (EL6681)
- EL6681 hosts a palaeo-channel that was last tested for uranium 40 years ago; plus the new licence provides an extensive target area for Power's uranium exploration plans
- Power is assessing the uranium potential of these licences, following geochemical analyses detecting possible anomalous uranium concentrations on its Eyre Peninsula licences
- First-pass drilling is now planned at EL6961 for Q2 2024 on grant of requisite approvals for drilling
- South Australia is well-known for its uranium mineralisation and hosts five of Australia's approved uranium mines
- Power's flagship Salta lithium project in Argentina remains the focus for development.

Power Minerals Limited (ASX: PNN, **Power or the Company**) is pleased to announce it has extended its footprint for uranium exploration at its Eyre Peninsula Project in South Australia via the grant of a new exploration licence (Figure 1).

The strategic addition of the new licence further enhances the uranium prospectivity of Power's landholding on the Eyre Peninsula.

Power recently announced plans to explore the uranium potential of its Eyre Peninsula assets after geochemical pXRF analyses of drill intervals from the project detected possible anomalous uranium concentrations (ASX announcement 26 September 2023).

Consistent with its uranium exploration strategy, Power has been granted the Whichelby licence (EL6961), which is strategically located adjacent to the Company's existing Cungena licence (EL6681), and covers a large portion of the palaeo-drainage that flows west, towards the coast line from the divide with the Yaninee palaeo-drainage.

The Yaninee palaeo-drainage contains the Yaninee uranium occurrence which has previously been drill tested by Minotaur Exploration.







This palaeo-valley within EL6961 has not been extensively drilled. Historically, CRA Exploration (CRAE, now Rio Tinto) explored some of this area for uranium and completed 24 wide-spaced rotary mud drill holes during 1980 and 1981. The ability to measure the uranium concentration with this type of drilling was seen as being challenging at the time, and was very dependent on geophysical logging.

It was noted obtaining representative material from rotary-mud drilling was challenging and laboratory sample analyses by CRAE was very limited.

CRAE believed the thin lignite seams discovered from its exploration indicated that suitable reducing conditions existed within channel system for deposition of uranium within the area. The channel is surrounded by high uranium-bearing Hiltaba Suite granites.

More recently, regional drilling for kaolin and testing basement targets has better defined the edges of the channel below Power's new licence area. The channel is relativity well mapped, which provides the opportunity for exploration to progress directly to drill testing of the stratigraphic units within the channel.

"South Australia is a very proactive in uranium exploration and mining, as demonstrated via the multiple uranium mines and projects in development within the state. While we continue to develop the Salta Lithium Project in Argentina as our flagship project, the Company is keen to further explore the uranium potential of its Eyre Peninsula project area, and the strategic addition of the Whichelby licence substantially expands our contiguous uranium prospective ground position.

We aim to uncover the uranium potential of our project area, which would add significant value to the Project, at a time when demand for uranium continues to grow and there is appetite to bring new projects to market."

Power Minerals Managing Director Mena Habib

Uranium Exploration Strategy

Power plans to use modern aircore drilling in combination with advanced Vanta pXRF analysis to obtain real time, on-site uranium values (and other metals) in its maiden drill testing at EL6961. Such analysis was not possible with the historical drilling.

Also, to better target the uranium prospectivity, the different organic facies will be mapped to demarcate the stratigraphic intervals where the best potential uranium reductant is developed.

H-rich organic material (i.e. containing liptinite) is a high-quality uranium reductant that can lead to the precipitate of uraninite. Rock-Eval pyrolysis and gas chromatography-mass spectrometry (GC-MS), which is routinely used in petroleum exploration will be used to provide a hydrogen index (HI)



to provide a ranking and a vector on the areas and stratigraphic units that have the best uraniumbearing potential.

Drilling approval is in place for EL6681. Power will now seek requisite approval for drilling within the new licence area from SA's Department of Energy and Mining (DEM). together with environmental approval and land holder agreements. First-pass drilling is planned for Q2 2024 on grant of the requisite approvals.

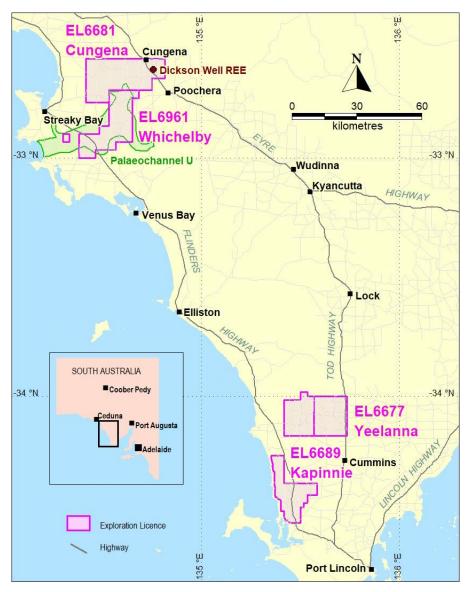


Figure 1: New licence (EL6961) acquired by PNN on South Australia's Eyre Peninsula, with green-shaded area showing an interpreted uranium-bearing palaeo-valley (based on recent information from the DEM).







Uranium and South Australia

Two of Power's existing Eyre Peninsula licences in the southern region of the Eyre Peninsula, EL6677 and EL6689, are adjacent to a large licence held by unlisted uranium-focused explorer Orpheus Minerals Ltd, a subsidiary of Argonaut Resources NL (ASX:ARE).

Also on the Eyre Peninsula, Alligator Energy (ASX:AGE) is seeking approval to conduct a pilot ISR (insitu recovery) Field Recovery Trial on its Samphire Uranium Project, south of Whyalla.

South Australia has five approved uranium mines including the massive Olympic Dam underground mine, and four approved In Situ Recovery (ISR) uranium mines (Beverly, Beverley North, Four Mine and Honeymoon).

Uranium explorers and developers in South Australia benefit from having established regulatory procedures and uranium transport logistics compared to other jurisdictions.

Other uranium exploration on the Eyre Peninsula includes Pinnacle Minerals (ASX: PIM) exploring over a portion of the Narlaby palaeo-valley, a buried valley northwest from Cungena and adjacent to PNN's EL6681. See PIM ASX Announcement dated 17 January 2024 for more information.

Authorised for release by the Board of Power Minerals Limited.

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About Power Minerals Limited

Power Minerals Limited is an ASX-listed lithium-focused exploration and development company, committed to the systematic exploration and development of its core asset, the Salta Lithium Brine Project in the prolific lithium triangle in the Salta Province in Argentina. It is currently undertaking a major JORC Mineral Resource expansion drilling campaign at Salta, and is focused on expediting development of the Project in to a potential, future lithium producing operation. Power also has a portfolio of other assets in key, demand-driven commodities including; kaolin-halloysite-REE, nickel-copper-cobalt and PGEs plus copper-gold.